MIDWIFE-LED ANTENATAL CONSULTATION: TOWARDS A COMMUNICATION MODEL

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Abstract

Aim: Evidence on effective communication in antenatal consultations between midwives and pregnant women is lacking. In a study, antenatal consultations implementation outcomes were evaluated. From the data, relevant aspects emerged concerning communication during consultations. This paper presents selected results and proposes a theoretical foundation for antenatal consultations. Design: A qualitative design. Methods: Semi-structured interviews were conducted with ten midwives, eight pregnant women, eight managers, and eight physicians in two hospitals. The interviews were audiorecorded, transcribed, and analyzed with framework analysis using the following steps: 1) Familiarization; 2) Coding: first, inductive coding (open coding to identify new themes), followed by deductive coding (by theory-defined codes); 3) Development and application of an analytic framework; 4) Data- charting in a matrix; and 5) Interpretation. Results: Amongst others, the following findings emerged from the data: communication about childbirth is influenced by the perceptions and conceptions of the midwife and the pregnant woman herself; pregnant women’s degree of participation in the consultation process depends to a significant extent on the attitude of the midwife. Conclusion: To assure the success of consultations, we propose a consultation model comprising the following elements: the life world of the woman and midwife, the construction of a social reality, and the mediation of mutual goals, expectations, intentions, wishes, and beliefs.

Keywords: antenatal consultation, communication barriers, communication theory, midwifery, prenatal care.

Introduction

A limitation of midwifery practice is that the mechanisms by which possible benefits ensue are largely unknown. To support effective communication in maternity care, such knowledge is urgently needed. There is a lack of evidence on how organizations prepare, monitor, and sustain interventions to support effective communication, which is reflected in priority outcomes for women (Chang et al., 2018). One possible explanation for this is a lack of theoretical foundations for communication concepts in maternity care and antenatal consultations (AC). Theories give systematic explanations for an event or behavior and show interrelations between concepts and definitions; in addition, theories can explain and predict occurrences (Tabak et al., 2012). Without explicit theory and research, positive attributes cannot be identified (Fahy & Parratt, 2006).

Every consultation a midwife conducts influences the attitudes and decisions of the pregnant women (Höfer, 2013), and each midwife has her individual notions of how AC should be conducted. This notion is shaped by the midwife’s experience, values, and education. Theory-based communication concepts support midwives in choosing a targeted, transparent, and valid way of consultation. Additionally, a theoretical foundation is a prerequisite for evaluating consultation in a complex situation such as AC. Moreover, many theories, models, and frameworks have been investigated and offer an evidence base for consultations, as an alternative to arbitrary consultation from midwives (Siegle & Schmidt, 2016).

In Germany, the National Expert Standard on promoting physiological birth (NES) sets the quality level. This quality level is defined by structure, process, and outcome. The aim of the NES is to promote physiological childbirth for every pregnant woman through the advocacy and support provided by a midwife. To achieve this goal, the NES recommends midwife-led AC. AC is a single meeting between a pregnant woman and a midwife at a hospital, to prepare for the upcoming birthing. As described in the NES, AC comes with a number of communication recommendations (Deutsches Netzwerk für Qualitätsentwicklung in der

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The midwife should encourage the pregnant woman to talk about her wishes, expectations and fears concerning the upcoming birth. The midwife should promote and facilitate the pregnant woman’s participation in the consultation process. Agreements between the midwife and the pregnant woman should be documented. The development of a consultation concept, including aims, principles, and surrounding conditions to support the consultation process, is also recommended by the NES (DNQP & Verbund-Hebammenforschung, 2014). A theoretical foundation, such as a communication theory, model, or framework, is essential for the development of concepts, communication training, and consultation evaluation (Craig et al., 2013; Elsbernd, 2013; Villalobos et al., 2019).

