An enquiry into the quality of reproductive health care provided at private hospitals & nursing homes and womens' perception in AP.

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# **QUALITY ASSESSMENT STUDY IN PRIVATE HOSPITALS**

# **INTRODUCTION:**

In India quality assessment studies on private hospitals are very few. According to Nandraj and Duggal, among the hospital based studies with specific reference to quality, Mahapatra and Berman conducted two studies on secondary data (108) of Secondary level public hospitals in Andhra Pradesh. The first study was on utilisation and productivity and the second highlighted the performance service-mix ratio's (Mahapatra P & Berman P. 1990, 1992). In 1994 a study was conducted in 24 hospitals and nursing homes in Bombay city and documented absolute lack of concern for minimum standards (Nandraj S 1994). In recent years a study was conducted in rural Maharastra where quality assessment of private hospitals was performed and physical standards were brought out (Nandraj & Duggal R, 1997).

Institute of Health Systems has initiated its project on "An Enquiry into the Quality of Reproductive Health Care provided at Private Hospitals and Nursing Homes and Women's Perception in Andhra Pradesh", with exit survey, followed by standards preparation in reproductive health care and has conducted quality assessment field based study in private hospitals in comparision with the standards evolved in reproductive health care procedures. To just glance at the project activities the overall objectives of the project are mentioned below:

### **Overall Objective:**

Quality Assessment of Reproductive Health Care in Private Hospitals and Nursing Homes. *Specific Objective:* 

I. To bring out perceptions and expectations of women regarding quality of health care in private hospitals by an exit survey.

This objective was aimed at both bringing out the nature and causes of reproductive morbidity and mortality if any that was traceable as well as women's perception of the quality of care provided at the private hospitals and nursing homes with its good points and at the same time, the gaps in quality. This direct feedback from women was used to modify the draft standards on reproductive health care. This objective was satisfied with an Exit Survey and the report is already presented.

II. To Assess the Quality Gaps in the Provision of Reproductive Health Care:

Institute of Health Systems has developed standards for some selected reproductive

health care procedures i.e., *Normal Delivery, Caesarean Section, Medical Termination of Pregnancy and few gynaecological conditions.* Standards developed by IHS are further modified as per the feed back from the Exit Survey and the suggestions of the Standard Setting panel. The Standards developed by IHS are basically in tune with the local needs and the size of the hospital with particular emphasis on the smaller hospitals of less than 30 beds. The existing quality in reproductive care services provided by private hospitals and nursing homes is measured against the standards which are being developed for reproductive health care procedures.

# WOMEN'S PERCEPTION OF QUALITY OF REPRODUCTIVE HEALTH CARE SERVICES PROVIDED IN PRIVATE HOSPITALS

Patient's satisfaction should be regarded as an important indicator of quality of care (WHO1992). One vital aspect of quality assurance programme has been the incorporation of patients suggestions and complaints as a main source of detecting problems in health care. Such example is Spanish Health care system where patients opinions are collected and coded through users attention services and the information is transferred to audit programmes (Sunol R & Sanz C 1990). And it was considered by many that it is a good way of assessing patients rights and preventing mal practices claims. Even the US health maintenance organisations include an element of consumer survey. It was found that 12% of the quality activities in England and Wales consisted of consumer surveys, while a further 8% of quality activities fell into the category of customer relations activities which involved distribution of leaflets and complaints and suggestions schemes (George A 1997).

Hence in the study of "An Enquiry into the Quality of Reproductive Health Care provided at Private Hospitals and Nursing Homes and Women's Perception in Andhra Pradesh" it was note worthy to consider all the suggestions and views of women on reproductive health care services.

The quality assessment of private hospitals in reproductive health care takes its source of information from:

- The Exit Survey of Patients of reproductive health problems
- The standards setting panel which is a consensus group of multiple professionals and stake holders including consumers represented by relevant activist groups.
- Exit survey with substantial quantum of unstructured enquiry is another important input which takes care of the views of consumers i.e., the women who are affected or likely to be affected by problems of reproductive health.

The third component mentioned above is analysed which was not covered in the earlier report. As mentioned earlier in the exit survey results. Nearly 59% of respondents had utilised the private hospitals for normal delivery. Another 2% had normal delivery with tubectomy. A substantial 25% of sample had Caesarean section (C.S.). Along with this there were another 2%

who had C.S with tubectomy. Women who had Medical termination of pregnancy constituted 2% of the sample.

In the structured interview we have tried to collect information through a number of questions on different aspects of services and facilities in private hospital and small percentage of patients have come out and given critical responses. Unstructured enquiry had further helped us in bringing out more critical facts and feelings of women about the quality of services provided in private hospitals.

The unstructured enquiries are meticulously coded and are being presented in the present report. All the views of women on various topics were broadly classified into the following topics like perception on good facilities in the private hospitals, perception on facilities disliked in the private hospitals, perception on human power in government hospitals, perception of women on caesarean operations and opinion on fee in private hospitals.

#### Perception on facilities in government hospitals:

As mentioned in the exit survey report maximum number of patients always compared the private health care services with the government sector and drew consolation which was clearly presented in this analysis. The women who have mentioned about the services in government hospital have totally presented a negative attitude. Although no specific questions were asked on government hospital services as high as 22% of women commented on the services as government hospitals. About 6% of the women felt that the treatment in the government hospitals would not be good. Five percent opined that if facilities are good in government we would also visit the government hospitals. Three percent of women commented that they do not prefer government hospitals as there are no proper facilities, no good treatment, cheap quality drugs are distributed, irritable staff, one has to bribe the doctor and staff to get proper treatment and many doctors have private practice and encourage them to visit their private hospitals. Various other reasons were also mentioned in the Table-1 where the women were justifying themselves for visiting private hospitals instead of government.

#### Perception on good facilities in private hospitals:

As high as 37% of women felt that the facilities are good in private hospitals. Various facilities were mentioned in these like water facility, electricity, space, communication facility etc. About 4% were satisfied with the equipment available in the hospital. Two percent were happy with the cleanliness, and another 2% mentioned that the hospital has got adequate facilities for operation. Other views are mentioned in Table-2 for reference.

## Perception on disliked/bad facilities in private hospitals:

Compared to the responses of structured interview, a lot of critical responses have come from the unstructured enquiry which are clearly mentioned in the Table-3. About 6% mentioned that the facilities in the hospitals they visited were not good. Nine percent complained that bed sheets are not provided in the hospitals, another 0.5% expressed that though bed sheets are available they are not even changed once in two days. Ten percent were mentioning their dissatisfaction for non-availability of ambulance in the hospitals.

It is also very important for women to know the benefits, schemes of incentive policies of private health sector which the government is providing, because 0.5% of women said that they did not receive the incentive for getting family planning operation done, which they usually get from the government. Apart from these we find that women were also talking about the equipment in lab, operation theatre etc. though they do not know much of technical details but are still mentioning about various aspects of quality of care. hence Charles Shaw says that the public has become a better informed consumer of services and experts assurance that services are good. Patients do not necessarily wish to know or able to judge all the technical details, but they do have the right to know that those who carry the technical responsibility do apply effective controls, this is essential to the public's trust in the profession (Charles Shaw).

Though the critical responses are few, still these quality gaps should be considered for providing total quality assurance in private health care services.

#### Perception on services provided by staff in government hospitals:

Medical and nursing care are only important constituents of the full range of services which constitute the hospital services to the public (Mahapatra P). Though no specific questions were asked on government sector as high as 12% of the women have expressed their dissatisfaction with the services of the staff in the government hospital. Among them 5% were unhappy with the doctors treatment, 4% said that treatment of nurses was bad. About 0.7% were mentioning about needles, that they are not put for boiling and are very brittle and painful for injection (Table-4).

# Perception on services provided by staff in private hospitals:

As high as 21% percent of the respondents said that services of doctors and nurses were good. Eleven percent were of the view that doctors treatment was good. Nursing services were complimented by 13% of the women and another 0.18% praised that inspite of low salaries nurses work well in private sector. Three percent of them felt nursing services were bad. And various other views are presented in the Table-5.

# Women's opinion on fee in private sector:

According to the analysis of unstructured enquiry from women it was found that the charges for normal delivery were ranging from Rs.250/- to Rs.3000/- and for Caesarean Operations it was minimum of Rs.2500/- to the maximum of Rs.10,000/-. Few were mentioning charges separately for Normal delivery or Caesarean, medicines, bed charges and diagnostics et. which could not be analysed separately as no specific questions were asked on these. About the perception of women on fee, 18% of them pointed out that fee was high and 1% said that the fee is very high. seven percent opined that fee was reasonable. About 3% said that doctor considers poor hence fee was less and another 3% felt that fee was less. Other views presented shows that women are not happy with the cost of health care in private Hospitals (Table-6).

# Perception of women on Caesarean Operations:

In the structured interviews, of the 144 Caesarean cases, 5% expressed that in their cases caesarean was not needed. Most of the women felt that doctors are always in a hurry and are not waiting for normal deliveries. Few expressed that to charge more money doctors were performing Caesarean operations when there is no need at all. Among the women who felt Caesareans were not necessary, various views were expressed which are mentioned in the Table-7.

	Table-1		
S.No.	Perception of Women on Facilities in Government Hospitals	No. of	%
		Responses	

1	If facilities are good in Government we also go there	28	5.05
2	Treatment in Government Hospitals will not be good	34	6.13
3	Private hospitals are little better than Government	3	0.54
4	In Govt. Hospitals people will not be getting minimum facilities/ no proper	12	2.16
	services/ hence even lower middle class also prefer private hospitals though it		
	is not affordable		
5	Guarantee to life is not given in Govt. hospitals	4	0.72
6	Services which I got in private are not available in Government	6	1.08
7	Even normal deliveries are not done in Govt. hospitals	1	0.18
8	If I go to govt. Hospital any way they refer me to private hospital	1	0.18
9	No cleanliness/ No neatness	12	2.16
10	Without recommendations doctors do not treat well	1	0.18
11	Treat rich people well and as poor to go out for diagnostics	2	0.36
12	Usually operations done in govt. Hospitals have more failures	1	0.18
13	Sufficient equipment are not available	1	0.18
14	I visited govt. Hospital. Doctor diagnosed that my baby is dead in womb. I	1	0.18
	visited private hospital where I delivered normally & baby is fine		
15	We don't prefer govt. hospitals as no proper facilities, no good treatment,	17	3.06
	cheap quality drugs, irritable nursing staff & one has to bribe the doctor &		
	staff to get proper treatment. And many doctors have private practice, they		
	encourage us to come to their private hospitals		
16	No emergency facilities in govt. hospitals	5	0.9
17	Govt. Doctor should stop private practice	4	0.72
18	I visited govt. hospital when I was getting severe pains and doctor rejected to	1	0.18
	admit me and advised me to come after three days. Immediately I visited		
	private hospital and I delivered normally. What would have been my		
	condition if I did not go to private hospital promptly		
Note: B	eing multiple answer questions N will not add up to 555 and percentage will not	t add to 100	

Table-2           Perceptions on facilities good at Private Hospitals							
1	Hospital is clean	14	2.52				
2	Hospital has good facilities	205	36.94				
3	Adequate equipment available fore operation	12	2.16				
4	Sufficient equipment are available in the hospital	24	4.32				
5	Good quality equipment are used	1	0.18				
6 Emergency facilities are available 7							
7	Rich & poor are treated alike	3	0.54				
Note: Bei	ng multiple answer questions N will not add up to 555 and percenta	ge will not add to	100				

S.No.	Perception on facilities in Private Hospitals-Disliked	No. of Responses	%			
1	Facilities are not good in this hospital	35	6.31			
2	No proper water facility	3	0.54			
3	No bed sheets	49	8.83			
4	No ambulance facility	58	10.45			
5	No mattresses	8	1.44			
6	No telephone facility	2	0.36			
7	Water, electricity & beds were not good	4	0.72			
8	Bed sheets are not changed even after two days	3	0.54			
9	No adequate equipment to do operation	4	0.72			
10	No adequate equipment to do lab tests	1	0.18			
11	There is no place between bed to bed	1	0.18			
12	Waiting time is more for consultation	2	0.36			
13	As such there is not good thing in this hospital	1	0.18			
14	We are not satisfied with the services	5	0.9			
15	Few facilities were not good	3	0.54			
16	Blankets are not washed	1	0.18			
17	No lockers were provided	4	0.72			
18	No sufficient space for visitors	4	0.72			
19	We are not satisfied with hospital equipment / no cleanliness, no neatness	8	1.44			
20	Anesthesia facilities are not good in this hospital	1	0.18			
21	We did not had adequate privacy with the doctor to explain problems	1	0.18			
22	Hospital is very congested	5	0.9			
23	It will be good if services are improved	2	0.36			
24	Private hospitals are very strict. They run with the saying "we will treat only if you have money"	1	0.18			
25						
Note: Bei	ng multiple answer questions N will not add up to 555 and percentage v	will not add to 100	)			

Table-4										
S.No.	S.No. Perception on Human power in Government Hospitals No. of Responses									
1	Doctors & Nurses are not available	1	0.18							
2	Treatment of Nurses was not good/did not give medicines properly	24	4.32							
3	Doctors don't treat properly/well/irresponsible/irritative/short tempered impatient	28	5.05							
4	Nurses shout at us/ impatient / short tempered	9	1.62							
5 Nurses do not boil needles properly, give injections with brittle 4 0.72 needles										
Note: Bein	g multiple answer questions N will not add up to 555 and percentage v	will not add to 100								

