

Celebrating three PhD graduations

In a first for MCHR, *three* students recently graduated together with the award, Doctor of Philosophy. Vice-Chancellor of La Trobe University, Professor Michael Osborne, conferred the awards on 7 October 2005.

Lisa Amir's research focussed on the *Prevalence and prevention of mastitis in lactating women*. Mastitis is an important public health issue because it affects a large number of women and has physical and emotional consequences. Complications of mastitis include the development of a breast abscess and/or premature cessation of breastfeeding.

The Breastfeeding Survey of Frances Perry House and the Royal Women's Hospital (RWH) Family Birth Centre was an addition to a concurrent large breastfeeding trial, Attachment to the Breast and Family Attitudes to Breastfeeding (ABFAB), which recruited public patients at the RWH. Of the 1,189 women who were interviewed at six months postpartum, 205 women (17%) had experienced mastitis. Fifty percent of episodes occurred in the first four weeks postpartum and 83% in the first three months postpartum. Five women developed a breast abscess, which is 3% of the women who experienced mastitis.

A separate case-control study investigated the possible association between mastitis and nasal carriage of *Staphylococcus aureus*. There was no difference in the proportion of women with mastitis and without mastitis who were nasal carriers. However, the infants of mothers with mastitis were more likely to be nasal carriers (82%) than the infants of other women (56%). The presence of a cracked nipple was associated with a high odds for mastitis after adjusting for mother's age, income, maternal tiredness and breastfeeding difficulty.

Lisa's studies were supervised by **Judith Lumley**.

Della Forster's thesis *Breastfeeding – making a difference: predictors, women's views and results from a randomised trial* described a study that aimed to determine whether mid-pregnancy breastfeeding education, with a focus on either attitudes to breastfeeding or on technical aspects of breastfeeding, had an effect on rates of breastfeeding initiation and duration.

In Australia, as in many high income countries, it has proven difficult to reach World Health Organization (WHO) recommendations that infants be exclusively breastfed from birth to six months of age, yet there is limited knowledge about interventions that are effective in increasing breastfeeding initiation and duration. What is particularly lacking is evidence about how to maintain breastfeeding rates past the first six weeks in countries which already have a high initiation of breastfeeding.

Neither intervention tested in the trial made a difference to the proportion of women initiating (96%) or continuing (53%) breastfeeding.

Recommendations for further research are based on the findings of this study in combination with meta-analyses following a systematic review of the literature. Given the complex issues related to measuring breastfeeding outcomes and the relative lack of efficacy of many breastfeeding interventions, it is important that future studies include adequate sample size; follow-up to at least six months; economic evaluation; clear breastfeeding definitions; and importantly, input from women about intervention design.

Della's studies were supervised by **Judith Lumley**.

Jane Yelland's studies culminated in her thesis *Changing maternity care: an evaluation of mainstream maternity enhancement initiatives at four Melbourne hospitals*.

In the late 1990s a Melbourne health network introduced a range of initiatives with the aim of improving mainstream maternity care. These innovations included the development of approaches that provided greater continuity of care, an emphasis on improving postnatal outcomes and strategies to foster the uptake of evidence in clinical practice.

Jane's doctoral work reports on the four-year multifaceted evaluation of these maternity enhancement initiatives. The findings focus on the outcomes of postal surveys of over 2,000 women who had given birth within the network at two time-points. Seventy-five Vietnamese women who had recently given birth were also interviewed at home about their experiences of care. Process evaluation, involving interviews with managers, clinicians and recent mothers, was conducted to assess the process and progress of change. Emergency department attendances and readmissions of mothers and infants were monitored.

The evaluation demonstrated that it is possible to re-orient mainstream maternity care in complex hospital environments, resulting in significant improvements. The study also illustrated the strengths and limitations of a quasi-experimental approach to evaluation and the benefits of systematically examining the context and process of a new approach to public maternity care. Many of the findings from the evaluation have applicability for the organisation and provision of care at other maternity facilities.

Jane's studies were supervised by **Stephanie Brown**.



