Original Article

Healthcare Providers' Views of Information, Support, and Services Offered to Women in the Postnatal Follow-up Care Period in Oman: A Qualitative Study

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Abstract

Background: Postnatal care is a component of the maternity care continuum, which is often under-valued and under-offered. The aim of this study was to explore healthcare providers' (HCPs) views about postnatal follow-up care (PNFC) offered to women in Oman.

Methods: This qualitative study was performed from May 2021 to January 2022; 29 individual participated in semi-structured telephone interviews with staff nurses (N=20), nurse/midwives (N=5), and doctors (N=4) from Khoula and Ibra hospitals and Al Amerat, Muttrah and Al Qabil health centers in Oman. Conventional content analysis was guided by Erlingsson and Brysiewicz.

Results: Seventeen sub-categories and four categories emerged from the data; they included communication and timing of PNFC, provision of PNFC with various components, challenges and needs for providing PNFC, and the impact of COVID-19 on PNFC.

Conclusion: Providing postnatal follow-up care in Oman is challenging for HCPs due to lack of clinics dedicated to postnatal care, no scheduled appointment times for women, very limited guidance within the National Maternity Care guideline, and some HCPs (i.e., nurses) with no formal education on the components of postnatal care. These hinder the ability to provide information, education, support, and services to women.

Keywords: Health care providers, Postnatal, Postnatal care, Qualitative, Utilization

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Introduction

The maternity care continuum consists of antenatal, intrapartum, and postpartum care. Of these, the literature reports that postpartum care is mostly under- offered and under-utilized.[1-3] Care during the postpartum period, also referred to as the postnatal period, is important for assessing the complications and providing health education and promotion to support healthy women and children into the future. It is important, not only in the immediate stage (0-1 day), but also during the early (2-7 days) and late (8-42) periods.[4]

Ongoing postnatal follow-up care (PNFC) supports the woman's physical and mental wellbeing and is important in developing parenting skills and providing 'nurturing care' for their newborn.[5] Offering structured and comprehensive PNFC is increasingly important, with early discharge practices now common and women often spending less than 24 hours in the hospital after an uncomplicated vaginal birth, resulting in less time for education and support in the early postnatal period.[6] Numerous professional and government health agencies have acknowledged issues with early discharge practices and introduced additional strategies including telephone calls and home visits.[7-9] Although many national guidelines outline recommendations for PNFC, there is a lack of consistency which may be related to the limited evidence for best practice, as acknowledged by the World Health Organization (WHO).[10] Despite the limited evidence, WHO emphasizes that women and families at a minimum should be educated on the signs of maternal and newborn complications, 'danger signs', importance of exclusive breastfeeding, and available support systems.[11]

In Oman, PNFC is primarily provided at community health centres by general practitioners, registered midwives, and nurses, who also provide antenatal care services. The Oman National Maternity Care guideline, which covers the continuum of maternity care, recommends two PNFC for women and newborns; at 2- and 6-weeks after discharge.[12] However, data from the 2019 health report show that PNFC is under-offered or under-utilized, with the mean number of visits declining from 1.3 visits in 2000 to just 0.72 in 2019.[13] However, utilization of antenatal care is much greater with 74% of women attending four or more visits and only 0.4% never attending. Furthermore, PNFC home visits were reported as 0.02% in Dhofar, 0.01% in Al Buraymi, and 0% utilization in the remaining nine governorates.[13] This home visit data implies that this is an option for women; however, home visit is not included in the maternity care guideline, which may reflect why rates of utilization are so low.

As significant concern in Oman is the low rate of exclusive breastfeeding for at least 6-months. The initiation of breastfeeding in hospital was greater than 90%, yet the exclusive breastfeeding rate at 6-months was just 8.9%, and the use of artificial formula and other foods (juice, traditional foods) was 90.7% by 6 months.[13]

The review of literature found no studies reporting on postnatal care in Oman, and there were just three studies on antenatal care: women's satisfaction with antenatal care, the influence of sociodemographic and health services factors on the overall adequacy of antenatal care utilization of Omani married women, and experiences and perceptions surrounding antenatal care for women with low-risk pregnancies in Oman.[14-16] As known about PNFC is not much in Oman, the objective of this study was to explore their views of postnatal follow-up care offered to women in Oman. The findings of the research have the potential to inform interventions to improve PNFC for women and newborns in Oman.