Table-5						
S.No.	Human Power in Private Sector	No. of Responses	%			
1	Doctors & Nurses are good	119	21.44			
2	Doctor is good / treated well	59	10.63			
3	Nursing care is good	72	12.97			
4	Doctor is available in emergency / round the clock	44	7.93			
5	Doctors & Nurses are available all the time	7	1.26			
6	Nurses treatment is bad / not well / not good	18	3.24			
7	Nurses work well inspite of low salaries	1	0.18			
8	Staff did no cooperate	1	0.18			
9	Doctor did not treat properly	4	0.72			
10	Lost my baby due to negligence of doctor	1	0.18			
11	Nurses are not available in this hospital	1	0.18			
12	12 Nurses were on strike so could not provide good services		0.18			
13	Doctor advised scanning when there is no need at all	1	0.18			
14	Health education was not given	1	0.18			
Note: Bei	ng multiple answer questions N will not add up to 555 and percentage will not	add to 100				

	Table-6						
S.No.	Women's opinion on fee in Private Hospitals	%					
1	Fee is high	102	18.38				
2	Fee is very high / very costly	7	1.26				
3	Fee is less	16	2.88				
4	Fee is reasonable	38	6.85				
5	Doctor considers poor hence fee is less	15	2.7				
6	We know the doctor hence charged more	6	1.08				
7	Charges are less as we go for regular check-ups	2	0.36				
8	Even doctor know us she charged more	1	0.18				
9	My relative / sister is working hence fee is less	2	0.36				
10	In emergency one has to go to private hospital, later we find it difficult to pay	3	0.54				
11	We had to sell the piece of land to pay the fee	1	0.18				
12	I had to sell my gold to pay the fee	1	0.18				
13	Doctor did not charge as my baby died after operation	1	0.18				
14	If in government hospitals people are taking money then there is nothing wrong by the private hospitals charging more	1	0.18				
Note: Be	ing multiple answer questions N will not add up to 555 and percentage will	not add to 100					

	Table-7						
	Women's perception on Operation						
S.No.	No. Responses						
1	First I visited government hospital where doctor refused to admit me. Then I visited this hospital						
	(private). Though we requested the doctor to wait for one more hour she has posted me for surgery.						
	Exactly after one hour I delivered normally.						
2	I visited this hospital for normal delivery and doctor did surgery. As we don't know anything we could						
	not differentiate why caesarean is needed.						
3	In few nursing homes it happens that patients are prepared for operation (caesarean) mean time they						
	deliver normally						
4	I am not satisfied with this operation						
5	I feel that doctor did operation unnecessarily and extracted money. Doctor did not treat me well as we						
	could not pay full advance at a time (Rs.2500/-). Doctor did not even remove my stitches for 20 days. I						
	suffered a lot as I had infection near operated area						
6	I think to charge more they wasted lot of time though I was getting good strong pains they said surgery						
	is must. They did not allow us to go to another hospital when we wanted to. They performed surgery						
	and we were not having money. I had to sell my gold to pay my bills. They transfused blood without						
	informing my family members and charged Rs.500/- extra for that. We are very poor. They squeezed us						
	a lot for money.						
7	Unnecessarily they used forceps to take out the baby. They should have waited for some more time for						
	normal delivery.						
8	Doctor said I can not have normal delivery and caesarean operation is must. When we said it is difficult						
	to pay so much for operation, they did normal delivery.						
9	Caesarean suction was not needed for me. Doctor did operation. I advise all people not to go to this						
	hospital						
10	I am not satisfied with the operation. I had many complications						
11	I like this doctor as she justifies whether caesarean operation is really needed or not. She waited for my						
	normal delivery even in critical condition.						

# A Field based quality assessment study in comparision with the Minimum Standards developed for Reproductive Health Care Services Standards for Reproductive Health:

With the application of the concepts of interprofessionality, consumer participation and representation to stake holders had helped in formulation of standards in reproductive health, which have a proper balance between technical perfection and practical and local relevance. After series of workshops standards document was finalised. Standards developed by Institute of Health Systems are mostly meant for smaller hospitals less than 30 bedded which form the major chunk of the bed strength and at the same time cater health needs to larger number of rural and small town dwellers and are more specific to reproductive health care.

Standards were mainly prepared of the following four procedures:

- w Normal delivery
- w Caesarean section
- w Medical Termination of Pregnancy
- w Basic diagnostics for Gynaecological diseases

Formulation of standards was based on the structure aspects which cover:

- 1. Minimum infrastructural facilities
- 2. Minimum human power needed-Type, Qualifications, Number
- 3. Minimum equipment needed
- 4. Minimum physical facilities needed

Based on the above mentioned standards the present quality assessment study was compared to find the quality gaps in private hospitals.

# STUDY DESIGN AND METHODOLOGY:

Same as exit survey the study was conducted in hospitals of two developed districts and two less developed districts in Andhra Pradesh. The sample hospitals which were selected for exit survey were also opted for the present study. From the 65 hospitals selected for exit survey 72% were convinced for quality assessment study in their hospitals and the remaining were newly selected. Andhra Pradesh Health Institutions Data Base (APHIDB) maintained by Institute of Health Systems has helped us in tracing out the list of new hospital sample for quality assessment.

Totally there were 63 hospitals involved in the study sample. Thirty five hospitals are from the economically developed districts (EDDs) i.e., Krishna and Nellore and twenty eight hospitals are from the economically backward districts (EBDs) i.e., Mahaboobnagar and Cuddapah. The sample for EBDs is less than as there was lot of opposition from the doctors in these districts and hospitals are also more scattered in developed districts due to large number of hospitals though rejection were more it was easy in getting other hospitals near by (Table-A)

**Note on Voluntary Sector:** From the voluntary sector we could get 10 hospitals for the present quality assessment study which constitute 16% of the sample. Out of the voluntary hospitals 60% are from 51-100 bedded, 20% are in 1-5 bedded and another 20% are in 6-15 bedded category (Table-A).

			Table-A							
Bed	Strength-wis		on of Private 1 sample by Di	-	Nursing Hom	es				
BED STRENGTH										
D:-4	1-5		6-15	31-50	51-100	Total				
District Name	No. Of Hospitals (%)	No. Of Hospitals (%)	No. Of Hospitals (%)	No. Of Hospitals (%)	No. Of Hospitals (%)	No. Of Hospitals (%)				
NELLORE										
Private	2 (16.67	3 (25.00)	6 (50.00)	0 (0.00)	1 (8.33)	12 (100)				
Voluntary	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	4 (100)	4 (100)				
Total						16				
KRISHNA	1									
Private	1 (5.89)	7 (41.17)	8 (47.05)	1 (5.89)	0 (0.00)	17 (100)				
Voluntary	0 (0.00)	1 (50.00)	0 (0.00)	0 (0.00)	1 (50.00)	2 (100)				
Total		()			()	19				
CUDDAPAH	1		1	I	1					
Private	1 (8.33)	4 (33.33)	6 (50.00)	1 (8.33)	0 (0.00)	12 (100)				
Voluntary	1 (50.00)	1 (50.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (100)				
Total				/	, , , , , , , , , , , , , , , , , , ,	14				
MAHBOOBN	AGAR			1	1					
Private	0 (0.00)	3 (25.00)	7 (58.33)	2 (16.67)	0 (0.00)	12 (100)				
Voluntary	1 (50.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (50.00)	2 (100)				
Total						14				
Grand Totals	6	19	27	4	7	63				

#### **FIELD WORK:**

The field level enquiry for quality assessment of hospitals against the standards developed is conducted from June 28th 1998 to August 10th 1998. Initially field work was planned for 5 months in the project and was cut short to one month as much of the time was exhausted in exit survey and finalisation of the standards document. To conduct the present study the time schedule was planned so tight and the research team had to struggle a lot to obtain adequate date. The first in the process was recruitment of investigators. Six investigators were selected three from the medical background who have done Multi Purpose Health Worker-MPHW (Male) Training course and the other three were social science graduates. In the middle of the study one Health Worker could not continue due to ill health hence social science graduate was recruited.

Training sessions for investigators was organised for two days in Government maternity hospital in Hyderabad. Incharge theatre nurses and nurses in respective departments have oriented the investigators according to the standards document.

# **Problems in the field work:**

- 1. Convincing the hospitals for the study was a tough task as many of their doctors were getting irritated to provide the data for the second time (as we have visited the same hospital for exit survey) and few did not allow us as they had fear of legal issues.
- One has to visit a particular hospital atleast 4-5 times to get the appointment from the doctors. Few gave their appointment even in the night or asked to meet at their residence for more details.
- 3. Many of the doctors did not allow the investigators to check the hospital. They filled the questionnaire by themselves. For obtaining filled-in questionnairs atleast 3-5 minimum visits were paid by the investigators.
- 4. In few hospitals a nurse was provided to take around the hospital and show all equipment. Many of the nurses were unqualified and are not much aware about the names of the instruments and equipment.
- 5. None of the hospitals could provide the total number of equipment/instruments available in their hospital.
- 6. Data could be little biased and would not be 100% accurate as few questionnaires were filled by doctors and some times investigators got confused with the names of few equipments and instruments initially.

# **PRIVATE HOSPITALS PROFILE & STATUS**

The findings revealed that the majority of the private hospitals were located in urban (59%) than rural (40%) (Table-2.1). Similar results were found in various other studies (Nandraj S & Duggal R 1997 (Maharashtra), FRCH 1993 (Ahmednagar), Baru.R, 1993 (Delhi)).

Among the respondents who have answered the questionnaire 85% of them were the owners of the hospital and only 12% were not (Table-2.2). The findings with regard to the type of management revealed that around 79% were individual proprietors, 13% were under the trust and 8% were running the hospital in partnership (Table-2.3). Eighty one percent of the sample were running their nursing homes in own buildings and 17% have established in rented premises and 1.5% took for lease (Table-2.4). Based on the information collected on year of establishment it was found that 30% of the hospitals were established in 1981-90's and as high as 40% of the hospitals between 1991-98, about 22% of the hospitals were established in between 1940-80's (Table-2.5). This shows that the private sector had its sudden and rapid growth in the 80's and 90's providing maximum percentage of the services in the state. Studies in Ahmednagar (FRCH, 1993), according to CBHI various years, Nandraj S & Duggal R 1997 similar results were out (Nandraj S & Duggal R, 1997).

Doctors were the administrative incharges for almost all the hospitals. In most of the cases it was found that husband and wife team are running the hospitals. Wife specifically looking after all the Obstetrics and Gynaecological cases apart from general. It was quite interesting to find that all the 63 hospitals were having female doctors who are looking after the Obstetric and gynaecological cases (Table-2.6). If we look at the exit survey results one of the main reason for choosing the private hospital by women is availability of lady doctor. Almost 62% were going to private hospitals for a lady doctor. To another question on impressions on being treated by a female doctor for gynaecological diseases in private hospitals, it was found that more than 62% of women were preferring a female doctor.

With regard to the qualifications of the doctors all the doctors were qualified in allopathy medicine. Among them 62% of them have done their post graduation or post graduate diploma's in various specialities and 37% were just MBBS graduates (Table-2.7).

#### Services at private hospitals:

The sample itself contains the hospitals providing Obstetric and Gynecological services. Apart from these services 94% of the hospitals were providing medical services. 75% and 52% of the hospitals were providing Surgical and Paediatric Services (Table-2.8). Among the sample of 63 hospitals all the hospitals were providing Normal delivery services 58 hospitals were conducting Caesarean and Medical Termination of Pregnancy and 60 hospitals were treating Gynaecological disorders (Table-2.9).

Table 2-1           Area by Bed strength wise distribution of the sample										
S.No.	S.No. Bed Capacity Rural % Urban % Not % Total %									
1	1-5 bedded	3	4.76	3	4.76	0	0	6	9.52	
2	6-15 bedded	6	9.52	13	20.63	0	0	19	30.16	
3	16-30 bedded	11	17.46	15	23.81	1	1.59	27	42.86	
4	31-50 bedded	1	1.59	3	4.76	0	0	4	6.35	
5	5 51-100 bedded 4 6.35 3 4.76 0 0 7 11.11						11.11			
	Total	25	39.68	37	58.73	1	1.59	63	100	

	Table 2-2     Hospital Ownership								
Ownership	No.of Responses	%							
Owner	53	84.13							
Not the owner	8	12.7							
Not mentioned	2	3.17							
Total	63	100							

	Table 2-3           Ownership by bed strength wise distribution of the sample											
S.No.	Bed Capacity	Individual/ Partnership	%	Partnership	%	Trust	%	Total	%			
1	1-5 bedded	3	4.76	1	1.59	2	3.17	6	9.52			
2	6-15 bedded	18	28.57	1	1.59	0	0	19	30.16			
3	16-30 bedded	26	41.27	1	1.59	0	0	27	42.86			
4	31-50 bedded	2	3.17	2	3.17	0	0	4	6.35			
5	51-100 bedded	1	1.59	0	0	6	9.52	7	11.11			
1	Total	50	79.37	5	7.94	8	12.7	63	100			

			I	Table 2-4								
	Hospital Building Ownership by bed strength wise distribution of the sample											
S.No.	Bed Capacity	Owner	%	Rented	%	Lease	%	Total	%			
1	1-5 bedded	3	4.76	3	4.76	0	0	6	9.52			
2	6-15 bedded	12	19.05	6	9.52	1	1.59	19	30.16			
3	16-30 bedded	25	39.68	2	3.17	0	0	27	42.86			
4	31-50 bedded	4	6.35	0	0	0	0	4	6.35			
5	51-100 bedded	7	11.11	0	0	0	0	7	11.11			
	Total	51	80.95	11	17.46	1	1.59	63	100			

