

The Use of Isihlambezo in the Upper Tugela Region — Dr Gary Morris, Miss BE Mdlalose



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Curriculum vitae

Gary Morris matriculated in 1975 at Pretoria Boys High School and in 1981 received the MBChB from Pretoria University. After internship at Tembisa Hospital, most of his time has been spent at Emmaus Hospital, near Winterton in the Drakensberg. In 1986 he obtained the DTM & H (Wits) and in 1990 the MPraxMed (Medunsa). Gary is married to Karin Volker, also a doctor at Emmaus, and they both are actively involved in working out the role of the doctor in primary health care. Their little daughter, Natasha Nosiphiwo, was born in 1990.

Miss Babongile Emily Mdlalose was born and educated in Natal. She matriculated at Okhahlamba High School and then worked her way successfully up in the nursing profession with experience in many fields including nursing school and maternity. Since 1989 she has been the nursing administrative officer at Emmaus Hospital where she became interested in investigating isihlambezo.

Summary

An observational study was done to investigate the use of isihlambezo (a decoction of different herbal roots and rhizomes) in the Upper Tugela Region of Natal. A high proportion (75,4%) of patients delivering at clinics use isihlambezo. Most people used the mixture to ensure a quick or good delivery (26,2%) and it was used with equal frequency by multigravida and primigravida. Oral and rectal routes of administration were used most commonly. The link between growth retardation and prematurity and the use of isihlambezo needs further investigation with a larger sample.

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KEYWORDS:

Pregnancy; Ethnic Groups; Zulu; Plants, medicinal; Plants, toxic.

Introduction

The impression had been gained at Emmaus Hospital and the clinics serving the Upper Tugela Region, that isihlambezo was used extensively during pregnancy. Little is documented on this herbal decoction and its use. An observational study was done to assess the frequency and reasons for use, routes of administration and to see if there was any link with the incidence of low birth weight (LBW) and premature babies. A secondary aim of the study was for medical and nursing staff to gain practical experience in research, and to encourage research and evaluation in the primary health care setting.

Background

Gumede¹ and Bryant² described the routine use of isihlambezo in the Zulu culture, from about 7 lunar months gestation. Isihlambezo is used to speed up,³ or ease deliveries,^{1,2} produce a clean baby with no vernix⁴ and remove excess fluid from the abdomen.³ A Baragwanath study⁵ found an association between thick meconium stained liquor and the use of isihlambezo. No significant difference in gestational age between those who took isihlambezo and the controls, was found. Isihlambezo has been found to have an oxytocin-like effect on rat uteri.⁴

No attempt has been made in our study to discover the constituents of isihlambezo. It is said to be a decoction of roots or rhizomes² for which there are as many formulas as there are izinyanga (traditional healers).¹ Rhoicissus cunefolia (isiNwazi) seems to be used in many formulas,^{1,6} as well as Gunera perpensa (uGhobo)^{1,6} and Trypha latifolia (iBhuma).¹ Some of these have toxic effects.⁶ Other substances are added, possibly for symbolic purposes eg eel meat⁶ and the head of a fish.¹ In Transkei, people used an infusion of baboon faeces soaked in baboon urine in a similar way to isihlambezo: this umchamo wemfene has been shown to have an oxytocic effect.⁷ In Zimbabwe Shona people used a substance known as masuwo, which also has an oxytocic effect.⁸

Demographic Data

Emmaus Hospital and the Upper Tugela Region are in the foothills of the Natal Drakensberg, in the Bergville and Okhahlamba Magisterial Districts. The majority of

the people are Zulu speaking from the Amangwane and Amazizi tribes. The population served is estimated to be between 133 000 and 180 000.⁹

The climate is temperate, with snow on the high ground in winter. This study was done in the autumn months of April and May 1988. The terrain is hilly, with subsistence farming, mainly with maize. Cows, goats and poultry are also kept.⁹

A link between isihlambezo and growth retardation & prematurity is investigated

Unprotected springs and rivers provide water to cover 70% of the population¹⁰ and pit latrines are used in about 58% of households. Wood is the main fuel used for cooking. The majority of household income (40%) is provided by migrant workers.¹⁰

Patients and Methods

All mothers who delivered in Emmaus Hospital and the three residential clinics during April and May 1988, were interviewed after delivery. They were interviewed by the midwife who did the delivery, from a prepared questionnaire. The questionnaire was drawn up in English and administered in Zulu. The replies were written down in English, according to the midwife's translation.

All babies under 2,5 kg were assessed by the medical officer or advanced midwife on duty and a Dubowitz count done within 48 hours. Babies which had a gestational age under 36

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Results

Table 1. The use of isihlambezo in hospital and clinic

	Took isihlambezo	Did not take isihlambezo	% which took isihlambezo
Clinic delivery	43	14	75,4%
Hospital delivery	66	63	51,2%

N = 186: (Information on one unavailable) $p < 0,05$

Table 2. The rate of reported use between multips and primiparas

	Took isihlambezo	Did not take isihlambezo	% which took isihlambezo
Primup	51	33	60,3%
Multip	58	44	59,9%

N = 186: (Information on one unavailable) $p > 0,05$

weeks were classified as premature and the others as growth retarded.

