

## REFERENCES

1. Bryceson, A.D.M., Parry E.H.O., Perine P.L. et al. 1970. Louse borne relapsing fever: A clinical and Laboratory study of 62 cases in Ethiopia and a reconsideration of the literature. Q J Medicine 39: 129 - 70.
2. Dennis, D.T., S. Awoke, E.B. Doberstyn, et al. Bleeding in louse-borne relapsing fever in Ethiopia. Clinical and laboratory features in 29 patients. East African Med. Jour. 1976; 53:4
3. Knaack, R.H., Wright, L.J. Leithead C.S. et al. 1972. Penicillin versus tetracyclines in the treatment of louse-borne relapsing fever. Ethiop. Med. J 10: 15 - 22.
4. Rijkels, D.F. 1971. louse borne relapsing fever in Ethiopia. Trop geog. Med. 23: 335 - 340.
5. Salih, S.Y., D. Mustafa, S.M. Abdelwahab, et al. 1977. louse borne relapsing fever: 1 A clinical and laboratory study of 363 cases in the Sudan. Tran. of the Royal society of Trop. Med & Hyg. 71:1
6. Zein, Ahmed, Zein and Helmut Kloos. 1988. The ecology of health and disease in Ethiopia. MOH, Addis Ababa.

**ATTITUDE OF PREGNANT MOTHERS TOWARDS BEING ATTENDED BY  
HEALTH WORKERS DURING DELIVERY IN SEKKA CHEKORSA,  
ILLUBABOR ADMINISTRATIVE REGION**

ASEFA AGA, BSC, MPH<sup>\*</sup>

Adem Abdulkadir<sup>\*\*</sup>

Bethesaida Teferi<sup>\*\*</sup>

Oluma Yoseph<sup>\*\*</sup>

Grum Hailu<sup>\*\*</sup>

Habtemariam Tekle<sup>\*\*</sup>

**ABSTRACT**

In August 1990, a questionnaire survey was carried out in Sekka Chekorsa Awraja, Illubabor Administrative Region, to investigate the utilization of antenatal and delivery services. One hundred and seventy pregnant women who attended antenatal care (ANC) during the month of August 1990 were interviewed for their opinions on utilization of health attendants. Out of 170 women, 129 (76%) were aware of ANC of whom 109 (84.5%) attended in one or more of previous pregnancies. Only 6 (4.4%) out of 137 last deliveries used trained attendants. The most important obstacles for utilization of trained attendants were found to be lack of trained persons in the vicinity and long distance of the available health facilities in the communities. Recommendations are suggested to tackle these problems.

<sup>\*</sup> Lecturer, Jimma Institute of Health Sciences,  
School of Laboratory Technology, P.O.Box 378, Jimma,  
Illubabor, Ethiopia

<sup>\*\*</sup> Senior Medical Students

## INTRODUCTION

In 1978, the Alma Ata Declaration called for Primary Health Care (PHC) as a new approach to health service so that Health for All by the year 2000 will be achieved. Among the various components of PHC, maternal and child care were given due attention by the many nations of the world. Achievements have been evaluated, several conferences and research projects have been initiated to appreciate and question the outcomes so far.

In Ethiopia, a survey conducted for the entire country showed a delivery service from 10% to 15% by trained attendants (1,5). Another study conducted in 1970 of urban population showed 18%, and rural population 7% (5). The institutional delivery service was 15% of the urban whereas of the rural population it was only 1% (1,5). The proportion of deliveries conducted by trained attendants of muslim population was 26% and institutional deliveries were only 2% in the same study.

In 1989 and 1990, the Antenatal coverage (ANC) for Seka Chekorsa Awraja was 43.6% for eligibles and within this period the institutional delivery was only 4.3% (1,2).

The purpose of this study was to explore factors related to the low utilization rate of ANC and delivery services experienced by mothers during pregnancies and deliveries.

## METHODS AND PROCEDURES

In August 1990, a questionnaire survey was conducted to investigate the attitude of pregnant mothers towards their choice of delivery attendance, i.e., whether they prefer health workers to other attendants and health institutions to home. Antenatal Care in this study was defined as a single or more visit to a health institution or to a health worker to check up the health

status of the pregnant mother or the fetus for current or previous pregnancies.

All pregnant mothers attending antenatal care at Shebe Health Centre and 12 outreach sites (Catchment area of the Awraja) were interviewed by a team training participants; five Interns, two Nurses, and a Sanitarian. The responses were filled in the pretested questionnaire according to the recommendations of Safe Motherhood (5).

