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CONTENTS

Effect of a new antenatal care programme on the attitudes of pregnant women and midwives towards antenatal care in Harare

*N MURIRA, *SP MUNJANJA, *I ZHANDA, **L NYSTROM, ***G LINDMARK

Objective: The aim was to study the effect of a new antenatal care (ANC) programme on the attitudes of pregnant women and midwives towards antenatal care.

Design: This was a controlled trial in which the attitudes of women and staff using the standard programme of ANC were compared to those using a new one. The new programme contained fewer but objective oriented visits, and was designed to improve consumer and provider satisfaction with ANC.

Setting: Antenatal sessions at primary care clinics in Harare.

Subjects: 200 pregnant women and 65 midwives.

Main Outcome Measures: The satisfaction of pregnant women and staff with ANC, reasons for lack of satisfaction, and time spent waiting for consultations.

Results: The new programme did not make any impact on the time spent by women waiting to be seen at the clinics, nor on the time made available for the consultations. There was no significant impact on the degree of satisfaction with the care among the women. In the control clinics, significantly more staff wished the women to make fewer visits, and in the study clinics, significantly more staff thought the use of appointments was appropriate. The major problem limiting access to ANC was lack of money to pay for the booking fees. Other problems mentioned by the women were ignorance regarding the best time to book, lack of privacy and insufficient staff at the clinics.

Conclusions: The solutions to some of the problems identified require infrastructural changes at policy making level, rather than changes within the antenatal care programmes.

Introduction

Health providers have only recently been paying attention to the attitudes of women towards antenatal care programmes.[1,2,3] Previously, the benefits of antenatal care (ANC) were considered so self evident that the consumers could not question how the services were delivered. However, the success of any ANC programme depends to a greater or lesser degree on the co-operation of the women. One of the aims of increased satisfaction with ANC is to achieve better compliance with the advice given[4], which may lead to improved pregnancy outcome. Satisfaction with the services, rather than the mere improvement of pregnancy outcome is also now considered a goal in its own right.[2,5,6]

In developing countries, the utilization of ANC is known to be low and this is usually attributed to a variety of socio-economic factors.[7] To what extent this poor utilization may also reflect dissatisfaction with the services has not been documented. In theory, at least, it should be easier to satisfy women in developing countries, where consumer expectations are lower and successful fertility is highly regarded.

In Harare the median booking gestation in 1988 was 28 weeks[7] and a preliminary survey done to prepare for a clinical trial in ANC had indicated that dissatisfaction with the

*Department of Obstetrics and Gynaecology
University of Zimbabwe
P O Box A 178, Avondale
Harare, Zimbabwe
**Department of Epidemiology and Public Health
University of Umea, S-901 85
Umea, Sweden

***Department of Obstetrics and Gynaecology
Uppsala University
S-751 85, Uppsala, Sweden

Correspondence to:
Dr S P Munjanja

rice was one of the reasons for this late booking.[8] Late king has been associated with a less favourable perinatal come in Harare.[9]

ven less attention has been paid to the job satisfaction of e staff providing the services. Midwives providing ANC in e urban areas of developing countries are faced with daily nics of up to 100 women and their ability to deliver a rvice that satisfies the women in such circumstances should e a cause for concern.

At the time of this study, a new programme of ANC had en developed and was being compared to the current ogramme in a randomized controlled trial. The new ogramme contained fewer but objective oriented visits and fewer routines during each visit.[10] An expected outcome of the new programme was that the clinics would become less busy leading to greater satisfaction with antenatal care among the pregnant women and the midwives. It was decided to study the effect of this new programme on the opinions and attitudes of the women and the staff towards antenatal care.

Materials and Methods

Setting.

The subjects were recruited from seven primary care clinics of the Harare City Health Department. These clinics offer total maternity care for low risk women from the low socio-economic areas of Harare, and are serviced by midwives. Women with complications are referred to Harare Central Hospital. Of the seven clinics, three had been randomized to the standard programme of ANC and four to the new one. The new programme contained six antenatal visits per pregnancy compared to 12 in the standard programme. Each visit in the new programme had well defined objectives and there were fewer routines per visit. The routines that were omitted in the new programme were urinalysis at subsequent visits and regular weighing of the woman. In the new programme, women were given appointments by date and time, whereas in the standard programme they were only given the date. Staff using the appointment system were instructed only to book the number of women they thought they could accommodate per session. Full technical details of the contents of the new programme are available elsewhere.[10]

The new programme was introduced during a three month period of re-orientation, and data collection only began when the researchers were satisfied with the compliance to the protocol by the staff. Follow up workshops were held regularly during the two year period of the study. In the clinics using the standard programme, there were similar workshops during the introductory and follow up two year period.

Subjects.