So far, no data exist on whether midwife-led AC is performed in accordance with the NES recommendations, or on the resulting implementation outcomes. This topic was addressed in a larger study, using an explanatory mixed-method design of AC in two hospitals, in order to explore the fidelity (adherence and participant responsiveness) of implementation outcomes (Dusenbury et al., 2003) and their sustainability (benefits, institutionalization, routinization, and development) (Fleiszer et al., 2015). The results of quantitative assessment of AC documents (Siegle et al., 2019) have been published elsewhere, and the qualitative results of implementation sustainability are under review. Neither of the participating hospitals used a theoretical foundation to conceptualize consultation, indicating either a lack of knowledge on its use, or a lack of suitable communication theories or models for consultation. Relevant results on communication emerged from the data and will be presented in this paper.

**Aim**

To our knowledge there are no recommended communication theories or models for communication in midwifery, particularly regarding AC, despite the uncertainties of the birth process. Therefore, the aim of this paper is to present qualitative results on the communication of midwives with women to promote physiological birth, and the theoretical assumptions derived regarding AC.

**Methods**

**Design**

Pragmatism was chosen for methodological orientation. Pragmatism eschews metaphysical concepts of truth, for single or multiple realities that can be subjected to empirical study. Pragmatism is concerned with what “works” in practice (Creswell & Plano Clarke, 2011).

**Sample**

In two hospitals (hospitals QR and SF) offering midwife-led AC according to the NES, the following people were invited to qualitative interviews: midwives conducting AC, pregnant women who had received AC (on a specific day), physicians working in obstetrics, and managers implementing AC. As gatekeeper, the midwife asked pregnant women at the beginning of AC if they wished to take part in this study. To ensure anonymity to each participant, the head midwife, head of the nursing department, head physician, and members of the quality assurance department of each hospital, were grouped as “managers” in the results.

**Data collection**

For each participating group (women, midwives, managers, physicians) a semi-structured interview guide was developed by the first author, discussed by a group of qualitative researchers, and pilot tested (examples see Table 1).

<table>
<thead>
<tr>
<th>Structure</th>
<th>Example question for pregnant women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open query</td>
<td>You visited a midwife-led antenatal consultation here in the hospital. Tell me what it was all about.</td>
</tr>
<tr>
<td>Specific query</td>
<td>What kind of benefits do you see?</td>
</tr>
<tr>
<td>Ending</td>
<td>Is there anything important we did not talk about and which you would like to add?</td>
</tr>
</tbody>
</table>

In addition, reflective postscript notes were taken after each interview (Witzel, 2000). All participants were interviewed face-to-face in German (March and October 2017) by a single interviewer (AS, a nurse and scientific officer, with experience in qualitative interviews, who was unknown to the participants). All interviews were conducted within the hospital setting according to participant preference. In three of the eight interviews, a partner accompanied the women.
Data analysis

The audio-recorded interviews were transcribed using F4-software (Dresing & Pehl, 2015) and anonymized. MAXQDA 12 software (Release 12.3.6) supported the data organization and analysis. The data analysis (in accordance with framework analysis) comprised the following steps: 1) Familiarization; 2) Coding, starting with inductive coding (open coding to identify new themes), followed by deductive coding (according to theory-predefined codes); 3) Development and application of an analytic framework; 4) Data-charting in a matrix; and 5) Interpretation (Gale et al., 2013). Codes, categories, and the analytic framework were developed by the first author AS, discussed with the second author MR, and a group of qualitative researchers (qualitative research workshop) at different stages on a regular basis.

To ensure the transparency of the report, the Consolidated Criteria for Reporting Qualitative Research (COREQ) was used (Tong et al., 2007).

