PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	WOMEN'S SATISFACTION WITH MIDWIFE-LED CONTINUITY OF CARE – AN OBSERVATIONAL STUDY IN PALESTINE
AUTHORS	Mortensen, Berit; Diep, Lien; Lukasse, Mirjam; Lieng, Marit; Dwekat, Ibtesam; Elias, Dalia; Fosse, Erik

VERSION 1 - REVIEW

REVIEWER	Caroline Homer Burnet Institute, Australia
REVIEW RETURNED	28-Mar-2019

GENERAL COMMENTS	Thank you for the opportunity to review this interesting paper. The midwife-led continuity of care program is poorly studied in low to middle income settings, especially in challenging contexts such as Palestine. Therefore, this study is important and significant. There is also limited research on woman's experiences of care in such settings which makes this work more important. The study is a case control study with women recruited postpartum and asked to look back at their care. This is not a classic case control study where participants are selected on an outcome of interest and then retrospectively examined about variables of interest. I felt this was more a comparative cohort study. Could the authors consider the design again and if it is a case control study, provide some justification/explanation. I was surprised to see that exactly 100 women from each group participated. It is unusual to get such a neat number and bot groups exactly the same. The continuity measure is only for women in the midwife-led continuity group. What about the control women? Could some of them have received some continuity? Did they have meetings with the same provider?

REVIEWER	Cristina A. Mattison McMaster University, Canada
REVIEW RETURNED	15-Apr-2019

GENERAL COMMENTS	1. Introduction - a description of the midwifery workforce is missing from the Palestinian context. Specifically, while the implementation of the modified midwife-led case-load model of care is described, it would be helpful to describe the size of the midwifery workforce, scope of practice and if possible estimates of the proportion of births attended by midwives during the implementation period.

	2. Methods - within the 'models of care', is the regular model of governmental antenatal care provided by a separate group of primary care providers (midwives, nurses, and physicians). As it is written now, it's confusing as to whether it is the same provider or a separate set of primary care providers that take care of antenatal care. -Participants and data collection: please describe what constitutes "regular care". A description of the control group is lacking. -The questionnaire: pilot testing of the final questionnaire for context and cultural sensitivity on only five midwives is a limitation. A larger sample on participants reflective of the study participants (e.g., women post birth) would be a more appropriate pilot. -Patient and public involvement: This section implies that patients were involved in the testing of the questionnaire, which is not indicated (only five midwives participated in piloting of the questionnaire). The discussion focuses in part on the attendance of a companion during labour, which is interesting, yet the analytic approach to this question as well as the detailed results of this question are lacking. 3. Results - within 'women's recommendations' - my understanding is that this is an open-ended question in the survey. This section is brief and there is no qualitative analysis regarding how the themes were coded, the themes themselves and the frequency in which the themes emerged. This section has the opportunity to yield additional insights into the research question, yet is not covered in-depth. 4. Discussion - as covered in my previous comment, the discussion draws heavily from the open-ended question, however, this is lacking from the analysis.

REVIEWER	jane Sandall King's College, London
REVIEW RETURNED	18-Apr-2019

GENERAL COMMENTS	The aim of this study was to investigate if and how a modified case load midwife-led continuity model of care, in the governmental system in Palestine, influenced rural women's satisfaction with care, through the continuum of antenatal, intrapartum and postnatal period. A secondary aim was to explore the association between the model and duration of exclusive breastfeeding. This is one of several papers reporting findings from this research which are cited in this paper. The evaluation of models of midwife continuity of care in low- and middle-income settings is a WHO research priority in the intrapartum guidance. This is an important study. An observational case-control design was used to compare satisfaction with care, between rural women receiving the midwife-led continuity model and rural women receiving regular maternity care, through the continuum of antenatal, intrapartum and postnatal period. The study design is weak but the authors acknowledge this in study limitations. Women who were between one to six months after birth invited to answer a face to face questionnaire. Careful consideration was given to recruitment and consent and administration of the questionnaire face to face. The questionnaire was based on previous studies measuring satisfaction with midwife-led

	continuity. The questionnaire was tested with 5 midwives, but not with women, which is a limitation. Continuity was measured by number of women who received care from their antenatal midwife during labour, at postnatal hospital and community. Primary outcome was the mean sum-score of satisfaction with care through the continuum of antenatal, intrapartum and postnatal period. Secondary outcome was exclusive breastfeeding. The power calculations were based on the results from a recent study in Australia, as we found no available studies on satisfaction with midwife-led continuity models of care in low – middle income countries. The STROBE guidelines were used to assess reporting quality. This is a well designed and reported study and I have no further comments.

VERSION 1 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 1

Reviewer Name: Caroline Homer

Institution and Country: Burnet Institute, Australia

Please state any competing interests or state ‘None declared’: None declared

Please leave your comments for the authors below

Thank you for the opportunity to review this interesting paper. The midwife-led continuity of care program is poorly studied in low to middle income settings, especially in challenging contexts such as Palestine. Therefore, this study is important and significant. There is also limited research on woman’s experiences of care in such settings which makes this work more important.

The study is a case control study with women recruited postpartum and asked to look back at their care. This is not a classic case control study where participants are selected on an outcome of interest and then retrospectively examined about variables of interest. I felt this was more a comparative cohort study. Could the authors consider the design again and if it is a case control study, provide some justification/explanation. We acknowledge that our study is in a borderline between a cohort and a case-control design. We chose the case-control design to select cases and controls from cohorts in various rural areas in the five different regions where the model was implemented. Inclusion of cases and controls were selected from a similar rural population (cohort) of women who had singleton pregnancies and had given birth within the same timeframe. We explained our choice of study design more thoroughly in the methods section on page 5 and believe this explanation justify our choice of design. As this is not a classical case-control design, we also changed the title to “an observational study” instead of “a case-control study”.