Materials and Methods

This study is a part of a mixed-methods sequential exploratory research design to gain a broad insight into early and late PNFC from the perspective of women (Study One- part one) and HCPs (Study One- part two), using qualitative

interviews. This paper reports the findings of interviews with hospital and health centre HCPs who deliver postnatal care. The study was conducted from May 2021 to January 2022, using individual semi-structured interviews and conventional content analysis.

Recruitment sites were Khoula and Ibra Hospitals, and Al Amerat, Muttrah and Al Qabil Health Centers. The two hospitals have approximately 5,574 and 3,259 deliveries, respectively, and the three health centers provide primary healthcare services at the local community level. These sites were selected because of population density, and social, educational and healthcare service differences.[13]

Purposive sampling was used to recruit HCPs (doctors, midwives and staff nurses) who had at least 6 months of experience in providing postnatal care in Oman and currently working at a recruitment site. The exclusion criterion was unwillingness to participate in the study after the interview. The primary investigator (AAH) recruited the participants and arranged a time for the interview based on mutual convenience. Twenty-nine individual semi-structured interviews were conducted by telephone (due to Covid-19), in English as this is the official language used in the healthcare system in Oman. The interviews were conducted by AAH, an Omani midwife and lecturer with more than 10 years of experience in working with postnatal women and HCPs in Oman. The questions asked in the interviews were; "*How is the continuity and integration of maternity care between hospital and community managed*?"; "*From your experience of working in Oman, what are your perceptions/views/ opinions on postnatal care provided here at the hospital/health centre*?" and "*Can you tell me about any postnatal guidelines that you have access to here at the hospital/health centre*?" Besides, such questions as "*What do you mean or explain more please*," were asked if needed. Interviews were digitally audio-recorded. Data saturation was determined when no new data emerged from the interviews. The average interview lasted for 24 minutes for hospital HCPs and 26 minutes for health center HCPs.

Interviews were transcribed verbatim (omitting identifiers) by AAH; also, the transcripts were read while listening to the audio-recording to ensure accuracy. Conventional content analysis was manually performed using Erlingsson and Brysiewicz phases: familiarizing with the data, dividing up the text into meaning units, condensing the meaning units, formulating the codes, and developing the categories.[17] Conventional content analysis was undertaken as no research literature was available on this topic from Oman; thus, the researchers avoided using preconceived categories. Instead, they allowed the categories to emerge from the data.[18] AAH selected the meaning units and coded the condensed units which were agreed upon by two research members (KN, MP) independently. Then, the codes which had a similar content or context were grouped into categories by AAH and agreed upon by KN & MP. To facilitate data management, all condensed meaning units, codes, sub-categories, and categories were manually performed.

For the rigor of this study, the Lincoln and Guba steps, i.e. credibility, dependability, transferability and confirmability, were used.[19] Credibility was ensured as the primary investigator is a midwife with more than 10 years' experience in working closely with HCPs and women during all stages of childbirth in Oman. Regular meetings and discussion among all authors were conducted and agreed on the codes, and categories emerged from the data. Dependability was achieved through maintaining an audit trail in which two other authors, MP and KN, were able to access and counter-check the codes and categories and provide debriefings. Transferability was demonstrated through the use of similar data collection methods to obtain data from HCPs who met the inclusion criteria in different regions in Oman. The confirmability was demonstrated as the

primary investigator was supervised closely by the team of professors and experts during all stages of the study including objectives, research design, recruitment, data collection, and analysis.

Ethical approval was granted from the Research and Ethical Review and Approval Committee, Oman Ministry of Health [MoH/CSR/20/23647] and the University of Queensland [2020002085/MoH/CSR/20/23647]. The primary investigator provided the participants with verbal and written explanation about the purpose of the study, duration of involvement, and benefits and risks; then, written informed consent was obtained. Time was given to the participants till the end of their shift to ask questions and clarify their concerns with the primary investigator. HCPs were assured that they had the right to withdraw from the study at any time they wished even after signing the consent form. The participants were also assured that audiotape and the data obtained from them would be used for the purpose of the study only and their identity would be omitted during transcription.