The pregnant women were randomly selected from the clinics until 100 subjects had been recruited into each arm of the study. They were interviewed about their opinions of the ANC they were receiving using a questionnaire containing coded and open ended questions. The interviews were done one year after the introduction of the new programme of ANC.

Staff.

The staff were interviewed one year after the commencement of the study. All staff who were on day duty in the maternity section of the seven clinics during the interview period were recruited into the study. They filled in a questionnaire containing coded and open ended questions about their opinions of the ANC they were providing.

Observations.

The researchers made observations of the time that women arrived at the clinics, how much time they spent with the midwives during the consultation, and what time they left. The staff were not aware of these observations although they knew that such observations would be made at some time during the two year study period.

Ethical Permission.

Permission to conduct the study was granted by the Harare City Health Department and the Medical Research Council of Zimbabwe. All the subjects were informed of the aims of the study and agreed to participate voluntarily.

Statistical Methods.

To test whether the differences between the control and study clinics were due to random variation or not, the Student's t-test was applied.

Results

Responses of the Pregnant Women.

Maternal characteristics: Two hundred women were recruited, 100 from each arm of the study. The median age of the total sample was 24 years and median parity was two. There were no differences between the two groups in median age, parity, the proportion of them who were married and the literacy rate.

Access to ANC: The women were asked what major problem, if any, they had encountered in seeking ANC services. Among the 200 women 75 (37%) mentioned lack of money to book, followed by uncertainty of the proper time to book in 38 (19%), being turned away by the staff to come on another day in 11 (5.5%), and distance in five (2.5%). Seventy one women (36%) said they had no problems with access to ANC. Regarding payment for booking, half of the mothers indicated that they could afford to pay Z$ 30 (Z$5 = US$1 in 1991), which was only about 50% of what they were expected to pay. None of the mothers wanted free maternity services. During the period of the main study, the booking fees rose from Z$28 in 1989 to Z$60 in 1991.

Suggestions for improvements in antenatal care: The women were asked to describe the improvements they would like to see in the services provided. Their responses were as follows with the percentage of women citing the responses in brackets (multiple responses allowed): providing more midwives at the clinics (44%); allowing mothers to book early with or without the booking fees (40%); reducing maternity fees (36%); providing food for antenatal in-patients (18%); providing more privacy (13%); and providing more sitting space at the clinics (5.5%).

Comparison between clinics using the standard and the new programme of ANC: Table I lists the comparisons that were done between the two groups of women in their responses to certain questions. There were no significant differences in the responses between the women attending the clinics using the standard or the new programme. The new programme did not make it more likely that women would be more satisfied with antenatal visits.

Responses of the Staff.

A total of 65 midwives were recruited into the study, 28 from the control clinics and 37 from the study clinics. The median age of the whole sample was 36 years and the median parity was three. There were no differences in age or parity between the two groups.

All the midwives expressed the opinion that ANC was beneficial and that it was worthwhile for the women to make the visits. The reasons they gave for under utilization of antenatal care by the women were as follows: lack of money (54%), urban-rural mobility (24%), ignorance by the women of the services offered (20%) and dissatisfaction with the services (2%). However, none of them wanted the services to be completely free and the median fee they suggested was Z$30, which was exactly similar to what the pregnant women had suggested.

The main problems the midwives encountered in the delivery of ANC were (multiple responses allowed): too many women during the antenatal clinic sessions (85%), late booking by the women (55%); inadequate medical histories (40%) and lack of compliance with advice given (31%).

The improvements they wished to see in their practice were, in descending order of importance; more staff; more clinics; more equipment; more privacy for the women; reduced booking fees and incentives for early bookers. When asked about how long they thought the women waited before being seen, 55% of them said half an hour or less. Forty five percent thought their consultations with the women lasted six to 10 minutes and 32% thought the consultations lasted 11 to 30 minutes.

Table I: Comparison of responses between women using the standard programme (control clinics) and those using the new programme (study clinics). Figures represent the percentage of women agreeing to the statement.

Statement	Number of women: Control clinics Total=100 %	Study clinics Total=100 %	p value
The attention provided is worth the effort of the visit	90	80	0.075
I am happy with the consultation time	59	66	0.381
I am listened to about my worries	70	78	0.259
I am told examination findings	86	76	0.105
I am given clear instructions about drugs	94	90	0.434
I am given time to ask questions	92	88	0.480
I am given time to express my feelings	96	92	0.372

Comparison between study and control clinics.

Table II lists the comparison between the responses to certain questions by the staff of the control and study clinics. Significantly more staff at the control clinics wanted the women to make fewer visits. In the study clinics more staff thought that the use of appointments was appropriate. There, were however, no differences in their responses to the other questions asked.

Table II: Comparison in responses between staff of the control and study clinics, numbers of those responding positively to the statement.