## RESULTS

Among the 170 pregnant women, history of parity showed that 71 women (41.8%) have given birth to 3 children or more whereas 126 (74%) women were between the age of 19 to 34 (Table 1).

TABLE 1

Age Distribution and Status of Parity among 170 Pregnant Women, Seka, Tilubabor, 1990.

Parity	N	%	Age	N	%
0	33	19.5	<15	1	0.70
1 - 2	66	38.8	15-18	13	7.80
3 - 5	56	32.9	19-34	126	74.00
5+	15	8.8	>35	30	17.50
Total	170	100		170	100

The problems stated by 24 women during their previous pregnancies were fatigue and weakness (42.8%), antepartum haemorrhage (57.2%) and the problems complained by 35 women during

their previous deliveries were prolonged labour (71.4%), abdominal cramps (20%), Postpartum haemorrhage (2.9%), retained placenta (2.9%) and fetal death (2.9%) (Table 2).

TABLE 2

Perceived Problems During Previous Pregnancies and Deliveries, Seka, Illubabor, 1990.

Problems during Pregnancy	N	%	Problems during Deliveries	N	%
Fatigue & weakness	10	42.8	Prolonged labour	25	71.4
Abortion			Abdominal cramps	7	20.0
APH *	14	28.6	PPH**	1	2.9
			Retained placenta	1	2.9
			Fetal death	1	2.9
Total***	24	100.00		35	100.00

\* APH = Antepartum Haemorrhage

\*\* PPH = Postpartum Haemorrhage

\*\*\* Figures are only for those responded

The opinion of 112 pregnant women who wanted to be attended by trained health workers for their future deliveries showed that 84 (75%) of them wanted the service in fear of problems or complications (Table 3).

TABLE 3

Opinion of Pregnant Women who Wanted to be Attended (A) and Do not Want to be attended by Trained Health Workers (B), Seka, Illubabor, 1990.

( A ) Want to be attended	N	%	( B ) Do not want to be attended	N	%
In fear of future problems	84	75.00	Health workers are not available	35	60.3
Because of previous problems	11	10.00	The place is too far	6	10.3
Because of present Problem	11	10.00	Health workers are incompetent	14	24.2
Advised by other	6	5.0	Fear of episiotomy	3	5.2
Total	112	100.00		58	100.00

Whereas 58 women who did not want to be attended by such people give the following reasons: health workers are not available, 35 (60.3%), health workers are incompetent, 14 (24.2%), the place is too far 6 (10.3%). Out of 137 last deliveries only one (0.21%) was conducted at health institution, the rest being at home (Table 4).



TABLE 4

Sources of Information on ANC and Person Attended on the Previous Deliveries, Seka, Illubabor, 1990.

Place of information on ANC	N	%	Previous deliveries were attended by		
				N	%
Health Centre	97	51.1	Family	55	40.1
Neighbour	60	35.3	Neighbour	67	48.9
Kebele leaders	10	5.9	Health Centre	6	4.4
husband	3	1.8	TBA	2	1.5
			Not attended	7	5.1
Total	170	100.00		137	100.0

The antenatal history of 170 pregnant women showed that only 109 women attended antenatal care of whom 10 had problems during their previous pregnancies. Attendance to ANC did not show any association to problems experienced during their previous pregnancy ( $X^2_1=21$ , 711 P < 0.05, Table 5).

TABLE 5

Antenatal Attendance & Problems During Previous Pregnancies of Women, Seka, Illubabor, 1990.

Problems during previous pregnancy	ANC Attendance		
	Yes	No	Total
Yes	10	14	24
No	99	14	113
Total	109	28	137

$$X^2 = 21.711, P < 0.005$$

Out of 137 pregnant women who delivered previously, only 17 had problem during their previous deliveries and no association was found with ANC attendance ( $X^2_1=24.07771$ , P < 0.005, Table 6).

TABLE 6

Antenatal attendance and Problems During Previous Deliveries for 137 Pregnant Women Seka, Illubabor, 1990.

Problems During previous pregnancy	ANC Attendance		
	Yes	No	Total
Yes	17	18	35
No	92	10	102
Total	109	28	137

$$X^2 = 24.0771, P < 0.005$$

There is no statistical association of utilization of antenatal care and positive attitudinal response, ( $X^2_1 = 25,5454$ ,  $P < 0.005$ , Table 7).