Table 2 Characteristics of the participants

<table>
<thead>
<tr>
<th>Items</th>
<th>Managers</th>
<th>Midwives</th>
<th>Pregnant women</th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. participants</td>
<td></td>
<td>10</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Gender</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>men</td>
<td>3</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>women</td>
<td>5</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>45</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>average years</td>
<td>31–55</td>
<td>25–52</td>
<td>26–38</td>
</tr>
<tr>
<td></td>
<td>range years</td>
<td>19</td>
<td>19</td>
<td>30–49</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td>3–30</td>
<td>4–19</td>
</tr>
<tr>
<td></td>
<td>average years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>range years</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Results

Participant characteristics

Altogether, 34 interviews were conducted, eight with midwives, eight with pregnant women, eight with managers, and eight with physicians. The average age of interviewed midwives was 42 years (range 25–52), pregnant women 32 years (range 26–38), managers 45 years (range 31–55), and physicians 39 years (range 30–49). Three managers and one physician were men. Average duration of the interviews was 38 minutes (range 28–55) with midwives, 19 minutes (range 5–29) with pregnant women, 54 minutes (range 23–100) with managers, and 28 minutes (range 20–33) with physicians (see table 2). Two interviews were considerably shorter (the women had limited time due to their need to take care of other children).

In the interviews with midwives, pregnant women, physicians, and managers, the following categories regarding consultation conduct emerged from the data: communication (inductive), participation (deductive), and agreements (deductive).

Communication

Communication between the midwife, woman, and her partner is influenced by perceptions and conceptions concerning birth and birthing. According to midwives, physicians, and managers from hospital QR, the woman and her partner often have a hazy perception of the birth process, which has certain advantages, such as the woman being able to forget her discomfort, pain, and extreme situations during her birthing. However, there are also disadvantages, such as the woman not being aware of (or forgetting) exactly what midwives and physicians said or did during the birth process. In the view of midwives, women’s awareness is also affected during AC, since the matters discussed in AC seem to have been forgotten during the birth process itself. They suggest that the information the woman absorbs during AC passes through a selective filter – screening and protecting the woman, resulting in her hearing what she wishes to hear. One midwife believed this might apply to other contexts in healthcare, such as the breaking of bad news. Midwives put a woman’s inattentiveness down to “hormones” or to her being too busy anticipating her next question to listen or attend to what the midwife is telling her.

Although midwives have the impression that women’s attentiveness may be limited during AC, they, nevertheless, endeavor to prepare the woman and her partner for the uncertainties of the birth process. In AC, midwives stress that everything physicians and midwives do during the birth process is for the woman’s health and well-being, since, according to one manager: “... often they [the woman and her partner; AS], presume we want to upset them on purpose ... [as kind] of a reproach. Actually, we want to support them using scientific evidence but trying to adapt this evidence to the individual woman in front of us is, I think, very, very difficult. To make
In hospital QR, in particular, midwives aimed at achieving an understanding of the woman and to facilitate the workflow and the birth process by informing and explaining. This is opposed to the NES goal of gathering information about wishes, concerns, and worries of pregnant women during AC. Midwives in hospital SF also addressed the differences between perception and reality in AC: “... I think it’s really important to bring them [the women; AS] close to what ‘reality’ looks like ... what birthing ‘really’ involves. To introduce a little bit of reality; ... so they don’t come and think birthing is like a nice little stroll in the park” (SF-He7; 63 – own translation). According to midwives in hospital SF, it is necessary to explore the perceptions of the pregnant woman to be able to attend to these perceptions. Although most women are well-informed, primipara do not have firsthand knowledge of birthing; instead, according to midwives in hospital SF, wild stories about birthing circulate. To counter this, midwives try to explain birthing in AC; although one midwife stated this is not an easy task: “I try to strike a balance between reality and the wishful thinking of the woman, so as not to lead the woman on, but ... to faithfully describe delivery room reality or daily routine” (SF-He3; 53).

Interestingly, in both hospitals some women also mentioned changes in their perception. One pregnant woman, pondering her altered attitudes and opinions since becoming pregnant, said: “Yes, well it is really strange, but when you’re pregnant, you’re also nuts” (QR-F1; 51 – own translation).

