

UNIVERSITA' DEGLI STUDI DI PADOVA
DIPARTIMENTO DI SALUTE DELLA DONNA E DEL BAMBINO
CORSO DI LAUREA IN OSTETRICIA



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TESI DI LAUREA

Analysis of clinical and socio-economic factors in pregnant women with meconium stained amniotic fluid at St Luke's hospital, Wolisso

Relatore: Dott. Marin Loris

Correlatrice: Dott.ssa Rubbo Valentina

LAUREANDA: VALENTINI ELISABETTA



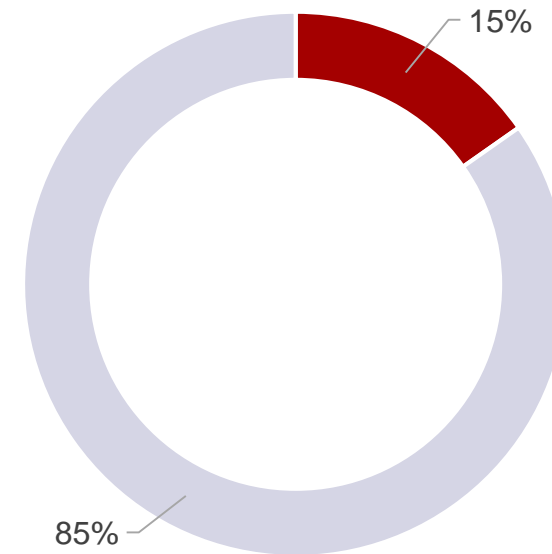
MECONIUM STAINED AMNIOTIC FLUID (MSAF)

PHYSIOPATHOLOGY

The condition of severe acidosis can result in sphincter release with meconium emission in the uterus.

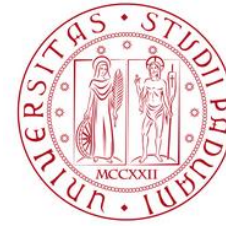
DEFINITION

Passage of fetal meconium into the amniotic fluid.



■ MSAF CASES ■ CLEAR AF

Figure 1: Incidence of MSAF



BEING MOTHER AND WOMAN IN ETHIOPIA

Ethiopia is a country
where being a woman and
being a mother has
consequences:

In the daily
routine of
women

In the
economic
sphere

In the social
sphere





OBJECTIVES



PRIMARY OUTCOME

Rename and integrate risk factors according to the Ethiopian context, adapting the clinic to the culture and socio-economic background of women.



SECONDARY OUTCOME

Evaluate neonatal outcome of the stained fluid cases analyzed.



MSAF RISK FACTORS

Clinical Risk factors associated with MSAF reported in the literature included on the trial are:

PRIMIPARITY

GESTATIONAL AGE \geq
41 WEEKS

OXYTOCIN IN LABOR

CESAREAN SECTION

MATERNAL AGE

DURATION OF
LABOR

PREECLAMPSIA

INDUCTION OF
LABOR

OBSTRUCTED
LABOR

PREGNANCY-
INDUCED
HYPERTENSION

OLIGOHYDRAMNIOS

INTERPREGNANCY
INTERVAL LESS
THAN 2 YEARS

MECHANICAL
DYSTOCIA

DYNAMIC DYSTOCIA

POSTTERM
PREGNANCY

NONREASSURING
FETAL HEART RATE
PATTERN





MSAF RISK FACTORS



Socioeconomic risk factors associated with MSAF included on the trial are:

TRIP DURATION (MIN)

ESTIMATED MONTHLY FAMILY INCOME (BIRR)