When birth weight and prematurity incidence are compared, only singleton deliveries, resulting in a live baby, were considered. A total of 178

Figures may be falsely low because of the belief that health services were against using isihlambezo

deliveries which satisfied these criteria, occurred. With the other comparisons, all deliveries were considered, making a total of 187 deliveries.

Discussion

A large percentage (58,8%) of the patients delivered within the health service, are using isihlambezo. The figure may be falsely low, as traditionally the health service has been seen to be against this practice. Patients may therefore have been reluctant to come forward with this information. This was also cited as a possible problem in the Baragwanath study,⁵ when questions related to isihlambezo were asked. Significantly more patients delivered at clinics said they used isihlambezo (75,4%) as opposed to the hospital (51,2%) (Table 1). This may indicate that the patients found the clinic a less threatening atmosphere in which to give this information. However, every effort was made to pose the questions in a non-judgemental way. A recent

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Table 3

Reasons for taking isihlambezo (more than 1 reason possible)

	<i>Number of Respondents</i>	<i>Percentage</i>
Unknown to patient	26	14,8%
Quick labour	25	14,2%
Good labour	21	12,0%
Told by relatives	14	8,0%
Healthy baby	13	7,4%
Healthy mother	6	3,4%
Pain relief	3	1,7%
Others (fewer than 3 respondents)		
Prevent jaundice	Improve fetal movements	
Taken as a custom	Avoid adherence of baby to uterus	
Decrease liquor	Prevent caesarean section	
Prevent backache	Prevent rupture of membrane	
Relieve Constipation	Clear the womb in preparation for delivery	
Deliver spontaneously	Prevent oedema	
Protect against evil spirits		

Table 4. Using isihlambezo before and after 28 weeks gestation

	2,5kg or more	Under 2,5kg
Started before 28 weeks	47	7
Started after 28 weeks	42	9

Table 5. Route of Administration

Orally	44
Enema	5
Oral & Enema	43
Steam inhalation	1
Not Mentioned	17

study in the area¹¹ showed the home delivery rate to be similar to other areas in Natal/Kwa Zulu, at 40 - 50%.¹² If those people delivering at home, take isihlambezo at the same rate as those delivered at the clinics, the use of isihlambezo can be regarded as usual practice.

The low birth weight rate for the singleton, live babies was 10,1% and the prematurity rate 3,9%. The average age of the patients was 24,1 years.

There was no significant difference in the rate of reported use between multips and primiparas (Table 2). Those delivering at clinics reported a significantly higher use of isihlambezo (Table 1).

Many took isihlambezo only because they were told to

Only two people said that they took imbelekisane, and this substance did not seem to be well known to people in this area. The term isihlambezo seems to cover both substances distinguished by Gumede¹ and Larsen, Msanc, Monkhe,⁴ as isihlambezo and imbelekisane.

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Table 6. The link between using isihlambezo and retarded growth

	Took isihlambezo	Did not take isihlambezo
Under 2,5 kg	12	6
Over 2,5 kg	92	68
N = 178		P > 0,05

Table 7. The link between using isihlambezo and prematurity

	Took isihlambezo	Did not take isihlambezo
Premature	6	1
Term (IUGR)	6	5
N = 18		Fishers's exact test P > 0,05

In other studies^{3,4} information on why isihlambezo was used, was provided by traditional birth attendants. In our study, on inquiring from the recipient of the medication, it was found that a large number of people (22,8%) took isihlambezo for reasons unknown to them or because they were told to by the relatives. The largest group (26,2%) said that they had taken it for either a good or quick labour (Table 3). This reason may have some physiological basis. Only one person attached any spiritual significance to taking isihlambezo, saying that it was used as a protection against evil spirits. The only two other categories of any significance were those who took it for their or the babies' health (10,8%). Pain relief is not an important reason for its use (Table 3).

The number of patients using

isihlambezo before and after 28 weeks gestation does not vary greatly (Table 4). The oral route is the most commonly used route of administration, but a large proportion used oral and rectal routes (Table 5).

A link between isihlambezo use and either prematurity or growth retarded babies cannot be made on this small sample. No difference in incidence was shown (Tables 6 + 7) but this may be a result of beta-error, as a power of 80% with 95% confidence level, would require a sample size of over 3 000. This study has however served as a pilot for determining sample size for a bigger study to explore this association.

The association is certainly worth investigating in view of the link with meconium-stained liquor⁵ and the reasons given for taking isihlambezo

viz to decrease vernix⁴ and abdominal fluid,³ both associated with inter-uterine growth retardation.

An assumption was also made, viz that all babies over 2,5 kg would be neither premature or growth retarded. This would have to be rectified in further studies.

Conclusions

1. Isihlambezo is taken as a routine by most pregnant women in the Upper Tugela Region to ensure a good or quick delivery, and protect the health of mother and baby. That isihlambezo has been

Patients seemed reluctant to give this information especially when in hospital

used, should always be born in mind when treating pregnant women.

2. Further studies, with larger numbers, and taking home deliveries into account are needed to explore the association with prematurity and growth retardation.
3. Further collaborative studies involving health workers, traditional midwives, ethnobotanists and biochemists need to be done to explore this commonly used substance.

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