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## Food safety in pregnancy: an exploration of lay and professional perspectives

Dolly Bondarianzadeh  
*University of Wollongong*

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# **Food Safety in Pregnancy: An Exploration of Lay and Professional Perspectives**

A thesis submitted in partial fulfilment of the requirements for the  
award of the degree

**Doctor of Philosophy**

From

**University of Wollongong**

By

**Dolly Bondarianzadeh, BSc., MSc.**

School of Health Sciences

2008

## **Certification**

I, Dolly Bondarianzadeh, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy in the School of Health Sciences, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Dolly Bondarianzadeh

## **Publications**

The research documented in this thesis has been presented and published as following:

Bondarianzadeh D., H. Yeatman and D. Condon-Paoloni (2006) Listeriosis in pregnancy: better safe than sorry. Proceedings of the First World Congress of Public Health Nutrition, 28-30 September 2006, Barcelona, Spain.

Bondarianzadeh D., H. Yeatman and D. Condon-Paoloni (2007) *Listeria* education in pregnancy: lost opportunity for health professionals. *Australian and New Zealand Journal of Public Health*, 31, 468-474.

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## Abstract

This thesis explores pregnant women's and midwives' perspectives on food safety issues during pregnancy with an emphasis on foodborne listeriosis. Although not a prevalent illness, listeriosis has been identified as a significant public health problem during pregnancy because of its serious consequences for the baby and high fetal mortality rates. However, there is limited information available on the state of *Listeria* awareness among general public and health professionals in Australia and the socio-cultural elements that influence both lay and professionals' approaches to food safety recommendations to avoid *Listeria*. This study, therefore, aimed to investigate *Listeria* knowledge and preventive food safety practices among pregnant women and to explore their understanding of the *Listeria* risk, how they positioned it among their other health concerns during pregnancy, and how they managed to avoid the risk based on the knowledge they gained from different sources of information. The study also explored midwives' perceptions of the *Listeria* risk and their approach to the provision of advice in this regard.

The study was a mixed methods research carried out in one private and two major public hospitals in the South Eastern Sydney and Illawarra Area Health Services. Participants were pregnant women who attended antenatal clinic and/or classes in the study sites and midwives who provided antenatal services at the same sites. Pregnant women's knowledge, practice and opinions with regard to *Listeria* were investigated through a survey using a self-administered questionnaire in which 586 women took part. Semi-structured interviews were carried out with 26 pregnant women and 10 midwives to provide an in-depth understanding of the factors underpinning their *Listeria* prevention strategies and approaches to food safety recommendations.

Survey results indicated that more than 40 percent of participants had not received any information on food safety issues during their pregnancy, and relied on their lay network as the major source of *Listeria* knowledge for pregnant women. Large proportions of participants were not aware of the risk associated with some of the high *Listeria* risk foods and continued the consumption of these foods during pregnancy.



Women's level of knowledge of high risk foods was a major determinant of their eating practices/preferences. Unsafe food handling practices in keeping raw and cooked foods in the refrigerator, and keeping and reheating of leftovers were also reported by a large number of participants.

Interview data were analysed using constant comparative method and within a broad sociological framework exploring the concept of risk in the context of food and pregnancy. For most participants the safety of food was not a concern. Food safety recommendations specific to pregnancy entered the dichotomised rules that women already employed to simplify their decisions about the safety of their food. Women's accounts indicated that their strategies to avoid the *Listeria* risk were informed by their past experience with food related risks, the scientific knowledge that they gained in the course of their pregnancy, and the idea of maternal responsibility that dominated their discourses of pregnancy. The concepts of authoritative knowledge and cognitive authority were employed to investigate pregnant women's perceptions of authority of different sources of *Listeria* knowledge. It was found that *Listeria* information based on scientific knowledge was the only perceived authoritative knowledge that influenced women's food related decisions to avoid the *Listeria* risk.

Interviews with midwives revealed that food safety education was a lower priority in their agenda for pregnancy care. Midwives had a range of approaches to *Listeria* education which was informed by their personal understandings of the risk based on their previous experience with cases of illness, and a general assumption that their clients were knowledgeable about food related risks and the ways of avoiding them.

Findings of this research provide an important insight into the current position of food safety in the Australian antenatal care practice. It is anticipated that information from this study on pregnant women's approaches to *Listeria* risk information and communication, as well as the lost opportunities within the antenatal system and the compromised role of health professionals in *Listeria* education during pregnancy would be beneficial in informing future educational initiatives for the prevention of listeriosis. It also will be of value to administrators and educators who are interested in creating an environment which is supportive of food safety education for the broader community.

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