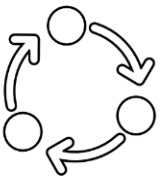
NUMBER OF CHILDREN ALIVE

ANTENATAL CARE FOLLOW UP

DISTANCE TRAVELED TO ST. LUKE'S HOSPITAL

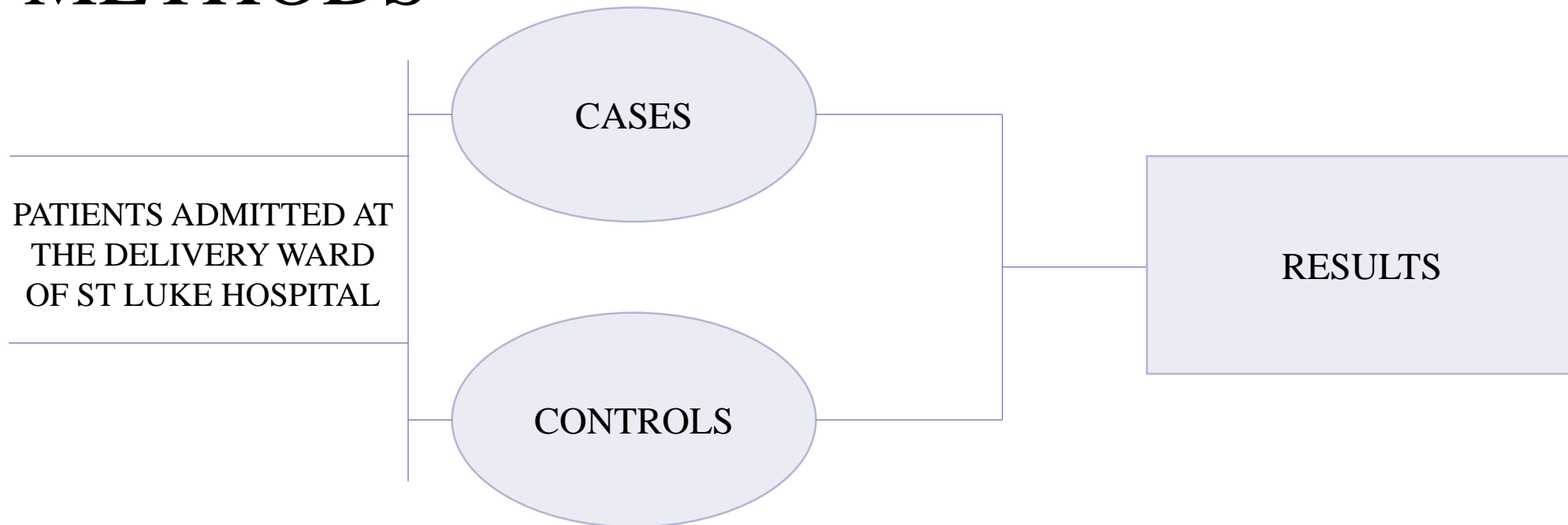
MODES OF TRAVELS

WORK HOURS THAT THE SAMPLE PERFORMED WEEKLY



MATERIALS AND METHODS

PROSPECTIVE STUDY





STATISTICAL ANALYSIS



Continuous numerical data were expressed as absolute and relative frequencies (%), and purely numerical data as mean \pm standard deviation. Parametric and non-parametric tests were used. P-value less than 0.05 was considered statistically significant.



CLINICAL RESULTS

	OLIGOHYDRAMNIOS		FEVER		PRIMIPARITY		PROM		AUGMENTATION	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
TOTAL	1,85%	98,14%	10,18%	89,81%	42,6%	57,41%	7,40%	92,59%	36,11%	63,88%
CASES	1,53%	98,46%	9,23%	90,76%	46,15%	53,84%	9,23%	90,76%	16,27%	83,72%
CONTROLS	2,32%	97,67%	11,62%	88,37%	37,21%	62,70%	4,65%	95,34%	15,38%	84,61%
P VALUE	0,767		0,687		0,358		0,53		0,9	

	CASES	CONTROLS	P VALUE
AGE	26,11 ±5,056	25,72 ±5,293	0,703
LABOR DURATION (HOURS)	9,061 ±3,864	8,558 ±4,521	0,537
CURRENT AND PREVIOUS PREGNANCY INTERVAL (MONTHS)	16,135 ±8,929	20,068 ±8,374	0,073

	DYNAMIC DYSTOCIA		MECHANICAL DYSTOCIA		BREECH	
	YES	NO	YES	NO	YES	NO
TOTAL	5,55%	94,44%	4,62%	95,37%	1,85%	98,15%
CASES	4,61%	95,38%	4,61%	95,38%	0%	100%
CONTROLS	6,98%	93,02%	4,65%	95,34%	4,65%	95,34%
P VALUE	0,6		0,993		0,072	



CLINICAL RESULTS

	DIAGNOSIS OF ADMISSION			
	AFSOL	LFOSL	SECOND STAGE	ROM
CASES	36,92%	7,69%	15,38%	40%
CONTROLS	37,21%	11,62%	20,93%	30,23%
P VALUE	0,895	0,89	0,506	0,381