	Table. 2.5     Year of Establishment								
S.No. Year No.of Responses									
1	1940-60	3	4.76						
2	1961-70	7	11.11						
3	1971-80	7	11.11						
4	1981-90	19	30.16						
5	1991-98	25	39.68						
6	Not Mentioned	2	3.18						
	Total	63	100						

	Table 2-6           Doctors by bed strength wise distribution of the sample											
S.No.	Bed Capacity	Male Doctor	%	Female Doctor	%	Total	%					
1	1-5 bedded	0	0	6	9.52	6	9.52					
2	6-15 bedded	0	0	19	30.16	19	30.16					
3	16-30 bedded	0	0	27	42.86	27	42.86					
4	31-50 bedded	0	0	4	6.35	4	6.35					
5	51-100 bedded	0	0	7	11.11	7	11.11					
	Total	0	0	63	100	63	100					

Table 2.7Owner's Qualifications									
S.No.	No. Qualifications No.of Responses %								
1	P.G. & MBBS	39	61.9						
2	MBBS Only	23	36.51						
3	Not Mentioned	1	1.59						
	Total	63	100						

	Table 2-8           Services by bed strength wise distribution of the sample											
S.No.	Bed Capacity	Medical	%	Surgical	%	Paediat	%					
						rics						
1	1-5 bedded	6	9.52	3	4.76	2	3.17					
2	6-15 bedded	17	26.98	12	19.05	9	14.29					
3	16-30 bedded	25	39.68	21	33.33	14	22.22					
4	31-50 bedded	4	6.35	4	6.35	3	4.76					
5	51-100 bedded	7	11.11	7	11.11	5	7.94					
	Total	63	100	58	92.06	60	95.24					

	Table 2-9           Sorvious by had strength wire distribution of the sample											
	Services by bed strength wise distribution of the sample											
S.No.	Bed Capacity	Normal	%	Caesarean &	%	Gynea	%					
	Bea Capacity	delivery	70	MTP	70	problems	/0					
1	1-5 bedded	6	9.52	4	6.35	4	6.35					
2	6-15 bedded	19	30.16	18	28.57	19	30.16					
3	16-30 bedded	27	42.86	26	41.27	27	42.86					
4	31-50	4	6.35	4	6.35	4	6.35					
5	51-100	7	11.11	6	9.52	6	9.52					
	bedded											
	Total	63	100	58	92.06	60	95.24					

#### **HUMAN POWER:**

Health care basically is a service. Human resources by way of doctors and nurses and other paramedical staff are the basic means of production and rendering of these services. Every professional would need certain material support and a work environment to be able to practice his profession. Hence material resources should just be viewed as complimentary to the human resources (Mahapatra P). Hence availability of human power in the hospital is of prime importance. Data regarding the staffing pattern was obtained with regard to various categories of personnel employed, their number and their qualifications and compared with the minimum human power requirement of the standards document. There are diverse category of personnel in the hospital like doctors, nurses, specialists, lab technicians, trained staff and ward boys and other class four employees.

# Nurses:

Andhra Pradesh has got the highest number of training centres for general nursing course (16%) and Auxiliary Nurse Midwife/Multipurpose Health Workers course (31%) at all India level (CBHI 1994). But still the availability of trained nurses in the private hospitals is negligible. There are no specific qualification for nurses in private sector. Any woman or girl who has passed her secondary education or intermediate or ordinary graduation is trained by the doctor and is called as "Nurse". The untrained nurses were doing all sorts of work including the work of class four employees in some hospitals. The salaries paid for untrained nurses are very low. In many hospitals there is no uniform for nurses and it was difficult to recognize them.

#### Auxiliary Nurse Midwives (ANM) /Multipurpose Health Workers (Female):

As high as 44% of the hospitals do not have auxiliary nurses. These hospitals just have women who were trained by the doctors. The availability of trained personnel in various hospitals were very less i.e., below the standards mentioned. According to the staffing norms it was mentioned that in the hospitals of less than 30 bedded atleast 4 full time (one/shift) ANMs should be available and eight full time ANMs (two/shift) were suggested for more than 30 bedded hospitals.

With specific reference to the bed strength wise distribution of nurses, in 1-5 bedded hospitals 33%, 52% in 6-15 category and 16-30 category each, 25% in the 31-50 bedded hospitals and about 14% in the more than fifty bedded hospitals ANMs were not available. Out of the 198 nurses in 63 hospitals, 158 nurses were working on full time basis and 35 nurses on part time (Time-3.1).

#### **Diploma/General Nurses:**

As per the norms diploma nurse was suggested as a must in hospitals with more than 15 beds, 2 (1/shift) in 6-15 bedded hospitals, 4 (1/shift) for 30-50 bedded hospitals, six (1/shift) in more than 50 bedded hospitals. Seventy nine percent of the hospitals do not have Diploma Nurses/General Nurses. In the study it was found that none of the hospitals in the category of 31-50 bedded have diploma nurses. Eighty nine percent in 6-15 category, 66% of hospitals in 1-5 bedded, 33% in 16-30 category, 28% in the 51-100 diploma nurses were not available (Table-3.1). **Doctors:** 

Twenty two percent of the hospitals do not have graduate doctors. Hospitals without graduate doctors are manned by post graduates (Diploma/Masters) of various disciplines. Only in 22 hospitals doctors with post graduation (Diploma) in Obstetrics & Gynaecology (Gynae & OBG) were found. Non-availability of doctors specialised in diploma in Gynae & Obstetrics were found even in larger hospitals, 14% in 51-100 bedded and 50% in 31-50 category hospitals. Out of the 28 post graduate diploma doctors (Gynae & OBG) 89% of them were full time employees (Table-3.1).

Fifteen hospitals of the sample have post graduate doctors with Masters in Gynae & Obstetrics. Seventy one percent of the hospitals in 51-100 category, 50% in 31-50 category, 81% in 16-30 category post graduates in (Gynae & OBG) are not available.

Out of the 63 hospitals 88% of the hospitals are managing surgeries without an anaesthetist (Diploma/Masters). According to the information casually collected from few doctors we found that doctors usually prefer spinal anaesthesia where patient can be recovered very easily and do not need an anaesthetist. They said only for general anaesthesia they need an anaesthetist. They said based on experience and training in anaesthesia they try to manage cases by themselves. Norms suggest that all the hospitals irrespective of size or the hospital conducting Obstetric or Gynaecological operations should have an anaesthetist.

Paediatricians were not available even in larger hospitals where it was suggested as must in the standards document for normal delivery and caesarean sections. None of the hospitals in 31-50 category, 71% of the hospitals in 51-100 have a paediatrician (Table-3.1).

# Lab Technicians:

All the 27 hospitals with laboratories have lab technicians. Out of the 43 lab technicians available 47% of them were untrained. Almost all the hospitals have a full time lab technician available (Table-3.1).

# **Class four employees:**

All the 63 hospitals have class four employees. These is no definite qualification for appointing class four employees in the hospital (Table 3.1).

# **Other staff:**

Apart from five post graduate doctors specialised in various other fields like Ophthalmology etc., as high as 399 untrained personnel, who are just formally trained by the doctor in performing various duties are available. These untrained staff are designated as nurses, compounders, lab technicians etc. (Table-3.1). The qualifications of the personnel range from secondary level education to ordinary graduation (B.A, B.Com., B.Sc., etc.,) (Table-3.1).

			1 7 1 1				n Power	1	< 00 1 I		20	50.1 1			50.1	001 11 1
S.No.	Personnel		1-5 bed			-15 bed			6-30 bed		30-50 bedded					00 bedded
0.110.	i ersonner	No	NA	%	No	NA	%	No	NA	%	No	NA	%	No	NA	%
1	ANM Auxiliary Nurse Midwifes	9	2	33.33	27	10	52.63	43	4	14.81	10	1	25	109	1	14.29
2	Diploma Nurse	2	4	66.67	7	17	89.47	9	24	88.89	0	4	100	17	2	28.57
3	Graduate Nurse	0	6	100	0	19	100	0	27	100	2	2	50	3	4	57.14
4	MBBS Graduate	7	2	33.33	17	5	26.32	31	6	22.22	11	0	0	53	1	14.29
5	MBBS Graduate wtih Diploma & Gynaecology and	3	3	50	3	16	84.21	8	19	70.37	3	2	50	11	1	14.29
6	MBBS Graduate with MD in Gynaecology and Obstetrics	0	6	100	14	13	68.42	21	22	81.48	15	2	50	2	5	71.43
7	MBBS with MD in Anaesthesis / Diploma in Anesthesia	0	6	100	3	18	94.74	3	25	92.59	0	4	100	4	3	42.86
8	MBBS with MD in Paediatrics / Diploma in Paediatrics	0	6	100	18	17	89.47	21	23	85.19	0	4	100	4	5	71.43
9	Lab Technician	0	6	100	10	12	63.16	23	12	44.44	3	2	50	7	2	28.57
10	Class four employees	12	0	0	55	0	0	104	1	37	38	0	0	89	0	0
11	If any other staff please specify and mention in detail their qualifications	8	0	0	77	1	5.26	140	1	37	38	0	0	141	0	0
		41	41		231	128		403	164		120	21		146	24	

## **BASIC INFRASTRUCTURAL FACILITIES**

One of the important component of patient's comfort is supporting services. Certain basic infrastructural facilities are needed for any hospital irrespective of bed strength and services provided. These may include many facilities like transport, communication facility, space, beds, lockers, lighting, water supply ventilation etc.

#### District Vs Bed strength wise distribution of private hospitals/nursing homes

The whole exercise of the standards formulation was based on bed strength wise classification of hospitals. The bed strength categories are classified into six group i.e. 1-5 bedded, 6-15, 16-30, 31-50 and 51-100 bedded and these bed strength refer to the bed strengths of maternity and female wards of the hospitals. It is unlikely to have more than 100 beds in these two categories of maternity or female beds hence 100 beds was kept as maximum. Usually in smaller hospitals we do not find separate maternity wards or maternity beds separately. In such cases the maternity bed strength and general bed strength overlap. Based on the maternity wards and beds it was assumed that two deliveries could take place per day in 1-5 bedded hospitals, five in 6-15, eight in 16-30, ten in 31-50 and twenty in 51-100 bedded hospitals.

In the present study we could just collect the number of total beds but not the number of maternity beds. Many hospitals could not provide us the number of maternity beds in their hospitals hence only total number of beds were considered for analysis. Respondents said maternity services are just the part of the services provided by the hospitals hence they are not classifying the beds based on services. We also tried to get the data on number of deliveries per day/per month, number of Caesarean's or MTP per day/month. This data was not available as they are not maintaining any medical records. Few said they cannot provide the data as it is difficult to calculate the number of cases they get in a month because some times the cases may be more some times they do not have cases at all.

The information on number of Gynaec outpatients was also not provided as nothing was documented. The usual procedure followed by many is that doctor writes the prescription and patient pay him immediately the consultation fee. Few hospitals approximately told the number of outpatients they get per day but not specifically for gynaecological cases. Hence to obtain information on number of maternity beds an indepth study has to be done, should talk to the authorities and find the cases from birth registers and from other sources if any to know the cases per annum and calculate approximately the number of maternity beds.

#### Area per bed:

Standards for area per bed for 1-5 bedded hospitals is 50 Sqft. And for more than 5 bedded it was suggested as 60-75 Sqft. Approximately it is found that in 16% of 1-5 category of hospitals the area per bed was less than 50 Sqft. In 6-15 category 52%, 48% in 16-39 category, all the hospitals in 31-50 and 71% in 51-100 bedded hospitals area per bed are below the standards mentioned.

# **Communication facility:**

According to the panel it is desirable to have telephone facility and intercom facility even for smaller hospitals. But in rural areas as it is very difficult to get telephone connections it was suggested as optional for smaller hospitals. But in the present study it was found that all the 63 hospitals have the communication/telephone facility (Table-4.1).

# Fire extinguishing facility:

Fire extinguishing facility was suggested as desirable for smaller hospitals less than 15 bedded and it was considered as must in hospitals more than 15 beds. In the present quality assessment study it was found that none of the hospitals below five beds have this facility (Table-4.1). In 6-15 bedded category as high as 74% of the hospitals do not have this facility.

# **Electricity (generators)**

Question on availability of generators revealed that about 83% of the hospitals under the category of 1-5 bedded and about 10% in the category of 6-15 bedded do not have generators. As it was suggested in the standards document all the hospitals need to have generators more than 15 bedded were having generators and only in one hospital under 16-30 category generator is not in working condition (Table-4.1).

#### Lighting and electricity:

Irrespective of size of hospitals adequate lighting facilities are must in any hospital. From the study it was found that there is no adequate lighting facility among 17% of 1-5 bedded hospitals and 4% in 16-30 category (Table-4.1).

#### Hand washing facility:

In 19% of the hospitals hand washing facility is not present. (x) percent in 1-5 bedded category, 16% in 6-15 bedded, 19% in 16-30 bedded, 25% in 31-50 category of hospitals this facility is lacking. Norms suggest that all the hospitals should have hand washing facility separately for patients and staff in every ward (Table-4.1).

# Lockers for patients:

Standards mentioned that ideally each patient should get one locker. In the study it was revealed that none of the 1-5 bedded hospitals were providing lockers. In 6-15 bedded hospitals 32% were not providing lockers. Twenty two percent of the hospitals in 16-30 bedded category. Twenty five percent in 31-50 and 43% in 51-100 bedded hospitals lockers were not available (Table-4.1).

