Perspectives on birth among families and health care professionals in the Arctic: A scoping review protocol

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Introduction

Many countries in the Arctic have lost local maternity services in recent years due to centralization, forcing women to travel significant distances to access intrapartum care[1, 2]. Centralization of birthplaces is a reality in many remote communities[3], and the practice of routine evacuation for birth from smaller towns/settlements to larger urban centers, points to a conflict between the necessity to ensure safety of the patients, and the importance of delivering services, that are respectful to the needs and values of the population served[4]. Globally, there are 476,6 million indigenous peoples[5], and the proportion of indigenous people living in the Arctic is estimated to be 10 percent of the total population[6]. In the Arctic, indigenous populations include but is not limited to Saami in areas of Finland, Sweden, Norway and Russia, Aleut, Yupik, Inuit (Iñupiat) in Alaska, Inuit (Inuvialuit) in Canada and Inuit (Kalaallit) in Greenland[7].

The objective of this review is to scope and map existing research, providing perspectives on birth from the views of families and health care professionals in remote communities in the Arctic. To gather information about pregnancy and birth from a "patient-provider" perspective, will provide an overview of existing knowledge about the challenges and opportunities of centralization of births in remote communities. The findings of the review can support decisions made by governments, local authorities, and other health- and maternity care providers, when planning future maternity care service and birth programs in remote places.

Background

This review is instigated by a project investigating facilitators and barriers regarding birth service in Greenland. In 2002, a new referral system was instituted in Greenland, and new guidelines were introduced, to streamline the criteria for referral from the regional birth clinics to the obstetrical department in the capital Nuuk[8]. Within the last 10 years, 4 out of 7 regional birthplaces in Greenland have closed due to substantial personnel shortage and recruitment challenges in cities and settlements[9]. It is estimated that 40-50% of the pregnant women in Greenland will be transferred out of their communities to give birth[10]. This includes both normal and low/high risk births. The changes in the referral system led to an increase in the proportion of deliveries in the capital Nuuk, which in turn was followed by public criticism[8].

Within the last decades[10-12] childbirth has changed significantly in several Arctic countries. From 1953 to 1992 women in Greenland gave birth in their local communities and even in 2000, it was still uncommon for women to leave their communities for births[10]. In Canada, growing governmental control over indigenous childbirth led to increased evacuations, and in the 1980's, almost all births took place outside the most remote indigenous communities[13]. In many Arctic countries, births are an important part of culture[14], it is a personal event as well as a family and community event, involving all members of the community[13, 15]. Research from Canada and Greenland has shown that leaving family, culture, and community behind can have substantial social consequences, not only for the woman and the family, but for the whole community[15, 16 12, 17, 18].

When the women are separated from their family, they are on their own with the responsibility of care and decision-making for their unborn child [19]. Therefore, giving birth is at risk of becoming a stressful event that disrupts, rather than strengthens families and communities[3].

In the Arctic, childbirth has moved from the private to the public arena, where decisions are made by policymakers, health, and government officials while the women and families themselves are often excluded from the dialogue[10]. A study performed in Greenland concludes that focus should be on the views and opinions of the community for which decisions are made, to be able to get valid information about the needs of a community and to ensure that decisions are culturally safe[12]. This review seeks to investigate what is currently known about families' and health care professionals' perspectives on birth.

Protocol design

Scoping reviews can be used to map key concepts that underpin a field of research and to inform future research[20]. For these reasons a scoping review was considered the most appropriate methodology. This scoping review will be conducted according to the Preferred Reporting Items for Systematic reviews and Meta-Analyses for Scoping Reviews (PRISMA-ScR) Checklist[21] and The Joanna Briggs Institute Reviewers' Manual 2015, Methodology for JBI Scoping Reviews[20]. The specific methodological Framework for this review were developed based on Arksey and O'Malley's[22] 5 stages for conducting a scoping study: (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; and (5) collating, summarizing and reporting results.

This scoping review protocol is made a-priori to the scoping review, to ensure transparency and to reduce duplication of work. The protocol provides the plan for the scoping review and is important in limiting the occurrence of reporting bias[20]. Given the iterative process of a scoping review, changes to the protocol can be expected, and any change will be reported and justified in the final report[20].

Stage 1: Identifying the research question

Through consultation with the research team, the overall main research question of the review is defined as: 'What are the perspectives on birth in remote communities in the Arctic? Furthermore, two sub questions has been developed: 1) 'How does families and health care professionals perceive birth in remote communities in the Arctic?' and 2) 'What are the barriers and facilitators to local birth giving in remote communities in the Arctic?'

Stage 2: Identifying relevant studies

Search strategy and information sources

Identification of studies relevant to the review will be achieved by searching electronic databases of the published literature in MEDLINE, Cinahl, Scopus and PsycINFO. The databases were selected as they contain the largest number of relevant articles and covers a broad range of disciplines. As the review includes perspectives from both families and health care professionals, two separate searches will be conducted in all the included databases (the proposed search strategy is shown in supplementary appendix 1).

Grey literature such as government documents, reports, newsletters, policy statements, working papers etc. will also be eligible for inclusion. To ensure that all relevant information is captured, a targeted search in local, national, and international organizations' websites and related health or scientific organisations will be conducted. Systematic- and scoping reviews and meta-analyses will also be included in the search. All reference lists of included studies will be checked, to identify additional studies of relevance.