Jane Yelland, Lisa Amir & Della Forster

Exploring the importance of continuity of antenatal caregiver

Mary-Ann Davey

Continuity of care and of caregiver are thought to be important influences on women's experience of maternity care. We asked women about a number of aspects of their antenatal care in the 2000 *Survey of Recent Mothers (SRM)*, and were interested to explore the contribution of two aspects of continuity of caregiver in the antenatal period to women's overall rating of antenatal care: the extent to which women saw the same caregiver throughout pregnancy; and the extent to which women felt that their caregiver/s got to know them and remembered them and their progress from

one visit to the next. *SRM* was an anonymous, population-based postal survey, sent at six months postpartum to women who gave birth in a 14-day period in September 1999. Sixty-seven percent of those who gave birth in Victoria during the study period responded to the survey ($n=1,616$).

The majority of women saw the same caregiver at each antenatal visit (77%), and felt that caregivers got to know them (65%).¹ However, the proportions varied widely between different models of maternity care. Women who saw caregivers in private rooms (private care, shared care, combined care) reported much higher levels of both aspects of continuity than those who saw caregivers at a hospital (regular antenatal clinic care, midwives clinic care, birth centre care, and the hospital component of shared care).

Women were much more likely to describe their antenatal care as 'very good' if they 'always' or 'mostly' felt the caregiver got to know them ($OR=5.86$, 95%CI 4.3, 7.9), and if they 'always' or 'mostly' saw the same caregiver at each visit ($OR=2.91$, 95%CI 2.0, 4.3). However, after adjusting for socio-demographic factors, parity, risk status of

the pregnancy and a number of specific aspects of antenatal care, women who felt that the caregivers got to know and remember them remained much more likely to rate their care highly ($OR_{adj}=3.18$, 95%CI 2.0, 5.1), whereas seeing the same caregiver was no longer associated with rating of care ($OR_{adj}=0.65$, 95%CI 0.3, 1.2).

As measured by overall rating of their antenatal care, women were more concerned that their antenatal caregivers took the time to get to know them, and remember them and their progress from one visit to the next, than that they always saw the same caregiver at each visit.

1. Davey M-A, Brown S, Bruinsma F. What is it about antenatal continuity of caregiver that matters to women? *Birth*. In press.

Mary-Ann Davey



Are women satisfied with the decision to treat tall stature?

Jo-Anne Rayner

The *Tall Girls* study was a retrospective cohort study of girls treated and/or assessed for tall stature between 1959 and 1993. Synthetic oestrogens have been available since the 1950s to reduce the predicted adult height of tall girls. Therapy was undertaken in adolescence for perceived psychosocial reasons including: the potential for teasing; girls feeling different from their peers; an inability to find a male partner; and exclusion from careers. In a postal questionnaire we asked 844 participating women (396 treated and 448 untreated) to evaluate and comment on a number of issues, including how they felt about the decision around treatment. Comments analysed qualitatively clearly illustrated women's satisfaction and dissatisfaction with the treatment decision.¹

Untreated women were overwhelmingly happy that they were not treated (99.1%) no matter what adult height they reached. However, only 57.9% of the treated women

expressed satisfaction with the decision to undertake treatment to reduce their height. While there was no clear association between satisfaction with the treatment decision and women's adult height, those treated women who were satisfied expressed this in terms of being glad they were not as tall as predicted. Dissatisfaction among treated women was significantly related to: whether or not they had an active say in the decision; negative experiences of assessment and treatment; side effects whilst on the treatment; and any side effects in later years that they associated with the treatment.

Women who felt they had not had an active say in the treatment decision, were significantly more likely to be dissatisfied ($p=0.001$) when compared with women who did have an active say. Comments included expressions of anger and resentment toward parents and treating doctors. Others suggested their young age at the time precluded them from challenging such a decision. A summary of experiences to describe assessment and treatment procedures, revealed that women who reported their experiences in negative terms were significantly less likely to be satisfied with the decision ($p<0.0001$) when compared to women who reported no negative experiences. Comments included strong feelings about the inappropriateness of the assessment process. Women also reported a range of side effects experienced during treatment including: problematic weight gain, heavy periods,

irregular periods, mood swings, depression, increased nipple pigmentation, and increased vaginal secretions. Each was independently associated with dissatisfaction and those women who reported experiencing three or more side effects were significantly less satisfied with the treatment decision ($\times 2$ for trend 45.865, $p<0.001$). One in four dissatisfied women provided comments about side effects during treatment. Perceived long term side effects of treatment were also associated with dissatisfaction with the treatment decision. Women who had tried unsuccessfully to get pregnant for 12 months or more were significantly more likely to be dissatisfied with the treatment decision ($p=0.001$). Comments included issues about the untested nature of the treatment and a lack of explanation of possible long term consequences.