# **Sterilisation facilities:**

According to the standards laid down on sterilisation facilities all the hospitals should have sterilisation facilities. Vertical autoclave or dry steam steriliser. In the study it was found that as high as 59% of the hospitals were using autoclaves, 38% were using boiling as the method of sterilisation, 6% were sterilising in steam sterilisers, and only 3% were utilising dry steam sterilisers. Among the smaller hospitals from 1-5 bedded 50% were using boiling as the method of sterilisation, 33 percent were having autoclaves and 16% were sterilising on steam steriliser. In 6-15 category of hospitals 47% were autoclaving, 42% were going for boiling and 5% were having dry steam sterilisers. In hospitals of 16-30 category again autoclave is used by 70% of the hospitals and boiling is opted by 37% of hospitals. In larger hospitals above 50 bedded, 85% of the hospitals are totally dependent on autoclaves and 37% were using dry steam sterilisers (Table-4.2a, 4.2b, 4.2c, 4.2d).

	Table-4.2a (Sterilisation facility) Dry Steam steriliser											
S.No.	Bed Capacity	Available	%	Not available	%							
1	1-5 bedded	0	0	6	9.52							
2	6-15 bedded	1	1.59	18	28.57							
3	16-30 bedded	0	0	27	42.86							
4	31-50 bedded	0	0	4	6.35							
5	51-100 bedded	1	1.59	6	9.52							
	Total	2	3.17	61	96.83							

	Table-4.2b (Sterilisation facility) Steam Steriliser											
S.No.	Bed Capacity	Available	%	Not Available	%							
1	1-5 bedded	1	1.59	5	7.94							
2	6-15 bedded	1	1.59	18	28.57							
3	16-30 bedded	1	1.59	26	41.27							
4	31-50 bedded	1	1.59	3	4.76							
5	51-100 bedded	0	0	7	11.11							
		4	6.35	59	93.65							

	Table-4.2c         (Sterilisation facility) Boiling										
S.No.	Bed Capacity	Available	%	Not Available	%						
1	1-5 bedded	3	4.76	3	4.76						
2	6-15 bedded	8	12.7	11	17.46						
3	16-30 bedded	10	15.87	17	26.98						
4	31-50 bedded	3	4.76	1	1.59						
5	51-100 beeded	0	0	7	11.11						
		24	38.1	39	61.9						

	Table-4.2d (Sterilisation facility) Vertical Autoclave					
S.No.	Bed Capacity	Available	%	Not Available	%	
1	1-5 bedded	2	3.17	4	6.35	
2	6-15 bedded	9	14.29	10	15.87	
3	16-30 bedded	19	30.16	8	12.7	
4	31-50 bedded	1	1.59	3	4.76	
5	51-100 beeded	6	9.52	1	1.59	
		37	58.73	26	41.27	

# **Transport facility/Ambulance facility:**

One of the major cause of maternal mortality is lack of adequate transport (Table-4.1) shows that ambulance facility is available only in 11% of hospitals. There is no ambulance in the 1-15 bedded category of hospitals and ambulance is available only in 4% of hospitals in the category of 16-30 bedded, 25% in 31-50 bedded category and 57% in 51-100 category of hospitals. While preparing standards for transport panel had very serious discussions and had come out with various suggestions. The main concern was that some sort of transport is must to prevent maximum number of maternal deaths and brought out the following solutions where there is no ambulance facility.

- 1. Group of smaller hospitals should come together and should have common ambulance facility.
- 2. Smaller nursing homes can hire the ambulances.
- 3. Encourage unemployed youth to start ambulance facility, providing loans and incentives
- 4. Encourage NGOs to take up ambulance facility
- 5. Panchayat should provide this facility
- 6. In rural areas where the tractors are used in transport should have shock absorbers

- 7. Training the technicians in providing emergency care and certificate courses should be introduced in train technicians handling emergencies in rural areas
- 8. Training paramedical staff was given high priority in provision of emergency resuscitation care before referring the patients.

According to the Doctors opinion on transport for patients as high as 62% felt that it is patient's problem or responsibility in arranging for transport. About 14% said they would call a private vehicle/taxi and 6% have got concern for calling an ambulance (Table-4.1a)

	Table 4.1 a     Ambulance				
S.No.	Responses	No. Of Responses	%		
1	Patient has to arrange his own transport	39	61.9		
2	Call Abulance Government / Private	4	6.35		
3	Get Taxi / Private vehicle	9	14.29		
4	4 Not mentioned		6.35		
5	5 Not application		11.11		
	Total	63	100		

# Waste disposal methods in private hospitals:

It was found that in the 5% of the hospitals there were no dustbins available (Table-4.1). None of the hospitals in the sample are following any rules or regulations formulated by Andhra Pradesh Pollution Control Board (APPCB). The details about the standards on disposal of waste are mentioned in the standards document.

On specific question on treatment of waste 59% of the hospitals said they were throwing the hospitals waste in to the common garbage, 43% were using burning as the method of disposal of waste, 22% were land filling and just 1% of the hospitals were using incinerators. If we glance at the various bed strength categories it is clear that from 1-30 bedded hospitals the most common method of waste disposal is throwing in common garbage. Seventy one percent of major hospitals (51-100) are burning the hospital waste (Table-4.3).

	Table 4.3           Treatment of Waste in various categories of bed strengths								
S.No.	Bed Capacity	Burnin g	%	Comm on Garbag e	%	Inciner ation	%	Land Filling	%
1	1-5 bedded	1	16.67	4	66.67	0	0	0	0
2	6-15 bedded	7	36.84	14	73.68	0	0	2	10.53
3	16-30 bedded	10	37.04	15	55.56	1	1.59	3	11.11
4	31-50 bedded	4	100	2	50		0	0	0
5	51-100 bedded	5	31.43	2	28.57	0	0	0	0

Total	27	42.86	37	58.73	1	1.59	5	21.64	
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# Water facility:

Out of the 63 hospitals, almost 95% of hospitals informed that they have 24 hours water supply and only 3% mentioned that they have limited water supply. Among the three percent one hospitals is from 1-5 bedded category and another from 51-100 bedded hospitals (Table-4.4)

According to the data collected we found that 49% of the hospitals have separate source for drinking water or they were getting drinking water from municipality (Chlorinated/filtered/aquaguard fixed) in their hospitals. As high as 48% of the hospitals were not providing drinking water. Among these most of the hospitals have an overhead tank and the same water is used for all the purposes including drinking purpose. It was found that some tanks were unclean which are not washed regularly (Table-4.5)

Table 4.4 Water Facility				
Water facility	No. Of Responses	%		
24 hours	60	95.24		
Limited hours	2	3.17		
Any other specify	1	1.59		
Not mentioned	0	0		
Total	63	100		

Table 4.5				
Drinking water facility				
Drinking water	No. Of Responses	%		
Purified water	31	49.21		
Unpurified	30	47.62		
Not mentioned	2	3.17		
Total	63	100		

#### Visitors room:

Except one hospitals in 6-15 category bed strength almost all the hospitals have visitors room (Table-4.1)

# **Consultation or examination room:**

Regarding the consultation or examination room it was suggested in the standards document that for hospitals less than 15 beds no separate room is required for examination or consultation. In the study it was found that only 33% in 1-5 bedded category hospitals and 11% in 6-15 category consultation room were not available (Table-4.1)

#### **Preparation room:**

Preparation rooms were available in all the hospitals more than 15 beds, in less than 15 bedded hospitals 4 hospitals were not having preparation rooms. The figures are in compliance with the standards laid as for less than 15 bedded hospitals there is no need of separate preparation rooms (Table-4.1)

# Lab facility:

According to the norms each hospital should be able to do atleast minimum diagnostics like haemoglobin percent, urine for albumin and sugar, Rh.typing. Out of the sample none one the hospitals less than 5 beds have this facility. Seventy nine percent in 6-15 category, 44% in 31-50 bedded hospitals, 14% in 51-100 bedded hospitals, lab facilities were not available (Table-4.1). The hospitals which have lab facility the following list of lab tests were done.

Regarding various tests done, as high as 41% of the hospitals were performing haemotology tests. 38% are doing urine tests which are very important Gynaecological and Obstetric cases. 11% of the hospitals were doing pregnancy confirmation test, about 19% were performing diagnostics for Sexually Transmitted Diseases like HIV and VDRI etc. (Table-4.6)

		ble 4.6	
	List of Lab Tests in v	arious Private Hospi	tals
1	Haemotology	26	41.27
2	Urine Tests	24	38.1
3	Stool Examination	8	12.7
4	Mantoux Test	3	1.76
5	Widal	1	1.59
6	VDRL	3	4.76
7	HIV 1+2, HIV	9	14.29
8	HBS Ag	1	1.59
9	ESR	4	6.35
10	Biochemistry	8	12.7
11	Serology	3	4.76
12	Microbiology	4	6.35
13	Anti-D	1	1.59
14	Semen Analysis	5	7.94
15	Pregnancy Tests	7	11.11
16	Sperm for AFB	5	7.94
17	PCV	1	1.59
18	ECG	7	11.11
19	X-Ray	1	1.59
	As it is a multiple answer ques tages will not add up to 100	tion N will not add up	to 63 and

# **Pharmacy:**

Fifty seven percent of the hospitals do not have a pharmacy in their hospitals (Table-4.7). They answered that there is no problem for drugs as they have nearby pharmacy stores (Table-4.8).

Table 4.7					
Is there a Pharmacy/Medical shop in your Hospital					
	No. Of responses	%			
Yes	27	42.86			
No	36	57.14			
Not mentioned	0	0			
Total	63	100			

Table 4.8Is there a Pharmacy/Medical shop nearby					
	No. Of responses	%			
Yes	36	57.14			
No	17	26.99			
Not applicable	10	15.87			
Total	63	100			

## Lavatories and Bath rooms:

Norms suggest that one separate lavatory for males and females should be provided in the hospitals. It was suggested that female lavatories should have a squatting type as well as western commode. Based on the information collected it was found that in all the hospitals of 1-5 bedded category only one bathroom are lavatory were found. Inadequate number of lavatories and bathrooms were found in four hospitals of 6-15 category, seven hospitals in 16-30 category and in three hospitals of 50-100 bedded.

The following topics were analysed based on the investigators observation notes.

# Ventilation:

The modern concept of ventilation implies not only the replacement of vitiated air by a supply of fresh outdoor air but also control of the quality of incoming air with regard to its temperature, humidity and purity with a view to provide a thermal environment that is comfortable and free from risk of infection (Park. J.E. & Park, 1991). It was observed that about 17% of the hospitals were have poor natural ventilation

#### Mattress, Pillows and bed sheets:

On observation it was found that about 3% of the hospitals do not have mattresses, about 8% of the hospitals were not providing pillows to patients, as high as 21% of the

hospitals are not providing bed sheets to patients. Especially hospitals below 30 bedded are not providing bed sheets.

# Height of roof:

Only in 1.5% of the hospitals the roof is below 9ft.

# Sanitation:

In 11% of the hospitals poor sanitation was observed.

# **Privacy:**

Privacy was not provided for patients in 30% of the hospitals.

# **Bad odour:**

It was found that in 6% of the hospitals there was stinking smells or bad odour.

Apart from obtaining information on infrastructural facilities the respondents were also asked various questions on referral system in private hospitals, handling of emergency obstetric cases, blood bank facility and maintenance of medical records. Specific questions were asked on whether any of the private hospitals have come across with positive cases. All these are analysed and are mentioned below.

# Handling of emergency cases in private hospitals:

When it was asked where do they usually refer the emergency cases 46% confidently said that they manage by themselves, 21% answered that they refer the cases to the head quarter hospitals, 8% said that they send the cases to another hospital, about 3% were not treating the emergency cases at all. Mostly doctors in private sector try to manage all the emergencies by themselves or call consultants from outside. But they do not let the case go out of the hospital. This could be mainly to avoid bad reputation in the public and loss of fee could be another. If only if there is real threat to the mother's condition they refer the cases (Table-4.9).

	Table 4.9					
	Refer Emergencies					
S.No.		No. of responses	%			
1	Managed by themselves	29	46.63			
2	Refer to head quarter hospital	13	20.63			
3	Do not take emergencies	2	3.17			
4	Refer to another hospital	5	7.94			
5	Call consultants	2	3.17			
6	6 Not mentioned 12 19.05					
Note: 1	Note: Being multiple answer questions N will not add up to 63 and percentage will not add					
to 100						

# **Blood Bank facility:**

Out of the 63 hospitals in the sample only five hospitals have blood bank facility. According to the standards laid, blood bank was suggested as mandatory for more than 100 bedded hospitals. It was advised that atleast blood bank trained personnel or facilities to bleed are desirable. Panel also felt that for more than 30 bedded hospitals it is better to have ambulance as this can be used for medical transport and also for blood banking facility.

According to the Table-4.1, if we observe the blood bank facility based on bed strength it shows that no blood banks are there in the bed strength of 6-15 and 31-50 bedded category. It is important to note that in 16-30 bedded category only one hospital has this facility and only 4 out of 7 hospitals in 51-100 bedded have blood banks.

In the hospital where there is no blood bank facility a feneral question was asked where do they go when there is need of blood. Thirty two percent said that they get blood from outside or nearby blood banks, as high as 35% said they refer the cases to the head quarter hospitals, nine percent answered that they take the blood from relatives. Many of the doctors viewed that blood bank facility for Obstetrics & Gynaecological conditions is a must as they get many cases of anemia or severe anemia. Hence this problem has to be considered immediately in near future (Table-4.10)

Table 4.10           Hospitals where there is no Blood Bank facility				
S.No.	Responses	No. of responses	%	
1	Get blood from Red Cross	20	3.6	
2	Refer to head quarter	21	3.78	
3	Collect blood from donor/relative	10	1.8	
4	Not applicable	6	1.08	
5	Not mentioned	6	1.08	

Formulating standards for blood bank facilities panel suggested that atleast availability of plasma expanders should be a must as this saves the lift of mother in emergency and mean while transport arrangements could be made for referral. In the assessment it was found that almost 65% of the hospitals were not having plasma expanders (Table-5.1). These issues takeup high priority in decreasing the maternal mortality rates especially in rural areas.