	MODES OF DELIVERY		
	SVD	C/S	VACUUM
CASES	75,38%	18,46%	6,15%
CONTROLS	95,34%	4,65%	0%
P VALUE	0,064	0,036	0,153



FETAL AND PERINATAL RESULTS

	CASES	CONTROLS	P VALUE
APGAR SCORE AT 1'	7,046	7,86	0,028
	±2,117	±1,355	
NEONATAL BIRTH WEIGHT (G)	3043,076	2966,279	0,4
	±401,31	±542,121	

	TACHYCARDIA		BRADYCARDIA	
	YES	NO	YES	NO
TOTAL	9,25%	90,74%	42,59%	57,40%
CASES	6,15%	93,84%	52,30%	47,69%
CONTROLS	13,95%	86,04%	27,90%	72,09%
P VALUE	0,171		0,012	

	NEWBORN RESUSCITATION	
	YES	NO
TOTAL	10,18%	89,81%
CASES	12,30%	87,69%
CONTROLS	6,97%	93,02%
P VALUE	0,370	



SOCIOECONOMIC RESULTS

	CASES	CONTROLS	P VALUE
TRIP DURATION (MIN)	65,46	32,56	0,013
	±75,543	±47,814	
ESTIMATED MONTHLY FAMILY INCOME (BIRR)	2149,23	2732,56	0.000
	±743,539	±718,371	
NUMBER OF CHILDREN ALIVE	1,37	1,23	0,686
	±1,808	±1,555	

