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The follow-up of babies in the PMTCT programme in the West Rand

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THE FOLLOW-UP OF BABIES IN THE PMTCT PROGRAMME IN THE WEST RAND

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Public Health.

Johannesburg, April 2012

DECLARATION

I, Faith Mathabo Makhanya, declare that this research report is my own work. It is being submitted for the degree of Master of Public Health at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

_____

This _____ day of _____ 2012

DEDICATION

For all their patience, understanding and support, I dedicate this work to my husband, Peter, my daughter, Akullo, and son, Onweng.

ABSTRACT

Introduction

Routine PMTCT programmes are highly effective in reducing the mother-to-child transmission (MTCT) rate of HIV, but generally fail in follow-up of HIV-exposed children. Loss to follow-up in the PMTCT programme translates into failure in primary prevention of new infections in HIV-exposed infants, failure to identify HIV disease early in children, and a missed opportunity for early referral of HIV-positive children to ARV sites. An assessment of what happens to babies born of HIV-positive mothers in the West Rand district of Gauteng province, South Africa has never been done, and neither has the extent to which these babies are followed up for the first 12 months, and the extent of loss to follow-up been documented.

Aim

The purpose of this study is to describe the referral and follow-up of babies born to HIV-positive women during July to December 2005 in the PMTCT programme in the West Rand district of Gauteng.

Method

This was a descriptive study involving a retrospective review of records for a cohort of babies born to HIV-positive mothers in the PMTCT programme in the West Rand during July 2005 to December 2005. All records of HIV-positive mothers seen over the six-month period at Leratong hospital and the two midwife obstetric units (MOUs) that refer patients to Leratong hospital were reviewed, as were records of their babies. A total of 887 Mother-infant pairs were consecutively enrolled in the study.

Results

Referral linkages within the PMTCT programme were found to be weak. Only 34% of babies enrolled in the PMTCT programme were successfully registered with PMTCT follow-up services.

HIV PCR testing of babies enrolled in the PMTCT programme was relatively low. Overall only 41% of enrolled babies were tested for HIV infection. Of those babies who had a HIV PCR test, 16% were tested before or at six weeks with the majority of babies (84%) having a HIV PCR after six weeks. HIV PCR testing coverage at six weeks was 8.4%. Referral of confirmed HIV-positive babies to ARV sites was poor. Only 25% of all HIV PCR-positive infants were successfully referred to ARV sites. There was a high loss to follow-up in the PMTCT follow-up programme. The probability of an infant remaining in the PMTCT programme decreased from 0.5 at six weeks to 0.04 beyond 20 weeks.

Conclusion

Despite a high enrolment of babies in the PMTCT programme in the West Rand, referral linkages within the PMTCT programme are weak and there is a high loss to follow-up of infants in the PMTCT follow-up programme. HIV PCR coverage at six weeks is significantly low, and referral of confirmed HIV PCR-positive babies to ARV sites is also significantly low.

Further research is needed to assess whether there has been an improvement in the follow-up of babies in the PMTCT programme in the West Rand since the time of this study.

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TABLE OF CONTENTS

	Page
DECLARATION	ii
DEDICATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
CHAPTER	
1. INTRODUCTION	1
1.1 Background	1
1.2 Problem statement	4
1.3 Justification of the study	5
1.4 Literature review	6
1.5 Aim and objectives of the study	10
2. METHODOLOGY	13
2.1 Study design	13
2.2 Study setting	14
2.3 Study population and sampling	15
2.4 Measurement	15

2.5 Data processing and analysis 19

2.6 Ethics 20

3. RESULTS 22

3.1 Description of study participants 22

3.2 Registration at PMTCT follow-up services 25

3.3 HIV PCR testing 25

3.4 PMTCT follow-up visits 29

4. DISCUSSION 34

5. CONCLUSIONS AND RECOMMENDATIONS 44

LIST OF REFERENCES 47

APPENDICES 56

APPENDIX A – Data sheet 1 57

APPENDIX B – Data sheet 2 58

APPENDIX C – Ethics Clearance Certificate 59

LIST OF FIGURES

		Page
3.1.1	Flow diagram to describe flow of study participants in the PMTCT follow-up schedule.	24
3.4.1	Compliance of babies with PMTCT follow-up visits.	31
3.4.2	Probability of babies remaining in the PMTCT programme over time.	33

LIST OF TABLES

		Page
3.2.1	Registration of babies at PMTCT follow-up services.	25
3.3.1	Testing of babies to confirm HIV status.	26
3.3.2	HIV PCR testing at six weeks of age.	26
3.3.3	HIV PCR testing coverage at six-week follow-up visit.	27
3.3.4	Age at which HIV PCR test was done by infant feeding.	28
3.3.5	HIV PCR test results of babies tested for HIV infection.	29
3.4.1	Attendance of babies at PMTCT follow-up visits.	30
3.4.2	Referral of HIV PCR-positive babies to ARV site.	32

LIST OF ABBREVIATIONS

AIDS – Acquired Immunodeficiency Syndrome

ANC – Antenatal clinic

ARV – Antiretroviral

ART – Antiretroviral therapy

AZT – Zidovudine

DNA – Deoxyribonucleic acid

DOH – Department of Health

ELISA – Enzyme-linked Immunosorbent Assay

HAART – Highly Active Antiretroviral Therapy

HIV – Human Immunodeficiency Virus

IMCI – Integrated Management of Childhood Illnesses

MOU – Midwife Obstetric Unit

MTCT – Mother-to-Child transmission

NDOH – National Department of Health

NVP – Nevirapine

PCP – Pneumocystis carinii pneumonia

PCR – Polymerase chain reaction

PHC – Primary Health Care

PMTCT – Prevention of Mother-to-Child transmission

POPD – Paediatric Out-patient Department

TLC – Total Lymphocyte Count

UNAID – United Nations Agency for International Development

VCT – Voluntary counselling and testing

WHO – World Health Organisation