## Mothers with HIV/AIDS:

When it was asked whether any of the hospitals have come across mother's with HIV/AIDS cases. Thirty percent of the respondents said that they have diagnosed AIDS cases

(Table-4.11). In comparision with the bed strength none of the hospitals in 1-5 beds have come across HIV positive cases may be due to lack of diagnostic facilities in their hospitals. Twenty one percent in 6-15 category, 37% in 16-30 category, only 25% in 31-51 category and 57% in more than 50 bedded hospitals said that they have diagnosed or could find HIV/AIDS cases.

Table 4.11           Did you come across any mother with HIV/AIDS				
	No. of Responses	%		
Yes	19	30.16		
No	38	60.32		
Not mentioned	6	9.52		
Total	63	100		

When we have asked the doctors about the details of AIDS patients few expressed that records were kept confidential, few said that they usually refer the cases to head quarter hospitals and few pointed out that patient would not turn up again if she is known as HIV positive. This problem need to be highlighted in near future for more research studies.

## Maintenance of Medical Records in private hospitals:

Maintenance of medical records is one of the vital function of any hospital. Lack of proper documentation is one of the major problem in drawing conclusions for any sort of services, treatments or statistics etc., in the private sector. Without proper medical records obtaining any sort of information on private hospitals would be a tough task.

According to the study it was found that as high as 94% of the hospitals do not have any records on referrals. Least preference was given in the documentation of number of deaths (63%), outpatient records (54%) and admissions entries (35%) by the hospitals.

Birth records were the only records maintained with little caution in 97% of the hospitals, the other data documented with the hospitals felt important was inpatient records by 79% hospitals and 78% of the hospitals were maintaining the records of patients getting operated. The main reasons for maintaining the above records could be 1. Most of the patients as for firth certificates, 2. For billing purpose (Tables-4.12a, 4.12b, 4.12c, 4.12d, 4.12e & 4.12f)

Table 4.12 a			
Particulars of Medical Records (Births)			
Births	No. of responses	%	
Maintained	61	96.83	
Not	2	3.17	
Not mentioned	0	0	
Total	63	100	

Table 4.12 b           Particulars of Medical Records (Deaths)		
Deaths	No. of responses	%
Maintained	21	33.33
Not maintained	40	63.5
Not mentioned	2	3.17
Total	63	100

Table 4.12 c           Particulars of Medical Records (Admissions)		
Admissions	No. Of responses	%
Maintained	39	61.9
Not maintained	22	34.92
Not mentioned	2	3.17
Total	63	100

Table 4.12 dParticulars of Medical Records (Out Patients)		
Out Patients	No. Of responses	%
Maintained	27	42.86
Not maintained	34	53.97
Not mentioned	2	3.17
Total	63	100

Table 4.12 e         Particulars of Medical Records (In Patients)		
In Patients	No. Of responses	%
maintained	50	79.37
Not maintained	11	17.46
Not mentioned	2	3.17
Total	63	100

Table 4.12 f		
Particulars of Medical Records (Referrals)		
Referrals	No. Of responses	%
Maintained	2	3.17
Not maintained	59	93.66
Not mentioned	2	3.17
Total	63	100

Table 4.12 g		
Particulars of Medical Records (Operation Records)		
Operation Records	No. Of responses	%
Maintained	49	77.78
Not maintained	12	19.05
Not mentioned	2	3.17
Total	63	100

There is no definite way of maintaining these medical records. Only the information which the doctor feels important is written in their personal dairies like the inpatients list and cases of operation etc. Few hospitals were just writing the name of the patient and place, complete address of the patient is not provided. Records on patient's history of illness, reasons for operation etc., were given least consideration by many hospitals. Case sheets were not maintained in many hospitals. On the whole maintenance of medical records is poor in the private hospitals.

Results based on bed strength shows that documentation of medical records is in a sad state in the hospitals under 30 bedded and even in larger hospitals which are shown in the tables above.
#### ASSESSMENT OF EQUIPMENT IN PRIVATE HOSPITALS

Equipment standards are formulated based on bed strength category as 1-5 bedded, 6-15, 16-30, 31-50, 51-100.

Equipment standards are formulated for the following procedures

- 1. Equipment for Normal delivery
- 2. Equipment for Caesarean section
- 3. Equipment for Anesthesia
- 4. Equipment for conducting Medical Termination of Pregnancy
  - w Dilatation and Currettage
  - w Vaccum aspiration (VA) Suction evacuation
  - w Medical Termination of Pregnancy with Tubectomy
- 5. Common equipment for Gynaecological examinations

It was mentioned earlier in the same report, that the number of maternity beds connot be collected in the present quality assessment study. None of the hospitals could provide the total number of equipment available in their hospitals. The only information provided was whether the equipment is available or not. To obtain this information an indepth study has to be done yet in a planned way with expert team and allot adequate time for obtaining more accurate information.

The information was basically collected from doctors, nurses and on observations. This data could be biased as the information provided by doctors or nurses could not be 100% accurate because of fear of inspection, doctors might have written available for most of the equipment in their hospitals. In few cases investigators were not confident in identifying small instruments and some technical terms. Keeping aside all the lacunae in the study adequate information was collected and analysed.

#### Equipment for normal delivery:

According to the standards laid down on equipment for normal delivery it was assumed that two deliveries could take place per day in 1-5 bedded hospitals, five in 6-15, eight in 16-30, ten 31-50 and twenty in 51-100 bedded hospitals. Based on the number of deliveries it was suggested that double the number of instruments should be maintained i.e., 4 sets of instruments for two normal deliveries. The justification being two sets should be ready for conducting the procedures and the remaining two would be sent for autoclaving or kept in store. Few equipment were also calculated based on the labour tables which are mentioned separately.

According to the present study it was found that except for few costlier equipment almost all the hospitals (90%) mentioned that they have all the equipment mentioned in the norms. On analysis it was found that Paediatric resusitation equipment were not available in few hospitals. About 8% of the hospitals were not having Ambuag (Paediatric) and another 8% do not have paediatric laryngoscopes. Eleven percent of the hospitals do not have suction catheters and in 2% of the hospitals there is no mucus sucker (Table 3.1).

Five percent of the hospitals do not have facilities for applying Obstetric forceps. Vaccum extractor was not used by 35% of the hospitals. In the standards it was suggested that it is better that only larger hospitals use vaccum extractors. Ophthalmoscope is available in 65% of the hospitals which is not needed in less than 50 bedded hospitals. Angle poise lamp was suggested as must in all category of hospitals and about 14% of the hospitals do not have this. Shadow less lamp was not available in 19% of the hospitals which is just needed in hospitals more than 30 bedded. Labour tables were not available in 8% of the hospitals where examination tables were used as labour tables in these hospitals. Eleven percent of the hospitals do not have labour foot stools. Dressing trolley is not available in 19% of the hospitals.

Panel suggested that a needle breaker must be available in all the hospitals in order to stop the reuse of needles. As high as 44% of the hospitals do not have needle breakers. It was found that in few hospitals disposable needles and syringes were reused for the patients. Five percent of the hospitals were not having intravenous fluids. Plasma expanders were suggested as an important life saver in the absence of blood for all the hospitals and as high as 65% of the hospitals do not have these and 88% do not have blood bank facility. Life saving oxygen cylinders were not available in 2% of the hospitals.

#### CAESAREAN SECTION:

In the sample of 63 hospitals, 92% of the hospitals were conducting Caesarean operations. Based on the bed strength wise distribution of sample it was assumed that in 1-5 bedded hospitals one Caesarean section would take place, three in 6-15 bedded, 4 in 16-30, 5 in 31-50 and eight in 51-100 bedded hospitals. In the standards for Caesarean section it was suggested that minimum facilities mentioned in the document need to be available in all hospitals irrespective of bed strengths. In the assessment of Caesarean services two parts are mentioned:

- 1. Assessment of Operation theatre
- 2. Assessment of Anesthesia facilities in the hospitals

#### Assessment of Operation Theatres:

It was found that many of the hospitals were not having all the equipment mentioned in the standards document. Twenty two percent of the hospitals were not having Operating room light and 17% informed that they do not have portable room lights with stands for emergencies (Table-5.2). Twenty four percent of the hospitals do not have electric steriliser for boiling instruments specifically for theatre. Vertical steam autoclaves were not found in 22% of the hospitals.

Operating table, universal frame type with head piece was not available in 14% of the hospitals. As high as 36% of the hospitals do not have a Mayo stand. According to the general information provided by a doctor, Mayo stand was not used by many of the doctors as they place all the instruments on patient's legs or thighs during operation and they feel that it would be easy for them to assist themselves in operation.

Foot operated surgical suckers were not available in 25% of the hospitals. Panel felt that all the hospitals with electrical suction apparatus should have UPS or a foot operated suction apparatus standby. Twenty percent of the hospitals do not have disposable gloves and in another 20% Nasogastric tubes were not available. Intracaths were not found in 11% of the hospitals (Table-5.2).

In consumables 16% do not have plain catgut and indelible pencils. When specific instruments for Caesarean section were asked 14% said that Doyen's bladder retractor is not available. Nineteen percent hospitals do not have Green armytage (Table-5.2)

#### Anesthesia Equipment:

With regard to the anaesthesia equipment, most of the costlier equipment are not available in many hospitals (Table-5.3). As high as 52% of them do not have Pulse Oxymeter and Endtidal Carbondioxide monitor. ECG monitor with defribrillator unit were not available in 54% of the hospital. Forty nine percent of them do not have Central Pressure Monitoring Unit. Epidural catheters and needles were not found in 20% of the hospitals. As high as 40% of the hospitals do not have a suction apparatus for mother which is very much important in operations and need to be considered very seriously. Oropharyngeal airways were not there in 15% of the hospitals. Sodalime absorber (Boyel's) is not available in 29% of the hospitals.

Regarding drugs 19% of the hospitals do not have Veeromine and about 17% of the hospitals are short of Morphine. List of other drugs are mentioned in the Table-5.3.

#### Medical termination of pregnancy:

Medical Termination of Pregnancy can be performed in a number of different ways. In the equipment standards formulated two procedures were considered:

- 1. Equipment Standards for performing Dilatation and Curettage
- 2. Equipment standards for Vaccum evacuation / Aspiration
- 3. Equipment standards for performing MTP and Tubectomy operation.

#### Equipment standards for performing Dilatation and Curettage:

As mentioned earlier 58 hospitals were performing MTPs in the present sample. Table 5.4 clearly shows the details of the equipment not available in the nursing homes conducting medical termination of pregnancy. On an average about 2% of the hospitals are lacking equipment in performing MTPs.

#### Equipment standards for Vaccum evacuation / Aspiration:

Eleven percent of hospitals were not having Hegar's dilators and about 5% said that they do not have uterine curettes. Operation tables for MTPs were not there in 2% of the hospitals. The other details of the equipment are mentioned in the Table-5.5.

#### Equipment standards for performing MTP and Tubectomy operation:

Table 5.6 shows that almost all the hospitals conducting MTPs with tubectomy have adequate equipment.

#### Equipment for few gynaecological conditions:

It was found in the study that about 39% of the hospitals Colposcope was not available, about 27% do not have optimal microscope. Seven percent of the hospitals do not have fixative jar. Ten percent of the hospitals do not have a shadowless lamp (Angle poise lamp) (Table-5.7).

On the whole it could be analysed that the list of equipment not available in most of the hospitals are vital equipment. Though the available percentages are high these percentages could not be considered as accurate, as mentioned earlier, data could be little biased.

The present study on equipment is just a superficial study because indepth inspection could not be done by investigators because of various hindrances mentioned earlier. The information given by the doctors alone could not be considered accurate. Hence an indepth assessment yet to be done in all the hospitals to obtain accurate information on the equipment available and the number of equipment in future. It is very important to note that for assessment of any equipment in detail qualified, experience, trained health personnel like doctors and nurses are must.