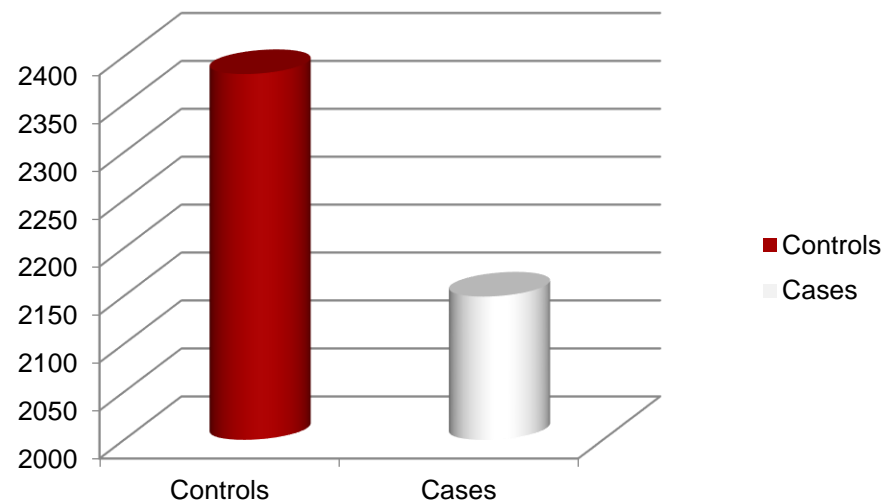


Figure 2- family monthly income (birr), division between cases and controls

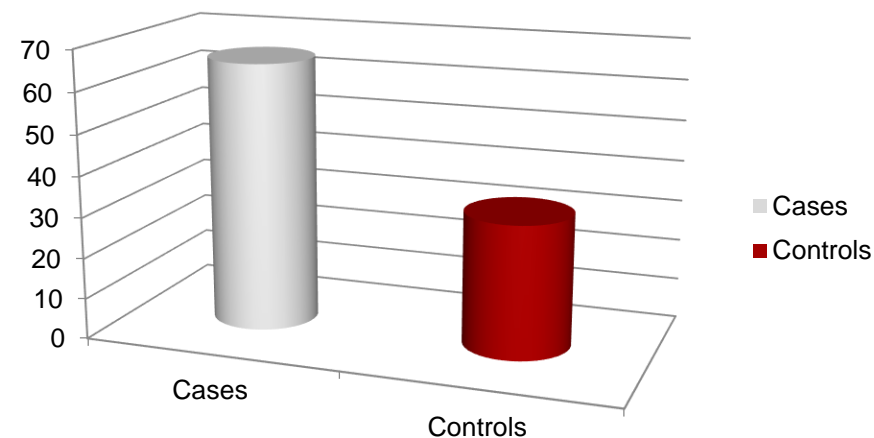
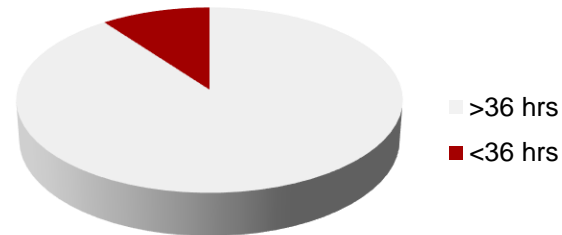
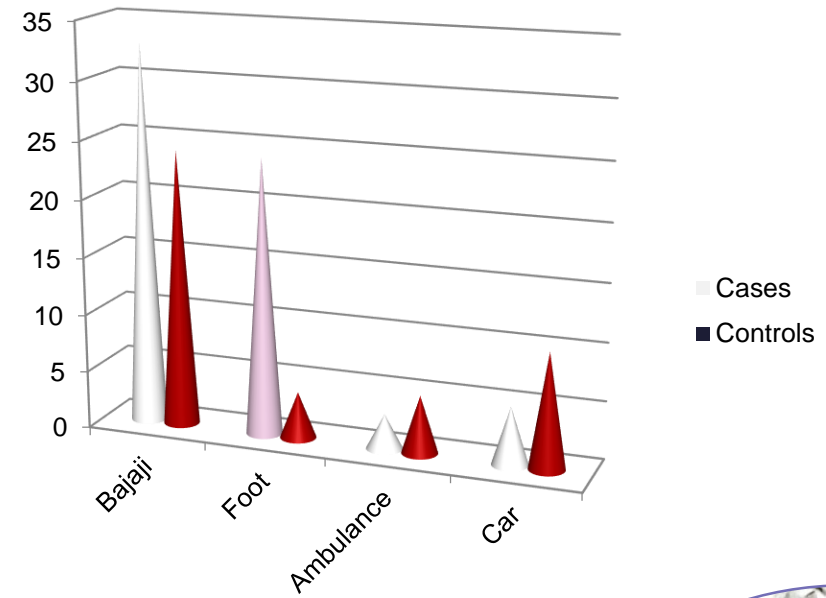
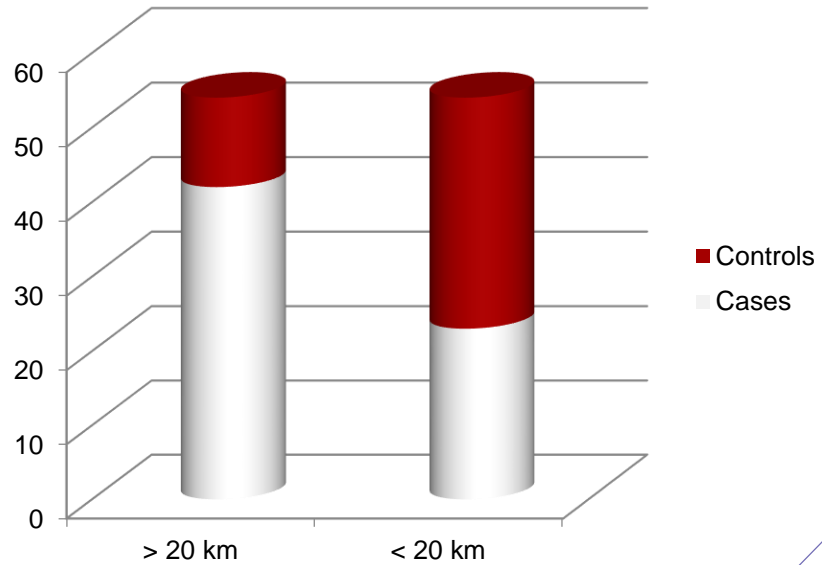
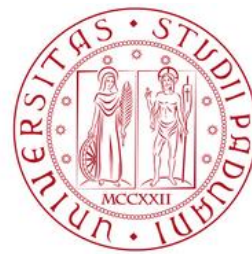


Figure 3- Representation of average minutes taken to get to the hospital divided between cases and controls



SOCIOECONOMIC RESULTS





CONCLUSIONS

RISK FACTORS

CLINICAL

MOSTLY
NON-SIGNIFICANT

PERINATAL OUTCOME

WORSE IN CASES

PREVENTION

SOCIOECONOMIC

MOSTLY
SIGNIFICANT

INTEGRATION

PREVENTION





GRAZIE PER L'ATTENZIONE

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