Results

A total of 20 staff nurses, five nurse-midwives, and four doctors were interviewed: 14 from two hospitals and 15 from health centers (Table 1).

Table 1: The participants' demographic data

Participant	Characteristics			
	Nationality	**Highest level of education**	**Professional title**	**Years of experience in providing postnatal care in Oman**
H[a]1-N	Indian	Bachelor's Degree	Nurse	2
H2-D	Tanzanian	Bachelor's Degree	Doctor	11
H3-N	Omani	Diploma certificate	Nurse	2
H4-N	Omani	Bachelor's Degree	Nurse	2.5
H5-N	Indian	Diploma certificate	Nurse	15
H6-N	Omani	Bachelor's Degree	Nurse	1.5
H7-N	Omani	Diploma certificate	Nurse	9
H8-NM	Omani	Bachelor's Degree	Nurse-midwife	4
H9-N	Omani	Bachelor's Degree	Nurse	5
H10-N	Omani	Diploma certificate	Nurse	11
H11-NM	Omani	Diploma certificate	Nurse-midwife	5
H12-NM	Omani	Bachelor's Degree	Nurse-midwife	6
H13-N	Omani	Diploma certificate	Nurse	5
H14-N	Omani	Diploma certificate	Nurse	8
HC[b]1-D	Pakistani	MBBS[c]	Doctor	15
HC2-D	Omani	FAMCO[d]	Doctor	5
HC3-NM	Omani	Bachelor's Degree	Nurse-Midwife	13
HC4-N	Omani	Diploma certificate	Nurse	9
HC5-NM	Omani	Bachelor's Degree	Nurse-Midwife	2
HC6-N	Omani	Bachelor's Degree	Nurse	1.5
HC7-N	Omani	Diploma certificate	Nurse	10
HC8-N	Omani	Diploma certificate	Nurse	3
HC9-N	Omani	Diploma certificate	Nurse	10
HC10-N	Omani	Diploma certificate	Nurse	2
HC11-N	Omani	Diploma certificate	Nurse	2.5
HC12-N	Omani	Bachelor's Degree	Nurse	14
HC13-N	Omani	Diploma certificate	Nurse	18
HC14-D	Omani	MD[e]	Doctor	5
HC15-N	Omani	Diploma certificate	Nurse	8

[a]Hospital health care provider, [b]Health centre health care provider; [c]Bachelor of Medicine-Bachelor of Surgery; [d]Family and Community Medicine; [e]Doctor of Medicine

As data were analyzed using the conventional content analysis approach, more data were generated. Initially, 426 meaning units were extracted from the transcribed interviews. After reviewing and evaluating the meaning units were condensed to 175 meaning units. Then, 60 descriptive codes were developed for the condensed meaning units. The codes were clustered into 17 sub-categories after comparing the differences and similarities. Finally, the sub-categories were sorted inductively into 4 categories: communication and timing of PNFC, provision of PNFC with various components, challenges and needs for providing PNFC, and the impact of COVID-19 on PNFC. Examples of sub-categories and categories are provided in Table 2.

1. Communication and Timing of PNFC

HCPs expressed differing views on communication and timings of PNFC. Some indicated that PNFC was taught to women through providing written and/or verbal information. For example, one Hospital HCP reported "*Before discharge, we provide the mothers with verbal explanation about the follow-up at local health centre about 2 and 6 weeks following birth*" (H7-N). However, health center HCPs reported *"The 2-week appointment is written in the pink card [newborn health card] of the child from the hospital"* (HC1-D). The use of the word 'appointment' conveys those women are given a date/time, but this is not the case: *"Mothers are not having a scheduled date, but they will be informed to calculate by themselves*[told to attend the clinic around two and six weeks post-delivery] *after delivery"* (HC4-N).