# CONDUCTING SINGLE INSTITUTIONAL NORMAL DELIVERY TABLE 5.1

S.No.	EQUIPMENT / INSTRUMENTS	Available	%	Not available	%	Not mentioned	%
	INSTRUMENTS SPECIFIC FOR NORMAL DELIVERY						
1	Apron (Plastic)	63	100	0	0	0	0
2	Delivery Set						
	2.1 Bowl, Stainless steel (4")	60	95.24	0	0	3	4.76
	2.2 Dissecting forceps (6")	60	95.24	0	0	3	4.76
	2.3 Artery forceps 8-10" (Kelly's)	63	100	0	0	0	0
	2.4 Square tray big (steel) for placenta	60	95.24	0	0	3	4.76
	2.5 Scissors cord tying	62	98.41	0	0	1	1.59
	2.6 Threads for cord tying	62	98.41	0	0	1	1.59
	2.7 Sterile pads	62	98.41	0	0	1	1.59
	2.8 Large cotton swabs to clean perineum (for mother) in the	63	100	0	0	0	0
	2.9 Small cotton swabs (to clean baby's eyes)	63	100	0	0	0	0
	2.10 Mucus sucker	62	98.41	1	1.59	0	0
	2.11 Drapes	58	92.06	3	4.76	2	3.17
3	Baby resuscitation Tray						
	3.1 Ambu bag (Paediatric) with proper training	58	92.06	5	7.94	0	0
	3.2 Oxygen mask	63	100	0	0	0	0
	3.3 Endotracheal tubes (2" & 2.5")	60	95.24	2	3.17	1	1.59
	3.4 Paediatric Laryngoscope (working with cells)	57	90.48	5	7.94	1	1.59
	3.5 Suction Catheters (Preferably disposable, paediatric)	55	87.3	7	11.11	1	1.59
	3.6 Disposable Syringe	60	95.24	2	3.17	1	1.59
4	Episiotomy Tray						
	4.1 Bowl, Stainless steel for Xylocaine	61	96.83	0	0	2	3.17
	4.2 Forceps dissecting toothed	62	98.41	0	0	1	1.59
	4.3 Forceps dissecting non toothed	60	95.24	0	0	3	4.76
	4.4 Episiotomy Scissors	63	100	0	0	0	0
	4.5 Sponge holder	63	100	0	0	0	0
	4.6 Needle holder	63	100	0	0	0	0
	4.7 Cotton balls/swabs to clean perineum	62	98.41	0	0	1	1.59
	4.8 Sterile Pads	62	98.41	0	0	1	1.59
	4.9 Sterile Drape (Fenestrated)	60	95.24	3	4.76	0	0

4.10 Sutu	res and ligatures, 1-0 Chromic catgut, ties and with	59	93.65	3	4.76	1	1.59
4.11 Tray	(to accommodate all the instruments and pads etc)	59	93.65	3	4.76	1	1.59
4.12 Disp	osable 10 cc Syringe needle for Xylocaine	62	98.41	0	0	1	1.59
5 Obsteric	Forceps Tray						
5.1 Mid 1	ow forceps/Obstetric Furguson	60	95.24	2	3.17	1	1.59
5.2 Obste	tric Wrigly's	59	93.65	3	4.76	1	1.59
5.3 Obste	tric Cream, Jar with cover	58	92.06	3	4.76	2	3.17
5.4 Urthr	al Catheter	59	93.65	3	4.76	1	1.59
6 Vaccum e	extractor	40	63.49	22	34.92	1	1.59
7 Foetoscop	e	62	98.41	1	1.59	0	0
8 Cheatle f	prceps with jar	62	98.41	1	1.59	0	0
9 I/V Stand		63	100	0	0	0	0
10 Jugs		63	100	0	0	0	0
11 Mackinto	sh (for Labour table & Examination table)	58	92.06	5	0	0	0
12 Ophthaln	noscope	41	65.08	22	0	0	0
13 Airway		60	95.24	1	1.59	2	3.17
14 Oxygen C	Cylinder / Trolley / Gas	62	98.41	1	1.59	0	0
15 Pint Mea	sure	55	87.3	5	7.94	3	4.76
16 Ryles Tul	bes (Paediatric)	57	90.48	3	4.76	3	4.76
17 Shadow l	ess lamp	51	80.95	12	19.05	0	1.59
18 Angle Po	ise Lamp	53	84.13	9	14.29	1	4.76
19 Spygmon	nanometer with	56	88.89	4	6.35	3	0
20 Thermon	eter Rectal	57	90.48	6	9.52	0	1.59
21 Torch wo	rking with cells	61	96.83	1	1.59	1	0
22 Labour ta	ble	58	92.06	5	7.94	0	0
23 Labour fo	ot stool	56	88.89	7	11.11	0	0
24 Patient T	rolley	56	88.89	7	11.11	0	0
25 Dressing	Trolley	51	80.95	12	19.05	0	0
26 Wheel Ch	nair	58	92.06	5	7.94	0	0
27 Weighing	machine for baby	63	100	0	0	0	0
28 Bed pan (	steel preferably)	60	95.24	2	3.17	1	1.59
29 Needle br	aker	33	52.38	28	44.44	2	3.17
30 Refrigera	tor Frost Free (165 liters)	51	0	10	15.87	2	3.17
	DRUGS AND FORMULARY						
31 Methergi	n 0.2 mg/ml, inj. 1ml	60	95.24	2	3.17	1	1.59
32 Oxytocin	2 unit/ml, inj, 2 units/ml	60	95.24	2	3.17	1	1.59

	I/V fluids						
33	i) 5% Dextrose, inj.540 ml	61	96.83	1	1.59	1	1.59
34	ii) 5% Dextrose Saline 540 ml	59	93.65	3	4.76	1	1.59
35	iii)Ringer Lactate 540 ml	60	95.24	2	3.17	1	1.59
36	iv) 25% Dextrose 100 ml	59	93.65	3	4.76	1	1.59
37	v) Sodium Chloride 0.9% w/v inj.450 ml	61	96.83	1	1.59	1	1.59
	List of Emergncy Drugs						
38	Soda Bicarbonate 7.5% w/v. IV inj 10 ml	61	96.83	1	1.59	1	1.59
39	Atropine Sulphate 0.5 mg/ml, inj. 1ml	61	96.83	1	1.59	1	1.59
40	Adrenaline Tratarate, inj 1ml	60	95.24	2	3.17	1	1.59
41	Hydro cortisone Sodium Succinate inj. 100mg OR	58	92.06	3	4.76	2	3.17
42	Calcium Gluconate 10% w/v inj. 10 ml	61	96.83	1	1.59	1	1.59
43	Diazepam, 5mg/ml inj. 2ml	61	96.83	1	1.59	1	1.59
44	Prostidine	59	93.65	3	4.76	1	1.59
	BLOOD BANK FACILITY						
45	Blood Bank	5	7.94	56	88.89	2	3.17
46	Plasma Expanders	18	28.57	41	65.08	4	6.35
47	Instrument sterilizer (Autoclave with two bins)	57	90.48	6	9.52	0	0
	LINEN						
48	Bed sheet	62	98.41	1	1.59	0	0
49	Towels (80 x 80 cm)	63	100	0	0	0	0
50	Gowns	62	98.41	0	0	1	1.59
51	Wrappers	62	98.41	0	0	1	1.59
52	Drapes	59	93.65	3	4.76	1	1.59
53	Towels for hand washing	62	98.41	0	0	1	1.59
54	Surgical mops	61	96.83	0	0	2	3.17
55	Cleansing mop	60	95.24	1	1.59	2	3.17
56	caps	62	98.41	1	1.59	0	0
57	Masks	62	98.41	1	1.59	0	0
58	Mattresses	62	98.41	1	1.59	0	0
	HOUSE KEEPING						
59	Cabinet for instruments	54	85.71	8	12.7	1	1.59
60	Buckets stainless steel	56	88.89	6	9.52	1	1.59
61	Placenta disposing bin	54	85.71	8	12.7	1	1.59
62	Dustbin for labour room waste	58	92.06	4	6.35	1	1.59
63	Screen (screen stand)	62	98.41	0	0	1	1.59

64	Chappals	62	98.41	0	0	1	1.59
	CONSUMABLES						
	Soap for hand washing	63	100	0	0	0	0
	Disinfectants/ Antiseptic solutions	63	100	0	0	0	0
	spirit	63	100	0	0	0	0
	Savlon (sterilising solution)	63	100	0	0	0	0
	DISPOSABLES						
	Sterile gloves (preferably disposable)	57	90.48	6	9.52	0	0
	Suction Catheters (preferably disposable, paediatric)	51	80.95	11	17.46	1	1.59
	Intravenous sets	61	96.83	2	3.17	0	0
	Sterile pads	62	98.41	1	1.59	0	0
	Sterile cotton swabs	62	98.41	1	1.59	0	0
	Syringes and needles 10 cc, 5 cc, 2 cc (disposable)	62	98.41	1	1.59	0	0

# CONDUCTING SINGLE CAESAREAN SECTION EQUIPMENT NEEDED TABLE 5.2

# **EQUIPMENT FOR OPERATION THEATRE**

S.No.	Equipment	Available	%	Not available	%	Not Applicable	%	Not mentioned	%
1	Operating-room light (shadowless movable)	44	69.84	14	22.22	5	7.94	0	0
2	Formalin vaporizer for fumigation	53	84.13	5	7.94	5	7.94	0	0
3	Portable room lights with stands (for emergencies)	47	74.6	11	17.46	5	7.94	0	0
4	Vertical steam autoclave	44	69.84	14	22.22	5	7.49	0	0
5	Electric sterilizer for boiling instruments	43	68.25	15	23.81	5	7.49	0	0
6	Jar with Cheatle Forceps	53	84.13	5	7.94	5	7.49	0	0
7	Cylindrical sterilizing bins (size of the bins according to the autoclave)	51	80.95	7	11.11	5	7.49	0	0
8	Instrument trolleys	50	79.37	8	12.7	5	7.49	0	0
9	Table to keep the sterile linen / glove	58	92.06	0	0	5	7.49	0	0
10	Foot stools	51	80.95	7	11.11	5	7.49	0	0
11	Trolley/strecher with comination wheel and adjustable sides	48	76.19	9	14.29	5	7.49	0	0
12	Tiltable operating table, universal frame-type with headpiece	49	77.78	9	14.29	5	7.49	0	0
13	Instrument stands with trays (Mayo stand)	35	55.56	23	36.51	5	7.49	0	0

14	Stands with hooks for swabs	49	77.78	9	14.29	5	7.49	0	0
15	Portable aspirating surgical suckers, foot-operated	42	66.67	16	25.4	5	7.49	0	0
16	Stainless steel buckets with covers	49	77.78	9	14.29	5	7.49	0	0
17	Dressing trays medium	57	90.48	1	1.59	5	7.49	0	0
18	Dressing trays large	50	79.37	8	12.7	5	7.49	0	0
19	Covered instrument trays 8" x 12"	56	88.89	2	3.17	5	7.49	0	0
20	Instrument trays with handles	55	87.3	3	4.76	5	7.49	0	0
21	Instrument and catheter trays	49	77.78	9	14.29	5	7.49	0	0
22	Stainless steel jugs; 4 litre, graduated	55	87.3	3	4.76	5	7.49	0	0
23	Utility basins, 3 liter stainless steel	53	84.13	5	7.94	5	7.49	0	0
24	Washable foot wear (shock proof)	47	74.6	11	17.46	5	7.49	0	0
25	Graduated drainage (collecting) bottles, glass 1.5 liter bottles for suction	51	80.95	7	11.11	5	7.49	0	0
	apparatus								
26	Heavy-duty "counter" scissors	47	74.6	11	17.46	5	7.49	0	0
27	Letex tubing: 10.0 mm inner diameter (for suction apparatus)	46	73.02	12	19.05	5	7.49	0	0
28	Connectors for tubing, assorted, including T-shape and Y-shape	45	71.43	13	20.63	5	7.49	0	0
29	Utility apron, opaque plastic	53	84.13	5	7.94	5	7.49	0	0
30	Rubber sheeting, double-coated, (mackintosh)	52	82.54	5	7.94	5	7.49	0	0
31	Eye shields	54	85.71	4	6.35	5	7.49	0	0
32	Instrument clips	54	85.71	4	6.35	5	7.49	0	0
33	clipboards	50	79.37	7	11.11	5	7.49	0	0
34	Battery-operated wall clock, with hands showing time in seconds, minutes and hours	51	80.95	7	11.11	5	7.49	0	0
35	Pillow (for hypo tension)	55	87.3	3	4.76	5	7.49	0	0
36	Mercury sphygmomanometer with cuff on stand	54	85.71	4	6.35	5	7.49	0	0
37	Stethoscopes, binaural (bell and diaphragm)	56	88.89	2	3.17	5	7.49	0	0
38	Fetal stethoscope	58	92.06	0	0	5	7.49	0	0
39	Tape measure	58	92.06	0	0	5	7.49	0	0
40	Clinical thermometers: oral	54	85.71	4	6.35	5	7.49	0	0
41	Rectal Thermometer	48	76.19	10	15.87	5	7.49	0	0
42	Torch, battery-operated	57	90.48	1	1.59	5	7.49	0	0
43	clothers-pegs	56	88.89	2	3.17	5	7.49	0	0
	DISPOSABLES								
44	Self-retaining balloon urinary catheters (disposable) sizes 8, 10, 12 and 14 ch (Folley's)	50	79.37	8	12.7	5	7.49	0	0
45	Scalpel blades No.11, 22	55	87.3	2	3.17	5	7.49	1	1.59

46	Urethral catheters, sizes 8, 10, 12, 14 and 16 ch.	54	85.71	4	6.35	5	7.49	0	0
47	Urinary bags (disposable)	54	85.71	4	6.35	5	7.49	0	0
48	Surgeon's latex gloves sizes 6, 6.5, 7, 7.5, 8 (Disposable is preferable)	45	71.43	13	20.63	5	7.49	0	0
49	Nasogastric tubes (levine) 12ch (disposable)	44	69.84	14	22.22	5	7.49	0	0
50	Spinal needles	57	90.48	1	1.59	5	7.49	0	0
51	Infant feeding tube infant-size, 5-6 ch. 38 cm long (disposable)	47	74.6	11	17.46	5	7.49	0	0
52	Intracath Disposable (webster Lucr)	47	74.6	11	17.46	5	7.49	0	0
53	Scalp-vein infusion sets disposable	54	85.71	4	6.35	5	7.49	0	0
54	Face masks and caps (should be adequate)	57	90.48	1	1.59	5	7.49	0	0
55	Gauze bandages (should be adequate)	57	90.48	1	1.59	5	7.49	0	0
56	Absorbent gauze (for dressings, swabs, abdominal packs, petrolatum gauze)	52	82.54	6	9.52	5	7.49	0	0
57	Absorbent Gauze (for dressings, swabs, abdominal pads, packs,	50	79.37	7	11.11	5	7.49	1	1.59
	petrolatum gauze tec.)								
58	Absorbent cotton wool	56	88.89	2	3.17	5	7.49	0	0
	LINEN								
59	Gowns (should be adequate)	58	92.06	5	7.94	0	0	0	0
60	Drapers (should be adequate)	56	88.89	2	3.17	5	7.49	0	0
		CONSUM	IABLES						
61	Linen tape	51	80.95	7	11.11	5	7.94	0	0
62	Umbilical tape	49	77.78	9	14.29	5	7.94	0	0
63	Indelible pencils (mark the uterine fungus in accidental haemorrhage etc.)	48	76.19	10	15.87	5	7.94	0	0
64	Surgical adhesive tape	50	79.37	8	12.7	5	7.94	0	0
65	Double edged safety razor blades	56	88.89	2	3.17	5	7.94	0	0
66	Chromic catgut and (3/0, 2/0)	48	76.19	9	14.29	5	7.94	1	1.59
67	Plain catgut 0 with and without needles (sub cutaneous)	48	76.19	10	15.87	5	7.94	0	0
68	Nylon and silk with and without needles 0, No.1, Barbers thread No.20	53	84.13	3	4.76	5	7.94	2	3.17
	SPECIFIC INST	RUMENTS F	OR CAESARE	AN SECTIO	N				<b>L</b>
69	B.P. Handle	55	87.3	2	3.17	5	7.94	1	1.59
70	Scissors (straight-1, Curved-1)	54	85.71	4	6.35	5	7.94	0	0
71	Needle holders	58	92.06	0	0	5	7.94	0	0
72	Artery forceps 6" (straight-6, curved-6)	57	90.48	1	1.59	5	7.94	0	0
73	Thumb forceps toothed	58	92.06	0	0	5	7.94	0	0
74	Thumb forceps non-toothed	58	92.06	0	7.94	5	7.94	0	0
75	Doyen's bladder retractor	49	77.78	9	14.29	5	7.94	0	0