As recommended by JBI for scoping reviews, a three-step search strategy will be utilized[20]. The first step is an initial limited search of at least two online databases relevant to the topic. The initial search is followed by an analysis of the text words contained in the title and abstract of the retrieved articles, and of the index terms used to describe the articles. A second search with all the iden-

tified keywords and index terms will then be undertaken across all included databases. Thirdly, the reference list of all identified articles will be searched for additional studies[20]. Search terms will be discussed and determined with input from the research team. The search strategy will be developed together with an experienced librarian. Literature in English, Danish, Swedish and Norwegian from 2002-2022 will be eligible for inclusion.

Stage 3: Study selection

The screening process will consist of two levels of screening: (1) title and abstract screening and (2) full-text screening. For the first level of screening, three investigators will independently screen title and abstract of all retrieved citations for inclusion against the in- and exclusion criteria. All articles that are deemed relevant by at least one of the reviewers, will be included in the full-text screening. In the second step, the three investigators will then each independently assess the full-text articles. Any discordant in the full-text screening will be reviewed again, and any disagreements will be resolved through discussion, until full consensus is obtained. The web-based software Covidence[23], will be used in the screening process.

Only perspectives on 'normal' births will be included. The following definition from WHO of normal birth will be used: '*Spontaneous in onset, low-risk at the start of labour and remaining so throughout labour and delivery. The infant is born spontaneously in the vertex position between 37 and 42 completed weeks of pregnancy. After birth mother and infant are in good condition* '[24]. All available literature regarding birth perspectives in remote communities in the Arctic will be included. These perspectives can for example evolve around circumstances, practices and/or experiences of significance to birth giving.

Studies originating from the Arctic will be included. The Arctic regions is divided between eight Arctic countries; Canada, United States, Russia, Finland, Sweden, Norway, Iceland, and Denmark[25].

Studies involving families and/or health care professionals are eligible for inclusion. 'Families' includes women in any parity and trimester and/or their partner, and families who have given birth within the last year. Women, from the age of 18 and above, will be included. The decision to exclude women/teenagers under 18, is based on the different circumstances, that teenage pregnancies entails (e.g. decision about abandoning school)[26]. 'Health care professionals' (e.g. midwife, nurse, doula) will be included, if they provided care for women and families during perinatal period, within a formal organization, or anyone who is identified as providing maternity care.

Stage 4: Charting the data

In a scoping review, the data extraction process is referred to as charting the results[20]. A draft charting table has been developed to record the study characteristics (appendix 2). The study characteristics to be extracted will include, but not limited to author(s), publication year, country of origin, aim/purpose, main conclusion, study population, methodology, and key findings that relate to the scoping review questions. This may be further refined in the final report, and the charting table updated accordingly. Three reviewers will conduct a preliminary pilot-test of the data extraction, to ensure inter-reviewer reliability in the data extraction process. Any uncertainties or conflicts between the reviewers will be resolved by full team discussion, with the aim of reaching a consensus. The data analysis software NVivo will be used to validate and code the data[27].

Stage 5: Collating, summarizing, and reporting results

A thematic construction will be used to provide an overview of the breadth of the literature. A numerical analysis of the extent and nature of studies will be made using tables and charts. The results will be described in relation to the study objectives and in the context of the overall study purpose. Furthermore, a flow diagram illustrating the inclusion/exclusion process including the number of papers retained at each stage of the process, will also be used to present the results.

Appendices

Appendix 1 – Proposed search strategy

Database X	Block 1	Block 2	Block 3	Block 4
Search 1	"Healthcare professional*" OR "health-care professional" OR professional* OR midwife* OR nurse* OR doula* OR physician* OR doctor* OR practitioner* OR caregiver* OR "health professional*" OR "health worker*" OR obstetrician* OR "antenatal care" OR "perinatal care" OR "maternal care" OR "maternity care"	Circumpolar OR subarctic OR polar OR arctic OR greenland OR alaska OR canada OR sweden OR norway OR finland OR russia OR iqaluit OR sapmi OR nunavut OR nunavik OR nunatsiavut OR inuvialuit OR yukon OR "northwest territor*"	Rural OR remote OR remoteness OR isolated OR isolation OR distant OR faraway OR secluded OR country OR countryside	Birth* OR childbirth* OR childbirth* OR parturition* OR labor OR labour
Search 2	Mother* OR parent* OR adolescen* OR "young adult*" OR woman OR women OR female* OR pregnan* OR famil*	(Same as search 1 block 2)	(Same as search 1 block 3)	(Same as search 1 block 4)

Appendix 2 – Draft charting table of study characteristics

Extracted information
a. Author(s)
b. Year of publication
c. Country of origin
d. Aim/purpose
e. Main conclusion
f. Study population/sample size (if applicable)
g. Methodology/methods
h. Key findings that relate to the scoping review questions

Appendix 3 – Eligibility criteria

Inclusion criteria	Exclusion criteria
- Remote/rural context - Originating from the Arctic (Canada, United States, Russia, Finland, Sweden, Norway and Greenland) - Related to normal birth(s) - Women (in the families) from the age of 18 - Perspectives from: families OR health care professionals providing maternity care	- Urban context - Related to high-risk pregnancies - Not originating from the Arctic countries - Women (in the pregnant family) aged 18 or younger - Related to smoking OR covid-19 - Not perspectives from families OR health care professionals providing maternity care

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