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How midwives tailor health information used in antenatal care

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ABSTRACT

Objective: to examine the informal approaches taken by midwives and other antenatal staff to adapt health communication to the needs of their patients, as well as their perception of the barriers faced when trying to provide tailored health promotion.
Design: qualitative research methods (participant observation, individual and group interviews) were utilised to gain an understanding of how media and communication resources were used in practice within the study hospital.
Setting: a major metropolitan teaching hospital located in the Northern suburbs of Adelaide, South Australia.
Participants: individual semi-structured interviews with antenatal staff ($n=8$) were combined with group interviews ($n=2$; total number of staff=13), and observational research.
Findings: midwives and other antenatal staff use a range of strategies to meet the perceived health literacy level of their patients. However, their attempts to tailor health information to individual needs are frequently based on incomplete information about patients' health literacy, may be inconsistent in delivery and content and are seldom assessed to determine whether communication has been understood or led to patient behaviour change.
Key conclusions: midwives fully recognise the need to adapt standard printed materials to meet the diverse health literacy needs of patients but lack the resources required to evaluate whether these adaptations have positive effect.
Implications for practice: midwives' commitment to improving health communication provides a latent resource that institutions can build on to improve health outcomes for patients with low health literacy. This requires improvements in health communication training, willingness to use a range of validated instruments for measuring health literacy, and commitment to use of innovative approaches to health promotion where these have been shown to have a positive impact on health behaviours.

Introduction

The benefit of tailoring health information delivery to meet the specific needs of patients has become an accepted principle for effective health promotion and acute care (NCI, 2005). This need is particularly important in relation to the information needs of patients with low levels of health literacy, with specific communication needs due to minority cultural and linguistic background, or whose low socio-economic status makes it difficult to access health care resources that others may take for granted (Barber et al., 2009). Nevertheless, putting this principle into practice presents significant challenges to health care professionals given the resource constraints they often face in delivery of care, including inadequate knowledge regarding these principles. Evidence suggests that health care professionals may be unable or unwilling to implement systematic evaluations of patient health literacy as part of standard care (Macabasco-O'Connell and Fry-Bowers, 2011), but informal estimates of health literacy are

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frequently inaccurate and often overestimate patients' ability to understand and act on information (Bass et al., 2002; Yin et al., 2009; Dickens et al., 2013). As a consequence, health outcomes for low health literacy patients may be worse than anticipated and below what could be achieved through appropriately tailored health communication (Andrulis and Brach, 2007; Nutbeam, 2009).

Specific requirements for tailoring of information used for health promotion during pregnancy have been identified by a number of authors (Crafter et al., 1997; Renkert and Nutbeam, 2001; Abrahamsson et al., 2005b; Collins, 2007). Pregnant women may also have poor health literacy in relation to their own care and that of their unborn or newborn children (Kumar et al., 2010). Continuity of care during pregnancy has also been identified as a major factor contributing to the welfare of pregnant women (Crafter et al., 1997), which can lead to improved health outcomes for both mother and child (Sandall et al., 2013). However, as with formal health literacy screening, continuity of midwifery care is often difficult to provide within established working practices and available resources (Tracy et al., 2013). Therefore, the use of media and communication technologies to provide information about pregnancy potentially forms a vital link between patients and health care providers (Raine et al., 2010).

Despite the recognition of the importance of effective communication during pregnancy as part of the wider process of improving maternal and neonatal outcomes, we currently have little understanding of how midwives and other health care professionals use media to support women during antenatal care. Coulter and Baldwin (Coulter and Baldwin, 2013) suggest that if we are to improve communication interventions across a range of contexts it is important to avoid generalisations or assumptions about the effectiveness of communication through developing evidence-based understandings of 'communicative ecologies', i.e. how media and communication resources are used in practice within a particular context. This paper presents the first example of such a communicative ecology approach to the study of health communication practices in Australian antenatal care. It represents a first step towards understanding how variations in the extent and quality of tailored health promotion resources might impact on maternal and neonatal health outcomes. It does so by examining the informal approaches taken by midwives to adapt health communication to the needs of their patients, as well as their perception of the barriers faced when trying to provide tailored health promotion. This paper must of necessity be selective in its presentation of findings and we focus attention on the combined use of face-to-face (oral) communication with conventional printed materials.

Method

This paper draws on qualitative data collected in the first phase of a health communication project, 'Health-e Baby', conducted in partnership with a major metropolitan teaching hospital located in the Northern suburbs of Adelaide, South Australia.[1] The aim of Health-e Baby is to design and evaluate a tailored health promotion strategy for pregnant Australian women. In the first phase of the project, qualitative methods were used to summarise and analyse existing antenatal health promotion/communication practices in the context of the partner hospital and to identify potential areas for improvement. Findings specifically related to the communicative ecology experienced by patients using the hospital's antenatal services have been reported in a separate paper (Rodger et al., 2013). This paper focuses on the communicative ecology experienced by staff in order to develop answers to a series of primary research questions:

- What health communication resources and channels are available to staff to use with patients during antenatal care?
- Were these resources adapted (tailored) by staff in practice to meet the needs of different patients? If so, how?
- What evaluations did staff members make of different resources in relation to their capacity to deliver appropriate care to different patients?

Participants

Individual semi-structured interviews with antenatal staff ($n=8$) were combined with group interviews ($n=2$; total number of staff=13), and observational research. Participants included staff working in the following areas: antenatal clinic, midwifery group practice, drug and alcohol services, antenatal asthma management clinic, antenatal and parent education, special care nursery, shared care programme, and the birthing and assessment unit.

Participant observation was conducted at two triage appointments, two antenatal and parenting education sessions and in the waiting room that serves the antenatal clinic. A Research Associate and Research Midwife conducted, recorded and transcribed each individual interview. The first group interview was recorded, but due to technical difficulties the second group interview was not. Detailed notes were taken and written up immediately after completion of all interviews. Transcriptions and field notes were analysed to identify material relevant to each of the primary research questions. Summaries of each interview and field notes were then circulated and discussed by the research team as a whole. Follow-up questions were then asked, whenever possible, to clarify any questions arising from this preliminary analysis.

Although only a relatively small number of staff members were included in interviews ($n=21$), observational research and informal discussions with antenatal staff generated a considerable body of qualitative data and allowed the researchers to determine whether information gathered from interviews could be generalised to institutional practice as a whole. Research conformed to the 'Statement on Human Experimentation' by the National Health and Medical Research Council of Australia and was approved by the Adelaide Health Service Human Research Ethics Committee (The Queen Elizabeth Hospital, Lyell McEwin Hospital, Modbury Hospital). All subjects gave informed consent and are referred to by pseudonyms throughout.

Findings

We begin our discussion of the antenatal health education practices utilised at our field site with the first antenatal (or 'triage') appointment. A Registered Midwife conducts this one-hour appointment at approximately 8–12 weeks gestation. The client is first given their Pregnancy Record Pack, which contains the SA Pregnancy Record itself (a 16 page handheld medical record that women bring to each appointment) and 16 information brochures that are added by the midwives before or during the first appointment.[2] These brochures provide basic information

[1] We gratefully acknowledge funding provided by the Australian Research Council and SA Health. The research team are currently developing a tailored smart phone app as part of a wider suite of health communication interventions, which will be trialled over the next 12 months. Future papers will report on both the outcomes of these trials and ongoing qualitative studies of staff and consumer evaluations of these interventions.

[2] Additional information about the SA Pregnancy Record can be found here: http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+programs/sa+pregnancy+record/sa+pregnancy+record+guidelines (verified 26/11/2013).