There was no consistency of when and how often women and newborns should be reviewed postnatally. It was expressed that the 2-week visit should be for newborns, whereas women could be seen at around 6 weeks *"There is no need for the mother to come for the 2-week appointment because most of the mothers are educated now; only they should come to the 6-weeks…"* (HC12-N). Some HCPs perceived that the 6-week contact was only necessary for a sub-group of women. "*Six weeks are mostly for investigation for high-risk mother and for birth spacing*" (HC13-N). Only one participant suggested that newborns should be seen earlier than 2 weeks: *"For the babies, I think postnatal contacts should be in the first week and then after 2 weeks because they can develop complications like jaundice, pain, or excessive crying* (HC13-N).

2. Providing PNFC with Various Components

Hospital HCPs responses were predominantly focused on immediate

Table 2: Subcategories and categories in the study

Sub-categories	Categories
Verbal explanation	Communication and timing of PNFC
Giving written advice	
flexible timing for care	
Immediate postnatal care in hospital	Providing PNFC with various components
Early and late PNFC in health centre	
Women's Underutilization of PNFC	Challenges and needs for providing PNFC
Need for a separate PNFC clinic	
Lack of time and human resources	
Discontinuity of care	
Lack of women centred care	
Need to Psychological support	
Need to Breastfeeding counselling	
Lack of Alternative options for PNFC	
Not familiar with the guideline	
Untrained nurses staff	
Restricting visits	Impact of COVID-19 on PNFC
Early discharge after birth	

postnatal care: *"We usually check the breasts if soft or engorged; we also check if the uterus is contracted or not. We check the bleeding as well if it is normal or if she has bleeding"* (H7-N).

However, health center HCPs focused on the 2 and 6 weeks (early and late) PNFC and identified the components of care for this visit "*For the 2-week visit for the mother, we check the vital signs, blood pressure, temperature, and pulse. Also, we ask her if she is having any complication, if she is having any problem with urination, any bleeding, and the color of the lochia*" (HC12-N). However, for newborns the core focus of care was "*At 2weeks we will check the baby weight and umbilical cord and ask the mother if she is having breastfeeding problem*" (HC13-N).

The components of care at the 6-week follow-up were mostly focused on investigating health-related complications and/or for birth spacing "*In 6 weeks, if the mother is having problems, we will do blood tests for that; also, GTT [Glucose Tolerance Test] is done for diabetic mothers, and TFT [thyroid function test] and CBC [complete blood count]*" (HC5-NM).

Many of the HCPs expressed that a priority component of postnatal follow-up at around 40 days was to increase the women's awareness regarding birth spacing as their perception was that women were reluctant to consider birth spacing. "*Nowadays, even high-risk women are not using birth spacing; mostly women come to us again after only one year. I think they are not using birth spacing because they had a bad experience, or they did not get enough information about the importance of birth spacing or their husband refused and did not trust in birth spacing*" (H11-NM).

3. Challenges and Needs for providing PNFC

Various individual, organizational, and system-related challenges were revealed by both groups of HCPs in this study. HCPs acknowledged that women did not utilize PNFC even before Covid-19, suggesting that women ignored the verbal and/or written information given, and did not think that postnatal care was important. However, other responses from HCPs indicate other reasons for not attending "*Women are not attending the follow-up because they say they do not need the follow-up; they believe nothing will be done for them, and this perception has been taken from their sisters, mothers, and the community*" (H9-N).

One HCP demonstrated deeper insight by her reflective response *"I think we need to encourage more ladies to come; we need to persuade the ladies to come for postnatal care, because mothers are not coming for the postnatal appointments. Probably, they think it is not important and is just a routine care, so we need to change our services to encourage them to come*" (HC15-N).

Having a separate postnatal follow-up clinic would promote individualized care, encourage women to utilize PNFC, and reduce crowded health center environments.

"I think mothers must have different postnatal clinics because now the clinic ,is very crowded and it is for pregnancy and postnatal care; this is why the women do not take part in the follow-up because the clinic is busy and crowded...having a separate clinic will help to focus more on providing health education, on birth spacing, and checking the baby and the mother" (H13-N).

Workload, lack of time, and shortage of staff were viewed as impeding the provision of postnatal care: "*We don't have enough time…but we [are] try our best sometimes to provide the mothers with health education in the waiting area"* (HC12-N) and "*We were not able to give good care as we have a shortage, so we have twice as many patients [women and their newborn]*" (H3-N).