1. Pyett P, Rayner J, Venn A, Bruinsma F, Werther G, Lumley J. Using hormone treatment to reduce the adult height of tall girls: Are women satisfied with the decision in later years? *Soc Sci Med* 2005; 60:1629-39.

Jo-Anne Rayner



Women and smoking: from Toledo to Auckland

Judith Lumley

In late October I took part in the first International Symposium on Women and Tobacco (ISOWAT) within the amazing setting of the city of Toledo, in Spain. As I had not seen a program for the symposium I had no idea until it started just how diverse this meeting was going to be. Examples of this diversity were that while I was asked to present the updated Cochrane Review on interventions to assist women in stopping smoking during pregnancy, another speaker from Australia – Mary Assunta – discussed the information from tobacco companies on their activities and plans for Asia and Australia which had been brought into the light of day by activists in the last few years. The third speaker from Australia, Kathy Esson, gave

the opening plenary session about the WHO Framework Convention on Tobacco Control. Women and men attended from almost every country in the world and in every country harms from tobacco and approaches to tobacco control were major problems.

Toledo was a great place to hold this international meeting and not just because of its beauty. Reminders of the three cultures (Jewish, Muslim and Christian) which have all long had a place there contributed to that, as did the age of the city and its hilltop location. The unexpected factor, to me at least, was the ubiquity of people's smoking, apparent everywhere outside the building where the symposium was held. I had totally forgotten how unpleasant it is. The worst experience was a late afternoon drink and sandwich in the main city square with people at two adjacent tables smoking cigars and a high prevalence of smoking all around.

Shortly after the Toledo symposium I travelled to a forum in Auckland where the topic was also smoking. The title shows how different this experience was to be. The title was *The Smokefree Pregnancy Forum* and the language of "becoming

smokefree" was used throughout the meeting. The context was the high prevalence of smoking and the serious effects of smoking on women and babies both in pregnancy and afterwards, with the aim of increasing awareness at all levels. The notion of "becoming smokefree" and "staying smokefree" provided a much needed alternative to the usual language in which such discussions are phrased. I am looking forward to the final report and to a new approach in a very invisible area of public health.



Women's and men's incomes after childbearing

Marty Grace

My interest in mothering research came from my own experiences of bearing and raising children. My first two children were born at the height of second-wave feminism in the early 1970s, and the third in 1991 at a time when we were hoping to reap the benefits of second-wave activism. My disappointment over the continuing near impossibility of both caring for a young child and being economically self-supporting, led to a long-term research interest in the material conditions of mothers' lives.

My PhD explored ideas for change in the social arrangements for caring for young children in Australia. Participants in the

research supported policy changes advocated by second-wave feminists including accessible, affordable childcare and paid maternity and paternity leave. The most pressing need identified by the mothers of young children was some arrangement that would allow them to take time off from looking after their children when they were sick themselves.

Recent research I have conducted into women's and men's incomes following childbearing, was funded by a Victoria University Discovery Grant, and utilised Australian Bureau of Statistics 2001 Census data. I found that couple-family fathers are the only parents with any reasonable likelihood of achieving high incomes. Couple mothers, single mothers and single fathers all had particularly low incomes while their children were very young, gradually increasing with children's age, but never reaching the high average incomes of couple fathers. Responsibility for children clearly has a significant impact on income: caring for young children restricts parents' ability to earn labour market income. The recent inquiry into work

and family balance reflects widespread community concern that present social arrangements are failing families.¹

I have spent Semester 2, 2005 at Mother and Child Health Research, working on my own research and participating in the life of the Centre in order to learn more about carrying out large research projects, designing randomised controlled trials, writing grant applications, and the functioning of a successful research culture.

1. Goward P, Mihailuk T, Moyle S, O'Connell K, de Silva N, Squire S, Tilly J. **Striking the balance: women, men, work and family.** Sydney: Human Rights and Equal Opportunity Commission, 2005.

Marty Grace



MOSAIC implementation – funded at last!

Angela Taft

We have been outlining the gradual development of the *MOSAIC* (Mothers' Advocates In the Community) cluster randomised trial over previous centre newsletters. Readers will know that *MOSAIC* aims to evaluate the role of supportive mentor mother advocates in reducing partner abuse and depression, and strengthening mother-child bonds for women pregnant or with children under five, identified as at risk by their primary care providers.