76	Simpson's speculum	54	85.71	4	6.35	5	7.94	0	0
77	bebcocks	53	84.13	5	7.49	5	7.94	0	0
78	Sponge holders	58	92.06	5	7.49	0	0	0	0
79	Towel clips (Large-6, small-6)	55	87.3	3	4.76	5	7.94	0	0
80	Suction tube (Poole's pattern)	57	90.48	1	1.59	5	7.94	0	0
81	Green armytage	46	73.02	12	19.05	5	7.94	0	0
82	Allis forceps	56	88.89	2	3.17	5	7.94	0	0
83	Needles (Skin-2, Rectus Sheath-2, Peritoneum-2 (RB), Uterus-2 (RB))	57	90.48	1	1.59	5	7.94	0	0
84	Catgut 1/0, 2/0 ch.	49	77.78	9	14.29	5	7.94	0	0
85	Kidney Trays	58	92.06	0	0	5	7.94	0	0
86	Small Bowls	58	92.06	0	0	5	7.94	0	0
87	I/V stand	58	92.06	0	0	5	7.94	0	0
88	Basin Stands	57	90.48	1	1.59	5	7.94	0	0
89	Buckets with Sodium Hypo Chloride solution or Bleaching powder solution	54	85.71	4	6.35	5	7.94	0	0

# CONDUCTING SINGLE CAESAREAN SECTION EQUIPMENT NEEDED TABLE 5.3 ANESTHESIA EQUIPMENT (For Caesarean Section)

S1.	Equipment	Available	%	Not	%	Not	%	Not	%
No.				Available		Applicable		Mentioned	
1	Anaesthetic vaporizers for ether halothane	52	82.54	6	9.52	5	7.94	0	0
2	Anaesthetic face masks large adult size (2 of each size total 14)	53	84.13	5	7.94	5	7.94	0	
3	Ambubag (Anesthetic breathing bags)	54	85.71	4	6.35	5	7.94	0	0
4	Boyel's apparatus	54	85.71	5	7.94	5	7.94	0	0
5	Sphygmomanometer	46	73.02	12	19.05	5	7.94	0	0
6	Pulse Oxymeter for measuring SPO2 & PP	25	39.68	33	52.38	5	7.94	0	0
7	POET (Pulse Oxymeter and Endtidal Carbondioxide monitor)	24	38.1	34	53.97	5	7.94	0	0
8	E.C.G. Monitor with Defibrillation Unit	25	39.68	33	52.38	5	7.94	0	0
9	Central venous pressure monitoring unit	27	42.86	31	49.21	5	7.94	0	0
10	Catheter months (sometimes also called endotracheal tube connectors)	50	79.37	8	12.7	5	7.94	0	0
	antistane rubber								
11	Endotracheal tubes sizes 6,6,7,7.5 cu ffed (Rubber)with amendment No.1	53	84.13	5	7.94	5	7.94	0	0
12	Endotracheal tube connectors. 15 mm plastic (can be connected directly	50	79.97	8	12.7	5	7.94	0	0
	to the breathing valve)								
13	Epidural needles No.16	46	73.02	12	19.05	5	7.94	0	0
14	Epidural catheters	45	71.43	13	20.63	5	7.94	0	0

15	Intravenous infusion sets	50	79.37	8	12.7	5	7.94	0	0
16	Intracaths No.18	47	74.6	11	17.46	5	7.94	0	0
17	Laryngeal mask airways (Anesthetic airways)	53	84.13	5	7.94	5	7.94	0	0
18	Laryngoscopes (2 handles + 3 pairs of blades or 4 plastic laryngoscopes (2 adult + 1 Paediatric) Functional	49	77.78	9	14.29	5	7.94	0	0
Sl. No.	Equipment	Available	%	Not Available	%	Not Applicable	%	Not Mentioned	%
19	Magill's intubating forceps (in an emergency ovum forcep can be used)	50	79.37	8		5	7.94	0	0
20	Needles and ca	50	79.37	8		5	7.94	0	0
21	Oxyzen supply by poly mask	53	84.13	5		5	7.94	0	0
22	Oropharyngeal airway sizes 00 to 3.5 one inch size (2 of each size total 12)	48	76.19	10		5	7.94	0	0
23	Spare bulbs for laryngoscopes	50	79.37	8		5	7.94	0	0
24	Spinal needles range sizes 22 gauge to 24 guage	54	85.71	4		5	7.94	0	0
25	Urethral bougies, for use as intubating stylets	48	76.19	10		5	7.94	0	0
26	Guaze swabs	53	84.13	5		5	7.94	0	0
27	Antiseptic solution (Formalin/Savlon/Cydex/Concentrated dettol/Formaline vaporizers)	54	85.71	4		5	7.94	0	0
28	Sterile drapes	54	85.71	4		5	7.94	0	0
29	Sterile gloves.2	54	85.71	4		5	7.94	0	0
30	Suction apparatus Mother (30 pounds negative pressure)	33	52.38	25		5	7.94	0	0
31	Sodalime absorber Boyel's Sodalime canisters for use with gas anesthetic apparatus	46	73.02	18		5	7.94	0	0
32	Xylocaine jelly	52	82.54	6		5	7.94	0	0
33	Spirit	54	85.71	4		5	7.94	0	0
34	Cotton Swabs	54	85.71	4			7.94	0	0
	DRUGS & FORMULARY								
	Anaesthetic drugs								
Sl. No.	Equipment	Available	%	Not Available	%	Not Applicable	%	Not Mentioned	%
35	Atropine Sulphate 0.5 mg/ml, Inj 1 ml (Anticholinergic, Anticholinesterase, Antidote)	53	84.13	5	7.94	5	7.94	0	0
36	Diazepam, 5mg/ml, Inj 2ml	52	82.54	6	9.52	5	7.94	0	0
37	Ketamine	52	82.54	6	9.52	5	7.94	0	0
38	Pavalon	53	84.13	5	7.94	5	7.94	0	0
39	Pentothal vial	53	84.13	5	7.94	5	7.94	0	0

40	Scoline		53	84.13	5	7.94	5	7.94	0	0
41	Prostigmine		53	84.13	5	7.94	5	7.94	0	0
42	5% Xylocaine (spinal Anaesthetic)		52	82.54	6	9.52	5	7.94	0	0
43	0.5 % Bupivicaine (heavy) (spinal Anaesthetic)		49	77.78	9	14.29	5	7.94	0	0
44	Vecromine		46	73.02	12	19.05	5	7.94	0	0
45	2% Xylocaine (Local Anaesthetic)		53	84.13	5	7.94	5	7.94	0	0
46	Morphine 10 mg/ml, Inj, 1 ml Narcotic Analgesic)		47	74.6	11	17.46	5	7.94	0	0
	EMERGENCY DRUGS		1	1 1		1 1	1			
47	Atropine Sulphate, 0.5 mg/ml. Inj, 1ml (Antieholinergic, Antieholinersterase, Antidote)		54	85.71	4	6.35	5	7.94	0	0
48	Adrenaline Tartarate, Inj, 1ml (Adrenergic, Bronchodilator, Stimulant	Cardiac	53	84.13	5	7.94	5	7.94	0	0
49	Dopamine		53	84.13	5	7.94	5	7.94	0	0
50	Digoxine (Cardiotonic Anti arrhythmic)		54	85.71	4	6.35	5	7.94	0	0
51	Decadron vials		51	80.95	7	11.11	5	7.94	0	0
Sl. No.	Equipment	Available	%	Not Available	%	Not Applicable	%	Not Mention	ed	%
52	Etcorlin (Hydrocortisone)	54	85.71	4	6.35	5	7.94	0		0
53	Fortwin	54	85.71	4	6.35	5	7.94	0		0
54	Calcium Gluconate/ Chloride, 10%, W/V Inj. 10 ml (Calcium Replenisher Mineral)	54	85.71	4	6.35	5	7.94	0		0
55	Sodium bicarbonate 7.5% W/V, IV, Inj., 10ml (Electrolyte Replenisher Systemic Alkaliser)	54	85.71	4	6.35	5	7.94	0		0
56	Morphine 10mg/ml, Inj, 1ml (Narcotic Analgesic)	51	80.95	7	11.11	5	7.94	0		0
57	Voveran	49	77.78	9	14.29	5	7.94	0		0
58	Frusamide, 10 mg/ml Inj, 2 ml (Diuretic)	52	82.54	5	7.94	5	7.94	1		1.59
59	Aminophyline 2.5% W/V or 2.5 W/IV Inj. 10 ml	54	85.71	4	6.35	5	7.94	0		0
	& 2 ml (Broncho Dilator)									
60	Deriphyline	54	85.71	4	6.35	5	7.94	0		0
	Drugs for Uterine contraction									
61	Methergin 0.2 mg/ml Inj 1ml (Uterine Stimulant)	52	82.54	6	9.52	5	7.94	0		0
62	Oxytocin 2 units/ml Inj, 2 units/ml (Oxytocic)	52	82.54	6	9.52	5	7.94	0		0
63	Prostidin	51	80.95	7	11.11	5	7.94	0		0