Lack of communication from hospitals and the inability to access delivery information that would facilitate the continuity of care and workload management were the other challenges: "*There is no link between a hospital and health center; we don't know when she [pregnant woman] delivered … we only have an estimation of the EDD[Expected*

Date of Delivery]" (HC2-D); "*We need to know how many postnatal women are expected to follow-up. We should have a register [a book] for these ladies*" (HC10-N). Previously, there was a system which HCPs found useful, "*We had Al Shiefa system which enabled us to track the mother, but now we [nurses and midwives] are not authorized to access it; only doctors are authorized"* (HC3-NM).

Our study revealed that most HCPs expressed the need to improve the quality of postnatal care provided to women and newborns, "*The quality of care provided is not as I think; it needs to be...the needs of mothers are not met*" (HC3-NM).

While components of care discussed were mostly around physical wellbeing, HCPs in both groups raised the lack of support and emphasize the need for addressing mental health wellbeing, "*Many postnatal women will end up with depression; we never ask the mothers about psychological issues*" (HC9-N) and "*I think mothers do not know how to take care of themselves mentally; newborn stage is not easy. It is very stressful, most of us keep it inside of us and finally we will explode; maybe women do not talk about it because nobody will listen*" (H8-NM).

HCPs recognized that there is a need for more health education on exclusive breastfeeding; it has been found that more women are choosing to artificially feed soon after delivery, *"We observe mothers nowadays starting artificial feeding from the second day after delivery; this a big problem for mothers and babies"* (H5-N) *and "Around 99% of the mothers start artificial feed after one week of birth, and the reason is because they are tired"* (HC13-N). HCPs felt this was because of family influence, "*Family will also encourage their daughters to give artificial feed even in the hospital*" (HC13-N); and culture change "*Because the culture is different now, most of the mothers are working, so they will think that breastfeeding is a difficult task for them, so they use artificial feed*" (HC4-N).

As a way of improving the quality of care, HCPs suggested offering alternative postnatal follow-up contacts such as home visits and telephone contacts rather than visiting the health center, *"I think we need community visits at least at the mother's house; we can see the environment, cleanliness, ventilation, the way the mother is taking care of her-self and her baby and we will have enough time with the mothers to determine their needs"* (HC15-N).

HCPs suggested having alternatives could improve the utilization of postnatal care and is more women friendly, "*I think home visit will make things easier for them [postnatal women]; I know postnatal mothers, especially those who have delivered by caesarean section, found it very difficult to go for follow-up* (H4-N). Additionally, telephone contact could be useful, "*I recommend to have other means of follow-up like telephone calls to follow-up the mothers; this is very helpful as the mother will feel that someone is concerned about her health*" (H7-N).

This study reported lack of HCP's awareness of the postnatal component of the national guideline or had not accessed the document or could not remember any of the recommendations, "*I did not see any guidelines, especially postnatal ones*" (H4-N) and "*I am sure it is available in the health center, but I did not read it*" (HC7-N).

Lack of knowledge was also evident in this study as hospital HCPs revealed they are not providing birth spacing information because of lack of knowledge or a belief information that birth spacing is women's choice, "*To be honest, I have not explained to the mothers about birth spacing because I was an obstetric nurse and was not aware about the birth spacing methods; as to which one is suitable for her, I did not have that much information and knowledge to tell her*" (H8-NM) and "*I am feeling shy to give the mothers information about birth spacing"* (H13-N).

Health centre HCPs acknowledged that "*Generally, there is lack of postnatal care as more consideration is given to antenatal and intrapartum care*" (HC6-N) and postnatal

care is not considered integral to the maternity continuum of care. It was because "*We actually focus more on ANC [antenatal care] because this is an ANC clinic"* (HC10-N) and *"You know we feel that ANC is the most important as the mother is carrying the baby inside and she needs to be monitored more, but postnatal women are ok because they have already delivered"* (H13-N). Additionally, HCPs expressed that those mothers were more likely to experience complications during the antenatal period as opposed to the postnatal period, *"I mostly focus on the antenatal period because usually mothers are having complications during pregnancy, but mothers are rarely having any complication during postnatal stage; they sometimes do not inform us about jaundice in their baby "* (HC12-N).