**Participation**

The midwife should encourage the pregnant women to participate in the consultation process. However, when describing consultations with pregnant women, midwives of hospital QR use terms such as: “explaining”, “talking to”, “speaking about”, “informing”; such terms do not suggest active participation on the part of the women. One of the midwives said: “I start with ‘how nice that you are here’ and what I would like to talk about with her. Then I explain that we start collecting her data and filling in the documents. [...] after that, we will be talking about her birthing. And then she can ask her questions, because sometimes the women want to ask right away” (QR-He3; 60 – own translation). This statement offers little encouragement to women to participate in the consultation process. On the other hand, midwives report that when a woman is asked how she has been during her pregnancy, she will talk at length, which indicates that with open questions pertaining to the women’s experiences, participation can be initiated. All women in hospital QR reported that their questions had been answered.

In hospital SF, midwives regarded giving the woman an opportunity to talk about herself by asking questions as a prerequisite which allowed them to recognize what the consultation needs were and to give appropriate advice. According to the midwives, the pregnant woman should be heard and accepted with all her complexities – especially in the case of a woman who has given birth before: she needs to talk about her experience of birthing. The midwives emphasize that they want to know what was good and what could have been better about the previous birthing.

**Agreements**

According to the NES, midwives should document agreements between the midwife and pregnant woman. The interviews revealed an ambiguous understanding of agreements. Agreements in the strictest sense cannot be arranged in AC, according to midwives in hospital QR. One midwife stated: “they [pregnant women; AS] should be able to inform us about their wishes in a situation when they are not in pain. These are basically wishes ... but I can’t promise her if it [i.e., the birth; AS] will happen like that, but I can tell her we do read it [the birth plan; AS]” (QR-He5; 168 – own translation). An effectual agreement, understood as a joint decision that a particular course of action should be taken, can only be arranged between the pregnant woman and the midwife during the actual birthing, according to midwives. However, in this situation, agreements depend on the course of the birth process. Physicians agreed that it was helpful to know about the wishes and conceptions of the pregnant woman before birthing: it is only by knowing what the pregnant woman’s wishes are, that they can point out why it is not possible to fulfill a particular wish.

This shows, on one hand, that there are factors a pregnant woman can influence if the course of the birthing process allows it. On the other hand, there are factors pregnant women have no (or only little) influence over, e.g., the necessity of a cesarean section or an episiotomy. Although a woman may state that she does not wish to have an episiotomy, it might, nevertheless, be necessary to perform one during the birthing. As one midwife stated: “if a baby signals me with its heart sounds, ‘hey, I have to be born with the next contraction and not in seven or eight!’, [...] I can’t worry about the perineum, since in the end mother and child must leave the hospital in good health. We won’t accept anything else”
of communication about aims, intentions, and expectations between midwives and women might lead to misunderstandings. Therefore, underlying theory should explain how an intervention such as AC can be expected to produce the desired outcomes. There are certain pre-existing communication models that might be used in the context of AC. Some of them are very simple, such as the linear model (whereby a sender encodes a message and sends it through a channel for a receiver to decode), or the interactional model, in which communication works bidirectionally between sender and receiver; however, these are too simple to help with the conceptualization of AC.

Several existing theories and models, while not developed for AC, have been identified as suitable for conceptualizing midwife-led AC.

Carl Rogers developed a person-centered consultation theory in which he states that problems may be perceived as a threat, thus resulting in a lack of orientation in incriminatory life events that cannot be harmonized with the woman’s experienced coping (Rogers, 1951). Rogers’ theory contains no intervention strategies; therefore, the midwife would neither be offering intervention strategies nor making decisions. However, results indicate that in AC and during birthing there are situations in which midwives offer strategies, or even make decisions against the woman’s wishes; namely, if the safety of mother and child are at risk.

