Adverse perinatal outcomes and models of maternity care for Thai adolescent pregnant women: A mixed methods study

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, WAREERAT JITTITAWORN, declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy in Midwifery, in the Faculty of Health at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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ABBREVIATIONS

ANC	Antenatal care
APH	Antepartum haemorrhage
BF	Breastfeeding
BMI	Body mass index
CAPP	Comprehensive adolescent pregnancy program
COPE	Centre of perinatal excellence
C/S	Caesarean section
CHT	Chronic hypertension
CPD	Cephalo-pelvic disproportion
CPPC	CenteringPregnancy® Prenatal Care
DFIU	Death of a fetus in utero
EDB	Estimated date of birth
EDPS	Edinburgh postnatal depression scale
GA	Gestational age
GDM	Gestational diabetes mellitus
HB-CAPP	Hospital-based comprehensive adolescent pregnancy program
HREC	Human Research Ethics Committee
ICU	Intensive care unit
IUGR	Intrauterine growth restriction
LBW	Low birth weight
LMICs	Low- and middle-income countries
LSCS	Lower segment caesarean section
MGP	Caseload midwifery group or midwifery group practice
MPPC	Multiprovider prenatal care
NICU	Neonatal intensive care unit
N/L	Normal labour
PCUs	Primary Care Units
PICO	Population Intervention Comparators Outcomes
PIH	Pregnancy-induced hypertension

PPD	Postpartum depression
PPH	Postpartum haemorrhage
PROM	Premature rupture of membranes
PTB	Preterm birth
REACH program	Relaxation encouragement appreciation communication help-fullness program
RCT	Randomised controlled trial
SA sites	South Asian site
SB-CAPP	School-based comprehensive adolescent pregnancy program
SGA	Small for gestational age
SPPC	Single-provider prenatal care
SSA/LA sites	Sub-Saharan African and Latin American Sites
STDs	Sexually transmitted diseases
STI	Sexually transmitted infection
TPPC	Teen pregnancy parenting clinic
UTI	Urinary tract infection
WHO	World Health Organization
YWC	Young women's clinic

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abstract

Background

In maternity care, pregnant adolescent women are a concern worldwide, especially in low- and middle-income countries (LMICs), as they often have a higher incidence of adverse perinatal outcomes than older women. In high income countries, studies have been conducted on models of maternity care that improve perinatal outcomes amongst adolescent women, including group antenatal care to increase support. In LMICs including Thailand, it is necessary to understand models of maternity care for this group and the needs of the adolescent women more generally.

Aims of the study

To describe perinatal outcomes amongst Thai pregnant adolescent women who received care from the Teenage pregnancy clinics and explore the provision of these clinics from both experiences and perspectives of healthcare professionals and pregnant adolescent women.

Method and design

A concurrent mixed method study carried out in three public hospitals in Bangkok, Thailand. In the first phase, a quantitative descriptive study was conducted accessing retrospective data outlining perinatal outcomes from hospital databases. In the second phase, a qualitative descriptive study using semi-structured interviews with 21 healthcare professionals was undertaken. Finally, another qualitative descriptive study was conducted with nine group interviews (22 adolescent women) who had recently given birth in the hospital. The qualitative data were analysed using thematic analysis/SPSS was used for the quantitative aspect of the study.

Results

In the first phase, the perinatal outcomes of 759 adolescent women and 761 babies were obtained. The most common pregnancy complications were anaemia (179/759; 23.6%) and preterm labour (59/759; 7.8%). The most common adverse neonatal outcomes were low birth weight (94/759; 12.4%) and preterm birth (59/759; 7.8%). There were

two neonatal deaths (perinatal mortality rate of 2.64/1000 births). Overall, the adverse perinatal outcomes were less negative than expected although anaemia remains a significant concern.

In the second phase, healthcare professionals' experiences in caring for pregnant adolescent women were identified as '*recognising the challenges of providing care for young Thai pregnant women*'. Three themes included: 1) having an awareness of the political and cultural contexts and environment of care; 2) being aware of attitudes and the need to develop psychosocial skills in caring for adolescent women; and 3) having different approaches to caring for pregnant adolescents.

In the final phase, adolescent women's experiences in receiving care were identified as '*having needs as a young mother*'. Four themes included: 1) having access to care, 2) feelings about, and perceptions of, the care, 3) being a pregnant woman and a mother at school age, and 4) having an awareness of the challenges of the transition to motherhood.

Conclusions

This study provides a unique overview of perinatal outcomes and experiences of adolescent women and their healthcare professionals' experiences in caring for them in Thailand. The results of this study may inform health care providers, local health care systems and policy makers with information that may assist to improve care for pregnant adolescent women in Thailand and potentially, in similar countries in the region.