4. Impact of COVID-19 on PNFC

Hospital HCPs reported COVID-19 impacted postnatal care, with the length of hospital stay considerably reduced during the COVID-19 pandemic, "*Because of the Corona virus we discharged the mothers who had vaginal delivery after 6 hours and those who had caesarean section were discharged after 24 hours*" (H3-N).

HCPs at some health centers reported that no PNFC was offered, "*Because of Covid-19, we are not doing well on it…we are trying to minimize the number of visits…we cancel all the 2-week visits and we only accept those who attend at 6 weeks for birth spacing*" (HC6-N). At other health centers, contact was restricted to 6 weeks, "*Because of Covid-19, we were advising the mothers to come for 6 weeks only*" (HC12-N). Interestingly, some HCPs expressed that because of Covid-19 *"Most of them [women] are not going for postnatal follow-up*" (H5-N), *"Because of the Corona virus, the number of women who attend has reduced even more, especially for 2-week follow-up"* (HC15-N).

Discussion

This study showed that there was no consistent approach in the communication on PNFC visits; it was dependent on the individual HCP. Methods included verbal, written on the maternal and/or newborn card, or on the discharge summary. HCPs have a responsibility to provide information on the importance of attending PNFC and ensure women are aware of postnatal complications. However, a challenge for hospital HCPs is the volume of information and education provided to women around discharge.[20]

HCPs perceived that postnatal follow-up was not well utilized as women ignored their information. This may be one reason for not utilizing the service with rates as low as 0.29 mean visits per women in some Omani Governorates.[13]

Lack of a scheduled appointment potentially implies that PNFC is optional, not important, and not viewed as a part of the continuum of maternity care. In contrast, scheduled antenatal appointments play a key role in utilization of antenatal services, as visits are consistently higher and in line with the national guidelines compared to postnatal visits.[13] This is consistent with the results of a study, showing that if women were not given scheduled appointments, they did not think that postnatal follow-up was important; therefore, they did not utilize the services.[21]Additionally, they reported a positive relationship between scheduled postnatal appointment/s reminders and increased use of postnatal follow-up services by women.[21] A review of technological and innovative models study revealed that reminding women of their appointments had the potential to increase the use of services and women's satisfaction.[22] Poor knowledge on the importance of PNFC and its association with underutilization of postnatal follow-up services has been reported in numerous studies.[23-25] Thus, one solution to improving postnatal follow-up use in Oman may be centered around a more structured approach to appointments, offering reminders and elevating the importance of postnatal care, an integral part of the maternity care continuum.

The frequency and timing of PNFC visits was not consistently reported by health centre HCPs and subtle differences were noted between the health centre recruitment sites. Additionally, the inconsistency could be attributed to participants' lack of awareness or recall of the recommendations in the National Maternity Care guideline or other best practice guidelines.[9, 12, 26, 27]Although there was some consensus on contact at 2 and 6 weeks, this did not generally apply to 'low-risk' women and the mother and baby were not viewed as a 'dyad'. In Oman, PNFC is presently focussed on 'high risk' women although it is unclear how many of them are attending for care; women need to attend after 40 days or 6 weeks for birth spacing support. Interestingly in Oman, nurses without formal midwifery training are employed to provide maternity care to women. If the staff feel underprepared and are not sure of the essential components of the mother-baby dyad postnatal care at all contacts, then women's needs are unlikely to be met.[26] It is important for women to know that HCPs are able to carry out fundamental aspects of postnatal care and essential newborn care.[28] Additionally, despite acknowledging the poor exclusive breastfeeding rates, few HCPs reflected that PNFC was a time in which women could be supported and encouraged to continue with breastfeeding. These results are in the same line with those of a study conducted in Malaysia, which found that postnatal breastfeeding education one week after birth was associated with exclusive breastfeeding six months after birth.[29]

Although there is global inconsistency in the timing, the mode of contact, and components of postnatal care, it is imperative that the mother-baby dyad are receiving individualized care that meets their needs to promote health and wellbeing.[9, 30] According to Almalik, HCPs and policy makers need to recognise the women's needs and concerns in order to provide individualized care which fulfills those needs.[31] If women feel that HCPs are unable to provide care to meet their needs, they will seek knowledge and support from other sources such as the Internet and family members.