Another possible theory is outcome-oriented consultation (Bamberger, 2015), whose aim is to provide solutions to a problem by identifying and activating a person’s expertise and social resources – thereby enabling a pregnant woman to meet challenges. The interview results showed that many pregnant women do not explicitly state a problem. Although the midwife and pregnant woman can develop strategies on how to proceed, the birth process can develop quite differently from what was expected; this should be considered. Moreover, in outcome-oriented consultation, the midwife should have several contacts with the pregnant woman and be the one attending her before, during, and after the birth process. This is not standard in Germany, where 98% of all children are born in delivery rooms at hospitals with midwives working shifts (Albrecht et al., 2012).

Usually, the midwife in the hospital and the pregnant woman have just a single AC in which to prepare for the birthing. Furthermore, there is uncertainty concerning the course of the upcoming birth process; therefore, a specialized model is needed for AC.

Discussion
The results reveal important communication topics and procedures in midwife-led AC. A lack
We propose a consultation model for AC to promote physiological birth based on the results presented here, combined with elements of ethnomethodology (Garfinkel, 1996; Raschper, 2015) and linguistics (Meibauer et al., 2015) (see Figure 1). Ethnomethodology describes how interaction succeeds in daily routines by using common-sense methods. For successful communication, there are several prerequisites: the midwife and the pregnant woman should have a shared understanding of their actions, they should know their daily routines, and should align communication within their known experience patterns. Both of them possess different experiences and expectations to one another (Garfinkel, 1996), and their intentions, wishes, and beliefs (Meibauer et al., 2015) are part of the consultation (represented in the diagram as square boxes). The midwife and the pregnant woman belong to different life worlds (indicated as circles) and construct a mutually reciprocal reality. The arrows show the bidirectional construction of social reality between the life worlds (Garfinkel, 1996; Raschper, 2015); whereby, expectations of the other are evoked.

Understanding and expectations are guided by the interpretation of their counterpart. Social similarity and trust are crucial for a correct understanding. (Garfinkel, 1996; Raschper, 2015). The uncertainty of the birth process is illustrated as a cloud above the consultation setting. The aim of AC can be seen in the center: mediation of the shared goal—a physiological birth (DNQP & Verbund-Hebammenforschung, 2014).

There are limitations to the study that should be considered. The number of participants was restricted to two hospitals. Furthermore, it is possible that only pregnant women, midwives, physicians, and managers with a positive attitude to AC participated. The interviewed pregnant women will return to the same hospital to give birth potentially resulting in their providing socially desirable answers in the interview. Finally, it is possible that theoretical saturation was not achieved, since the number of interview partners was limited, and time was constricted.

Figure 1 Proposed consultation model of AC

Conclusion
To promote physiological childbirth in AC, it is important for midwives to encourage and gather information about the wishes, concerns, and worries of pregnant women. Too much information can be overwhelming for women and might lead to misunderstandings. The nature of agreements in AC is ambiguous. Therefore, more research on agreements between midwives and pregnant women and on effective communication in midwifery is needed. The proposed communication model can help to structure and evaluate the AC offered by midwives, since it offers dimensions (e.g., expectations, wishes, beliefs, intentions) and connections (e.g., reciprocal construction of social reality, mediation of the mutual goal) between these dimensions which can be evaluated. Furthermore, communication training and evaluation of AC can be conducted based on this model. Overall, more
research on the applicability of the proposed communication model, but also concerning agreements and liability of agreements in AC is necessary. The possibilities and limitations of communication within the AC need to be studied further.

Ethical aspects and conflict of interest
The ethics committee of the German Society for Nursing Science (Deutsche Gesellschaft für Pflegewissenschaft, No.2018-1) granted approval for this study. Participation in the study was voluntary, and after written and oral information, all participants gave their written informed consent.

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Author contributions
Conception and design (AS, MR), data analysis and interpretation (AS, MR), manuscript draft, data curation, validation, project administration (AS), critical revision of manuscript (AS, MR), final approval of the manuscript (AS, MR).

References