I was surprised to see that exactly 100 women from each group participated. It is unusual to get such a neat number and bot groups exactly the same. We understand that this might seem odd compared

to studies where questionnaires are sent to women electronically or posted by mail. Because our research midwives actively approached the clinics and asked women to participate, they did so until they had hundred women in each group, (i.e until the required sample size, was obtained). An unequal number of women were invited and not all agreed to participate. This number is described in the beginning of the results section on page 9.

The continuity measure is only for women in the midwife-led continuity group. What about the control women? Could some of them have received some continuity? Did they have meetings with the same provider? This is an important question. The group of women who received regular care were asked about continuity and reported only some continuity with providers during the pregnancy. No continuity with care provider was reported to other episodes of care for the group receiving regular care. This information has been added to the paragraph describing results of continuity measures on page 13.

Reviewer: 2

Reviewer Name: Cristina A. Mattison

Institution and Country: McMaster University, Canada

Please state any competing interests or state ‘None declared’: None declared

Please leave your comments for the authors below

1. Introduction - a description of the midwifery workforce is missing from the Palestinian context. Specifically, while the implementation of the modified midwife-led case-load model of care is described, it would be helpful to describe the size of the midwifery workforce, scope of practice and if possible estimates of the proportion of births attended by midwives during the implementation period. Thank you, this is important information, but we did not have detailed reliable information of proportion of births per midwife. We have added the midwife workforce employed in MoH and number of births in 2016, and information regarding scope of practice to the introduction, page 4.

2. Methods - within the 'models of care', is the regular model of governmental antenatal care provided by a separate group of primary care providers (midwives, nurses, and physicians). As it is written now, it's confusing as to whether it is the same provider or a separate set of primary care providers that take care of antenatal care. We made a more detailed distinction between the midwife-led model and the regular model of care at page 6.

-Participants and data collection: please describe what constitutes "regular care". A description of the control group is lacking. A more detailed description of the models of care has been given on page 6.

-The questionnaire: pilot testing of the final questionnaire for context and cultural sensitivity on only five midwives is a limitation. A larger sample on participants reflective of the study participants (e.g., women post birth) would be a more appropriate pilot. -Patient and public involvement: This section implies that patients were involved in the testing of the questionnaire, which is not indicated (only five midwives participated in piloting of the questionnaire).

The development of the questionnaire was based on previous studies in different populations, and the local midwives involved in testing it, knew the women's culture well and had a broad experience. Women were involved when the midwife researchers tested the questionnaires feasibility this did not lead to any adjustments and was not mentioned in the first manuscript due to the limitation of words. We agree on the importance of including this information which we added to the methods section at page 7.

The discussion focuses in part on the attendance of a companion during labour, which is interesting, yet the analytic approach to this question as well as the detailed results of this question are lacking. We agree, and we added more regarding this information to the results section on page 11 and 13.

3. Results - within 'women's recommendations' - my understanding is that this is an open-ended question in the survey. This section is brief and there is no qualitative analysis regarding how the themes were coded, the themes themselves and the frequency in which the themes emerged. This section has the opportunity to yield additional insights into the research question, yet is not covered in-depth.

The women's recommendations were written down by the research midwives in short terms. The statements were organized in themes and coded in an excel sheet and the frequency of each theme were calculated. This information has now been added to the manuscript on page 13.

4. Discussion - as covered in my previous comment, the discussion draws heavily from the open-ended question, however, this is lacking from the analysis. This has now been added to the analysis and results.

Reviewer: 3

Reviewer Name: Jane Sandall

Institution and Country: King's College, London

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

The aim of this study was to investigate if and how a modified case load midwife-led continuity model of care, in the governmental system in Palestine, influenced rural women's satisfaction with care, through the continuum of antenatal, intrapartum and postnatal period. A secondary aim was to explore the association between the model and duration of exclusive breastfeeding. This is one of several papers reporting findings from this research which are cited in this paper.

The evaluation of models of midwife continuity of care in low- and middle-income settings is a WHO research priority in the intrapartum guidance. This is an important study.

An observational case-control design was used to compare satisfaction with care, between rural women receiving the midwife-led continuity model and rural women receiving regular maternity care,

through the continuum of antenatal, intrapartum and postnatal period. The study design is weak but the authors acknowledge this in study limitations.

Women who were between one to six months after birth invited to answer a face to face questionnaire. Careful consideration was given to recruitment and consent and administration of the questionnaire face to face. The questionnaire was based on previous studies measuring satisfaction with midwife-led continuity. The questionnaire was tested with 5 midwives, but not with women, which is a limitation. The feasibility of the questionnaire was tested with ten women, five on each midwife research assistant, without need for adjusting the questionnaire, this has been added to the methods section.

Continuity was measured by number of women who received care from their antenatal midwife during labour, at postnatal hospital and community. Primary outcome was the mean sum-score of satisfaction with care through the continuum of antenatal, intrapartum and postnatal period. Secondary outcome was exclusive breastfeeding.

The power calculations were based on the results from a recent study in Australia, as we found no available studies on satisfaction with midwife-led continuity models of care in low – middle income countries.

The STROBE guidelines were used to assess reporting quality.

This is a well designed and reported study and I have no further comments.

VERSION 2 – REVIEW

REVIEWER	Caroline Homer Burnet Institute
REVIEW RETURNED	12-Jul-2019

GENERAL COMMENTS	Thank you. All changes have been made.

REVIEWER	Cristina A. Mattison McMaster University, Canada
REVIEW RETURNED	26-Jul-2019

GENERAL COMMENTS	The authors have addressed all my comments. I do not have any further revisions.