Participants identified some challenges and a lack of attention towards postnatal care, which is not unique to Oman, with postnatal care often being referred to as the 'Cinderella' service of maternity care.[28] This amplifies postnatal care as an undervalued and less important aspect of the maternity care continuum.

Another challenge is the lack of a dedicated postnatal clinic in health centers, with postnatal women seen when the clinics have availability; after antenatal women with appointments are seen. As a result, lengthy waiting times without appropriate breastfeeding facilities are reported. Poor utilization is linked with long waiting times at health facilities.[32] A dedicated clinic has the potential to improve the quality of PNFC.

Lack of continuity of care was also reported to be a challenge with a lack of communication between the hospital and the health center. Again, this is not unique to Oman; another study reported a lack of continuity of care, with a significant gap in sharing postnatal information between hospitals and general practitioners, midwives and child and family health nurses in the community setting in Australia.[33] Continuity of care is essential because it offers a safe and smooth transition for women and newborns from the hospital to the community setting.[33]

There are opportunities to enhance PNFC with the use of telephone calls and home visits, as opposed to merely attending a health centre. A literature review reported that a home visit following early discharge was associated with decreased newborn readmissions, promoted the continuation of exclusive breastfeeding, and increased postnatal women's satisfaction with care.[34] Similarly, another study found that home visits accompanied by telephone calls were associated with improvement in maternal and newborns access to care, reduced cost of health care, and facilitated maternal and newborns referral.[30] The Oman annual health report data on postnatal home visits indicates that there is an opportunity to

improve this service.[13] Further investigation is warranted on how and to whom home visiting is offered in Oman to explore opportunities to expand this service.

The HCPs openly indicated that they did not read or could not recall postnatal care guidelines, reflecting that PNFC is not viewed as an integral component of the maternity care continuum. A study indicated that evidence-based postnatal guidelines had the potential to improve the care and decrease medium- and long-term morbidity.[35] The WHO recommends raising awareness on the importance of postnatal care to promote maternal and newborn wellbeing.[4] Therefore, there is an urgent need to encourage HCPs to familiarize themselves with the national guidelines to raise the importance of and offer a more comprehensive and women-centered approach to postnatal care in Oman.

This study was conducted during 12 months following the declaration of the Covid-19 pandemic; however, data and participants confirm that the use of PNFC was already low. It is suspected that it is now even lower, in line with global restrictions. Women in Oman were discouraged from attending health centres, despite postnatal care being recognised as an essential service to keep women and babies safe.[36] Many countries updated recommendations and reorganised services to contact women remotely via telephone or use online platforms on day one, five, and ten and maintain face-to-face contact with 'high-risk' women (e.g., operative birth, additional complications).[37] Guidance from the WHO regarding postnatal contacts and maternal considerations were not addressed and in Oman, no alternatives were offered. Isolation and lack of contact during this vulnerable period may increase the health risks for women and newborns in later life. A study found that the risk of anxiety was higher among postnatal women during Covid-19 pandemic compared with non-pandemic period.[38] Thus, it is even more important that HCPs continue to support women and newborns during the postnatal period. Regular updates and recommendations have been made globally to ensure the continuity of care during the postnatal period through encouraging the use of innovative approaches.[37]

The strength of this study is that it sought the perspectives from a variety of maternity HCPs on PNFC services in both a metropolitan and regional area. The challenges were not limited to one area and highlighted that HCPs face challenges in providing individualized PNFC possibly reflecting the poor use of postnatal service by women in Oman.

Conclusion

Providing PNFC in Oman is currently challenging for HCPs due to a lack of dedicated clinics for postnatal care, no scheduled appointments for women, very limited guidance within the National Maternity Care guideline, and some not formally educated HCPs (i.e., nurses) on components of postnatal care. These hinder the ability to provide information, education, support, and services to women. Therefore, the findings of this study can encourage the policy makers in Oman to improve the quality of postnatal care through training HCPs on the postnatal care, updating the National Maternity Care guideline, and offering more alternative approaches for PNFC.

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