TABLE 7

ANC Attendance and Attitudinal Response  
of 170 Pregnant Women

Attitudinal Response	ANC Attendance		
	Yes	No	Total
Positive	57	55	112
Negative	52	6	58
Total	109	61	170

$X^2 = 25.5454$ ,  $P < 0.005$

\*\* Positive attitudinal response is taken as wanting assistance of Health Workers for future antenatal care or delivery.

## DISCUSSION

A workshop conducted from 10 to 13 February, 1987, in Nairobi, Kenya, estimated that deliveries attended by trained health personnel for Africa was 34%, 31% for South Asia, 93% for East Asia, 64% for Latin America and 100% for North America (3).

A epidemiological survey in Addis Ababa in 1980 estimated that deliveries attended by trained personnel was between 10-15% (4). Previous studies in Ethiopia (1970) for urban, rural and muslim populations showed coverage of deliveries by trained attendants, 18%, 7%, and 26% respectively, whereas institutional delivery coverage were 15%, 1%, and 2% in the same order (4). These figures actually show a very low coverage of delivery services by trained personnel compared to other countries(5). The sample size and methods used for our present study is by far different from those studies mentioned above, however, our finding of 4.4% remarkably shows a very low coverage of recent delivery service by trained health personnel in Sekka Chekorsa Awraja(2). The institutional delivery of 0.21% out of 476 previous deliveries showed a very poor utilization of health facilities by mothers who at least attended antenatal care. On the other hand, of 170 pregnant women, 112 (69%) wanted their future deliveries to be attended by trained health personnel. The majority of interviewed women (76%) were aware of the use of antenatal care indicating that screening of the risk group for institutional delivery is possible. The obstacles were found to be lack of trained health workers and availability of health facilities in the various communities (4).

In this study, it has been tried to indicate the problems encountered by the community in utilising trained health workers for delivery services at home or at the available health institutions. The concerned authorities should train motivated traditional birth attendants who must be selected by the communities themselves so as to make trained health workers

available to the needy communities (4). Apart from the training, provisions of delivery kits to the trainees should be given, regularly scheduled visits to the communities and the attendants is of paramount importance. Refresher courses should be given to the attendants.

The authors believe that, even though the study is not exhaustive, and only from selected subjects it could serve as a baseline data for future studies.

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## REFERENCES

1. Action plan for Sekka Chekorsa Awraja. 1990. Team Training programme participants, Jimma Institute of Health Sciences.
2. Annual morbidity report of Seka Chekorsa Awraja, 1989. The Coverage of Maternity Care. Tabulation of Available Information.
3. Chang, W.P. 1974. Population studies in Ethiopia: Knowledge, attitude, and practice surveys in population and health. *Journal of Ethiopian Studies* 12(1):
4. Kwast, B.E., Kidane-Mariam, W., Saed, E.M., and Fowls, F.G.R. 1985. Epidemiology of Maternal Mortality in Addis Ababa: A community-based study. *Ethiop Med J.* 23: (1) 7-16.
5. Safe Motherhood, February 10-13, 1987, Nairobi, Kenya. Proceeding of the International conference on Motherhood.
6. United Nations, 1980. Fund for Population Activities. Report of Mission on needs assessment for population assistance - Ethiopia. New York, United Nations Fund for population Activities,
7. World Health Document FHE/85.1, 1985: the coverage of Maternity care. A Tabulation of Available Information.

**THE APPLICATION OF RAIN-WATER HARVESTING  
TECHNOLOGY FOR HEALTH STATION IN A RURAL ETHIOPIA**

KEBEDE FARISS Bsc, Msc

**ABSTRACT**

Rain-water Harvesting is an appropriate technology suited especially for less developed countries. Such technology has economic importance for its provision of clean water supply without using costly items such as pipes, pumps, fuels etc.. This simple technological system has not been widely, used in Ethiopia. The purpose of this paper is to demonstrate the application of Rain-Water Harvesting technology for a health station in rural Ethiopia using locally available materials.

**INTRODUCTION**

Some countries are blessed by having good amount of lakes, rivers, underground fresh water reservoirs and abundant rain. Ethiopia has; however, of limited amount of such natural resources. Moreover, Ethiopians are mostly settled on highlands that keep them away from the natural available water sources. This condition forces the villagers to use animal transportation system or on foot travel to long distances to get their daily water needs. Obviously, they could carry only little amount of water which is substantially small to satisfy their needs. And this happens with no prior consideration of the hygiene of the water which has an impact on the health of the people.

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\* Lecturer, Jimma Institute of Health Sciences, School of Environmental Health, P.O.Box 378, Jimma, Illubabor, Ethiopia.