We were delighted in November that the Victorian Government announced a grant of \$471,982 through its Community Support Fund for full implementation of the project. *MOSAIC* already has NHMRC funding for the study's evaluation. The Victorian

Department of Communities acknowledged *MOSAIC*'s strong community partnership with maternal and child health nurse teams, divisions of general practice, and women's health services in the north-west region of Melbourne.

The Hon Mary Delahunty MLA, Minister for Women's Affairs, will launch *MOSAIC* on 12 December at Richmond Town Hall. The launch will provide a wonderful opportunity to celebrate the project with our community partners and the mentor mothers who have all supported *MOSAIC* with such enthusiasm and commitment during our quest for funding.

MOSAIC has also recently welcomed two new staff – Vivianne Woska, the new

MOSAIC mentor mother co-ordinator, and Jan Wiebe, *MOSAIC* research officer. They are pictured here, together with Chief Investigators Angela Taft, Rhonda Small and Judith Lumley, and Kim Hoang, our research and project officer with the Vietnamese community.

Project update: *MOSAIC* has now completed training with six maternal and child health nurse teams and 21 GPs from 17 general practices. These nurse teams and practices have been randomised to comparison and intervention arms of the trial and referrals to the study have now commenced. Further GP recruitment and training will continue early in 2006.



MOSAIC team

Staff news

MOSAIC welcomes two new staff to the team. **Jan Wiebe** is working as a research officer and **Vivianne Woska** as mentor mother co-ordinator for the project.

Vicki Wyatt graduated in October with a La Trobe University Diploma of University Administration.

Dianne Beck has commenced a four month placement at MCHR, her final placement as part of the Victorian Public Health Training Scheme. Dianne will be working with Lyn Watson and Judith Lumley on the association of prior pregnancy loss and preterm birth and how smoking influences this association.

Congratulations to **Ann Krastev** and **Ellie McDonald** on their recent marriages and **Liesje Toomey** on her engagement. We wish them every happiness for the future.

Congratulations also to **Fiona Bruinsma** on the birth of a baby girl, Naomi Elise.

Awards

Congratulations to **Lisa Amir** on winning the prize for the best poster at the Academy of Breastfeeding Medicine annual meeting in Denver, Colorado, USA in October. Her poster is titled 'The relationship between maternal smoking and breastfeeding duration after adjustment for maternal infant feeding intention'.

Grants

Angela Taft, Rhonda Small, Judith Lumley and **Associate Professor Kelsey Hegarty** were awarded a Community Support Grant of \$472,891 for the *MOSAIC* project.

An NHMRC enabling grant of \$1,040,000 over five years for the *WOMBAT* collaboration on perinatal trials was awarded to **Professor Caroline Crowther, Dr Steve Cole, Dr Jodie Dodd, Professor Lex Doyle, Ms Vicki Flenady, Professor David Henderson-Smart, Judith Lumley, Ms Philippa Middleton, Dr Christine Roberts, Professor Jeffrey Robinson, Professor Karen Simmer** and **Professor William Tarnow-Mordi**.

Five Faculty of Health Sciences Research Grant applications were recently successful.

- **Della Forster, Jo Rayner, Helen McLachlan** and **Jane Yelland** received \$9,930 for 'A state-wide review of postnatal care in private hospitals in Victoria'.
- **Mary-Ann Davey, Della Forster, Helen McLachlan, Lisa Amir, Lisa Gold** and **Jo Rayner** received \$9,884 for a project titled 'Exploring the acceptability of peer support for breastfeeding from the perspective of breastfeeding women and potential peer supporters in Melbourne'.

- **Jane Yelland, Della Forster, Helen McLachlan** and **Jo Rayner** received \$9,517 for a project titled 'The feasibility and development of a patient preference package of postnatal care'.
- **Ann Krastev** and **Stephanie Brown** received \$4,946 for a project titled 'Medical records versus self-report questionnaires: assessing discrepancies, inconsistencies and missing data for exposure and outcome measures in a prospective cohort study investigating women's health during pregnancy and after childbirth'.
- **Helen McLachlan, Della Forster, Jane Yelland** and **Jo Rayner** received \$4,934 for their project, 'Supporting women after childbirth: adapting and piloting an educational program aimed at enhancing the knowledge and skills of midwives and nurses to identify and support women with psychosocial issues during the postnatal period'.
- **Sue Armstrong** received a Faculty of Health Sciences Postgraduate Support Grant of \$425 to support her attendance at the recent annual Public Health Association of Australia Conference to present her research findings.

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