Statement	Number of women: Control clinics Total=28	Study clinics Total=37	p va
I am satisfied with the organisation of the antenatal clinic	15	28	0.11
I would like the women to make less visits than now	26	14	<0.0
The use of appointments is appropriate	18	35	0.0
I always tell women about their findings	14	19	0.8
I spend less than 5 min. with each woman	8	6	0.3
The women spend less than $^1/_2$ hr waiting	16	18	0.6
Women have complained to me about waiting	10	14	0.9
Women have complained about overcrowding	7	10	0.9
Women have complained about lack of attention	6	6	0.8

Observations.

Observations done at the seven clinics showed that wo were present at all the clinics by 7.00am, one hour before opening. The average time women spent waiting to examined was 162 minutes (SD 37) in the control clinics, a 166 minutes (SD 35) in the study clinics. Only one woman of the 200 spent less than an hour waiting. An import portion of the waiting time was spent at the clinic before it due to open. In both study and control clinics, the consultati lasted an average of three minutes. These observations can compared to the statements of the staff as shown in Tabl

Observations on the system of appointments showed many women ignored the times they had been given for visits, and still came early to beat the queue. This disregar the appointments system meant that staff were still not abl control the numbers of women they saw during the clini

Discussion

The study has shown that nearly two thirds of the wo (64%) had problems of access to ANC in the index pregna The main problem was lack of money to pay booking fee maternity care. This was also confirmed by the respons the midwives. The late median booking gestation of 29 w in this population may partly be the result of finar constraints. These constraints have been shown to be a m barrier to ANC in those countries where user fees applicable.[11,12]

It is interesting that all the mothers and the staff thought women should pay something towards maternity care. No wanted it to be completely free, but the majority prefe lower fees, staggered payments or incentives for early book This positive attitude could be exploited to arrive at user levels which allow proper utilization of maternity care facil

The problems faced by the staff in delivering the service were mainly in two categories; namely busy clinics and communication problems with the women. Predictably the staff blamed the women for late booking, lack of compliance and failure to give adequate histories. However, it can be argued that the service contributed to some of the problems. For example 11 women were turned away and told to come back at later dates when they had tried to book early. The lack of compliance and the inadequate histories supplied were likely partly caused by the very short time available for consultations.

Both the women and the staff agreed on what improvements they wanted to see in ANC. Both groups showed contradictions in wanting a better equipped and staffed service whilst at the same time recommending reduced user fees. Some of the issues addressed such as privacy are very basic and should be remedied as soon as possible.

The visits comprised of a wait of two to three hours followed by a consultation of three minutes with the midwife. During the waiting, urinalysis was done in the control clinics and the blood pressure was taken in all clinics. The responses of the women on the duration of the waiting and the consultation agreed closely with the researchers' observations but differed markedly from the midwives' responses.

Midwives grossly under estimated the waiting time and over estimated staff-client contact time. If this represents genuine ignorance of what the women go through during an antenatal visit, it suggests that regular service audits should be carried out by the staff themselves of their practice. The lack of sensitivity to the women's time by the health services is not peculiar to developing countries and has been documented in more sophisticated settings.[5,6]

The new programme of ANC had been expected to reduce the waiting time and increase staff-client contact time. This did not happen and neither were there any significant changes in the attitudes among the women and the staff. It could be argued that more subjects would have been required to show change or the lack of it, or that one year was not enough for the new programme to have shown impact. Previous reports have, however, also shown that reducing the number of antenatal visits does not lead to any increase in consultation length,[13] and that it may actually lead to dissatisfaction with ANC.[14]

In our setting, there were some definite infrastructural problems which the new programme of ANC encountered and which contributed to the lack of impact on satisfaction with care. Firstly, the researchers did not have control of the day to day duties of the midwives at the clinics. The clinics provide a wide variety of primary care facilities and staff are shifted from one section to another depending on need. Free staff time created by the new programme through less visits, fewer routines and use of appointments was not translated into shorter waiting times or greater staff-client contact time. These changes can only occur in a system where the midwives assigned to the antenatal sessions cannot be moved around to other sections of the polyclinic for administrative reasons.

Secondly, the new package did not and could not address some of the major problems related to the access of antenatal care to women. Factors such as booking fees, number of midwives at the clinics, privacy and sitting space at the clinic were outside the scope of the new programme. Certain problems such as the lack of privacy and sitting space may only be resolved by alterations to the physical structures of the clinics.

The study has shown that in order to increase the consumer and provider satisfaction with ANC, more attention will have to be paid to the infrastructural aspects of the service. These aspects may require major policy decisions by the administrative authorities. Whilst it is legitimate to re-examine the contents of ANC programmes, altering such contents may not lead to the expected greater satisfaction by its users and providers because of factors outside the immediate scope of the programmes.

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