## CONDUCTING SINGLE MEDICAL TERMINATION OF PREGNANCY EQUIPMENT NEEDED TABLE 5.4

# Equipment for Performing Dilatation and Curettage:

Equipment	Available	%	Not Available	%	Not Applicable	%	Not Mentioned	%
Kidney tray	58	92.06	0	0	5	7.94	0	0
MTP table (Maneuverable)	49	77.78	1	1.59	5	7.94	0	0
Sim's Speculum (large)	56	88.89	1	1.59	5	7.94	0	0
Sponge forceps	58	92.06	0	0	5	7.94	0	0
Uterine sound	57	90.48	5	7.94	0	0	1	
Uterine dilators (Hegar's)	53	84.13	4	6.35	5	7.94	1	1.59
Uterine curette (blunted. shrp edged)	56	88.89	1	1.59	5	7.94	1	1.59
Vaginal speculum (Sims, small, medium)	57	90.48	0	0	5	7.94	1	1.59
Volsellum forceps	57	90.48	0	0	5	7.94	1	1.59
Ovum forceps (small and medium)-2 Straight - 1,	56	88.89	0	0	5	7.94	2	3.17
Curved - 1-2,								
DRUGS AND FORMULARY								
EMERGENCY DRUGS								
Adrenaline Tratarate Inj 1ml. (Adrenergic,	57	90.48	1	1.59	5	7.94	0	0
Bronchodilator, Cardiac Stimulant)								
Atropine Sulphate 0.5 mg/ml. Inj. 1ml (Anticholinergic,	57	90.48	1	1.59	5	7.94	0	0
Anticholinesterase, Antidote)								
Dopamine	56	88.89	1	1.59	5	7.94	0	0
Digoxine (Cardiotonic, Antiarrhythmic)	57	90.48	1	1.59	5	7.94	0	0
	Kidney trayMTP table (Maneuverable)Sim's Speculum (large)Sponge forcepsUterine soundUterine dilators (Hegar's)Uterine curette (blunted. shrp edged)Vaginal speculum (Sims, small, medium)Volsellum forcepsOvum forceps (small and medium)-2 Straight - 1,Curved - 1-2,DRUGS AND FORMULARYEMERGENCY DRUGSAdrenaline Tratarate Inj 1ml. (Adrenergic, Bronchodilator, Cardiac Stimulant)Atropine Sulphate 0.5 mg/ml. Inj. 1ml (Anticholinergic, Anticholinesterase, Antidote)Dopamine	Kidney tray58MTP table (Maneuverable)49Sim's Speculum (large)56Sponge forceps58Uterine sound57Uterine dilators (Hegar's)53Uterine curette (blunted. shrp edged)56Vaginal speculum (Sims, small, medium)57Volsellum forceps57Ovum forceps (small and medium)-2 Straight - 1, Curved - 1-2,56DRUGS AND FORMULARY57EMERGENCY DRUGS57Adrenaline Tratarate Inj 1ml. (Adrenergic, Bronchodilator, Cardiac Stimulant)57Atropine Sulphate 0.5 mg/ml. Inj. 1ml (Anticholinergic, Anticholinesterase, Antidote)56Dopamine56	Kidney tray5892.06MTP table (Maneuverable)4977.78Sim's Speculum (large)5688.89Sponge forceps5892.06Uterine sound5790.48Uterine dilators (Hegar's)5384.13Uterine curette (blunted. shrp edged)5688.89Vaginal speculum (Sims, small, medium)5790.48Volsellum forceps5790.48Ovum forceps (small and medium)-2 Straight - 1, Curved - 1-2,5688.89DRUGS AND FORMULARY5790.48EMERGENCY DRUGS5790.48Adrenaline Tratarate Inj 1ml. (Adrenergic, Bronchodilator, Cardiac Stimulant)5790.48Atropine Sulphate 0.5 mg/ml. Inj. 1ml (Anticholinergic, Anticholinesterase, Antidote)5790.48Dopamine5688.8957	Kidney tray   58   92.06   0     MTP table (Maneuverable)   49   77.78   1     Sim's Speculum (large)   56   88.89   1     Sponge forceps   58   92.06   0     Uterine sound   57   90.48   5     Uterine dilators (Hegar's)   53   84.13   4     Uterine curette (blunted. shrp edged)   56   88.89   1     Vaginal speculum (Sims, small, medium)   57   90.48   0     Volsellum forceps   57   90.48   0     Ovum forceps (small and medium)-2 Straight - 1, Curved - 1-2,   56   88.89   0     DRUGS AND FORMULARY   57   90.48   0     Bronchodilator, Cardiac Stimulant)   57   90.48   1     Adrenaline Tratarate Inj 1ml. (Adrenergic, Bronchodilator, Cardiac Stimulant)   57   90.48   1     Atropine Sulphate 0.5 mg/ml. Inj. 1ml (Anticholinergic, Anticholinesterase, Antidote)   57   90.48   1     Dopamine   56   88.89   1   1	Kidney tray     58     92.06     0     0       MTP table (Maneuverable)     49     77.78     1     1.59       Sim's Speculum (large)     56     88.89     1     1.59       Sponge forceps     56     88.89     1     1.59       Sponge forceps     58     92.06     0     0       Uterine sound     57     90.48     5     7.94       Uterine dilators (Hegar's)     53     84.13     4     6.35       Uterine curette (blunted. shrp edged)     56     88.89     1     1.59       Vaginal speculum (Sims, small, medium)     57     90.48     0     0       Volsellum forceps     57     90.48     0     0       Ovum forceps (small and medium)-2 Straight - 1,     56     88.89     0     0       Ourwed - 1-2,     D     D     0     0     0       DRUGS AND FORMULARY     EMERGENCY DRUGS     57     90.48     1     1.59       Bronchodilator, Cardiac Stimulant)     S7     90.48     1     1.59	Kidney tray     58     92.06     0     0     5       MTP table (Maneuverable)     49     77.78     1     1.59     5       Sim's Speculum (large)     56     88.89     1     1.59     5       Sponge forceps     58     92.06     0     0     5       Uterine sound     57     90.48     5     7.94     0       Uterine dilators (Hegar's)     53     84.13     4     6.35     5       Uterine curette (blunted. shrp edged)     56     88.89     1     1.59     5       Vaginal speculum (Sims, small, medium)     57     90.48     0     0     5       Volsellum forceps     57     90.48     0     0     5       Ovum forceps (small and medium)-2 Straight - 1,     56     88.89     0     0     5       DRUGS AND FORMULARY     EMERGENCY DRUGS     5     7     90.48     1     1.59     5       Adrenaline Tratarate Inj Iml. (Adrenergic, Bronchodilator, Cardiac Stimulant)     57     90.48     1     1.59	Kidney tray     58     92.06     0     0     5     7.94       MTP table (Maneuverable)     49     77.78     1     1.59     5     7.94       Sim's Speculum (large)     56     88.89     1     1.59     5     7.94       Sponge forceps     58     92.06     0     0     5     7.94       Sponge forceps     58     92.06     0     0     5     7.94       Uterine sound     57     90.48     5     7.94     0     0     0       Uterine curette (blunted. shrp edged)     56     88.89     1     1.59     5     7.94       Vaginal speculum (Sims, small, medium)     57     90.48     0     0     5     7.94       Ovum forceps (small and medium)-2 Straight - 1, Curved - 1-2,     56     88.89     0     0     5     7.94       DRUGS AND FORMULARY     57     90.48     0     0     5     7.94       Marealine Tratarate Inj Iml. (Adrenergic, Bronchodilator, Cardiac Stimulant)     57     90.48     1	Equipment     Available     %     Not Available     %     Not Applicable     %     Mentioned       Kidney tray     58     92.06     0     0     5     7.94     0       MTP table (Maneuverable)     49     77.78     1     1.59     5     7.94     0       Sim's Speculum (large)     56     88.89     1     1.59     5     7.94     0       Sponge forceps     58     92.06     0     0     5     7.94     0       Uterine sound     57     90.48     5     7.94     0     1     1       Uterine dilators (Hegar's)     53     84.13     4     6.35     5     7.94     1       Vaginal speculum (Sims, small, medium)     57     90.48     0     0     5     7.94     1       Vaginal speculum (Sims, small, medium)-2 Straight -1, Curved -1-2,     56     88.89     0     0     5     7.94     1       Ovum forceps (small and medium)-2 Straight -1, Curved -1-2,     56     88.89     0     0

15     Decadron vials     56     88.89     1     1.59     5     7.94     1     1	.59
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S1.	Equipment	Available	%	Not	%	Not	%	Not	%
No.				Available		Applicable		Mentioned	
16	Etcorlin (Hydrocortisone)	57	90.48	1	1.59	5	7.94	0	0
17	Fortwin	57	90.48	1	1.59	5	7.94	0	0
18	Calcium Gluconate/Chloride, 10% W/V Inj. 10ml	57	90.48	1	1.59	5	7.94	0	0
19	Sodabicarb 7.5% W/V, IV, Inj, 10 ml (Electrolyte	55	87.3	3	4.76	5	7.94	0	0
	Replenisher Systemic Alkaliser)								
20	Morphine, 10 mg/ ml, Inj, 1 ml (Narcotic Analgesic)	52	82.54	1	1.59	5	7.94	5	7.94
21	Voveran	55	87.3	1	1.59	5	7.94	2	3.17
22	Frusamide 10 mg./ml. Inj. 2ml (Diuretic)	56	88.89	1	1.59	5	7.94	1	1.59
23	Aminophyline, 2.5% W.V. Inj. 10ml	57	90.48	1	1.59	5	7.94	0	0
	(Bronchodilator)								
24	Deriplhyline	57	90.48	1	1.59	5	7.94	0	0
	Drugs for Uterine contraction								
25	i) Oxytocin 2 units/ml. Inj (Oxytocic)	57	90.48	1	1.59	5	7.94	0	0
26	i) Oxytocin. 2 unists/ml. Inj 1ml (Uterine Stimulant)	57	90.48	1	1.59	5	7.94	0	0
27	(ii) Prostidn	55	87.3	1	1.59	5	7.94	0	3.17
28	Sterile Water for Injection. Inj. 5ml	58	92.06	0	0	5	7.94	0	0
29	Antiseptic solution	58	92.06	0	0	5	7.94	0	0
				LINEN					
30	Sterile Drapes	57	90.48	0	0	5	7.94	1	1.59
	DISPOSABLES								
31	Gauze swabs (Based on No. of procedures)	58	92.06	0	0	5	7.94	0	0
32	Sterile glove	55	87.3	1	1.59	5	7.94	2	3.17

33	Urinary Catheters Fiolley's Rubber all sizes	54	85.71	1	1.59	5	7.94	2	3.17
34	Vaginal pads	57	90.48	0	0	5	7.94	1	1.59
35	Syringes 2.5, 10 c.c.	58	92.06	0	0	5	7.94	0	0

# CONDUCTING SINGLE MEDICAL TERMINATION OF PREGNANCY EQUIPMENT NEEDED TABLE 5.5 LIST OF EQUIPMENT FOR VACUUM EVACUATION / ASPIRATION

Sl. No.	Equipment	Available	%	Not	%	Not	%	Not	%
				Available		Applicable		Mentioned	
1	Suction apparatus	54	85.71	2	3.17	5	7.94	2	3.17
2	Hegar's dilators/ Mathew's dilators	47	74.6	7	11.11	5	7.94	4	6.35
3	Curette	54	85.71	3	4.76	5	7.94	1	1.59
4	Sponge holder	55	87.3	1	1.59	5	7.94	2	3.17
5	Operation Table	56	88.89	1	1.59	5	7.94	1	1.59
6	Kidney Tray	58	92.06	0	0	5	7.94	0	0
7	Sim's speculum	54	85.71	2	3.17	5	7.94	2	3.17
8	Suction Cannulas	55	87.3	2	3.17	5	7.94	1	1.59
	DRUGS FORMULARY								
9	Normal saline bottles	55	87.3	0	0	5	7.94	3	4.76
	EMERGENCY DRUGS	57	90.48	1	1.59	5	7.94	0	0
10	Adrenaline Tratarate. Inj. 1 ml. (Adrenergic,	56	85.71	4	6.35	5	7.94	0	0
	Bronchodilator, Cardiac Stimulant)54								
11	Attopine Sulphate 0.5 mg/ml. Inj. 1 m56l	56	88.89	1	1.59	5	7.94	1	1.59
	(Anticholinergic Anticholinesterase,56 Antidote)								
12	Dopamine	56	88.89	2	3.17	5	7.94	0	0

13	Digoxine (Cardiotonic, Antiarrhythmic)	56	88.89	2	3.17	5	7.94	0	0
14	Decadron vials	56	88.89	1	1.59	5	7.94	1	1.59
15	Etcorlin (Hydrocortisone)	56	88.89	2	3.17	5	7.94	0	0
16	Fortwin	57	90.48	1	1.59	5	7.94	0	0

S1.	Equipment	Available	%	Not	%	Not	%	Not	%
No.				Available		Applicable		Mentioned	
17	Calcium Gluconate/Chloride, 10% W/V Inj., 10 ml	57	90.48	1	1.59	5	7.94	0	0
	(Calcium Replenisher Mineral)								
18	Sodabicarb 7.5% W/V, IV, Inj, 10 ml (Electrolyte	57	90.48	1	1.59	5	7.94	0	0
	Replenisher Systemic Alkaliser)								
19	Morphine, 10 mg/ ml	52	82.54	6	9.52	5	7.94	0	0
20	Voveran	53	84.13	5	7.94	5	7.94	1	1.59
21	Frusamide 10mg. /ml. Inj. 2ml (Diuretic)	57	90.48	1	1.59	5	7.94	0	0
22	Aminophyline, 2.5%	57	90.48	1	1.59	5	7.94	0	0
23	Deriphylline	57	0	1	1.59	5	7.94	0	0
	Drugs for Uterine contraction								
24	I) Oxytocin. 2 units/ml. Inj. (Oxytocic)	57	90.48	1	1.59	5	7.94	1	1.59
25	Ii) Metherginc, 0.2 mg/ml, Inj, 1ml, (Uterine	57	90.48	1	1.59	5	7.94	1	1.59
	Stimulant)								
26	ii) Prostidin	57	90.48	1	1.59	5	7.94	2	3.17
27	Sterrle Water for Injection, Inj. 5 ml	58	92.06	0	0	5	7.94	0	0
28	Antiseptic solution	58	92.06	0	0	5	7.94	0	0
	DISPOSABLES								
29	Disposable Syringes & Needles	57	90.48	1	1.59	5	7.94	0	0
30	Glove	54	85.71	4	6.35	5	7.94	0	0
31	Cotton Swabs	57	90.48	1	1.59	5	7.94	0	0

# CONDUCTING SINGLE MEDICAL TERMINATION OF PREGNANCY TABLE 5.6 EQUIPMENT NEEDED

S. No.	Equipment	Available	%	Not	%	Not	7.94%	Not	%
				Available		Applicable		Mentioned	
1	Sponge forceps.	58	92.06	0	0	5	7.94	0	0
2	Scalpel handle with blade	49	77.78	1	1.59	5	7.94	6	9.52
3	Small, curved artery forceps	56	88.89	1	1.59	5	7.94	1	1.59
4	Small straight artery forceps	58	92.06	0	0	5	7.94	0	0
5	Dissecting scissors	57	90.48	0	0	5	7.94	1	1.59
6	Stitch scissors, straight	53	84.13	4	6.35	5	7.94	1	1.59
7	Needle holder	56	88.89	1	1.59	5	7.94	1	1.59
8	Needles-skin, cutting, curved, round body	57	90.48	0	0	5	7.94	1	1.59
9	Dissecting forceps, non toothed	58	92.06	0	0	5	7.94	0	0
10	Disseting forceps, toothed	58	92.06	0	0	5	7.94	0	0
11	Retractos (Langenbeek) narrow	57	90.48	0	0	5	7.94	1	1.59
12	Tissue forceps (Allis)	58	92.06	0	0	5	7.94	0	0
13	Kidney dishes	58	92.06	0	0	5	7.94	0	0
	CONSUMABLES								
14	Sutures, 0 and 2/0 thread, ties and with needles per skin	58	92.06	0	0	5	7.94	0	0
15	Sutures 1/0 and 2/0 chromic catgut ties and with needles	58	92.06	0	0	5	7.94	0	0

16	Suture No.1 nylon ties and with needles	58	92.06	0	0	5	7.94	0	0
17	Linen tape. 1 piece 20-30 cm long	57	90.48	0	0	5	7.94	1	0
	DISPOSABLES								
18	Sterile gloves	56	88.89	0	0	5	7.94	2	3.17
19	Gauze Swabs	58	92.06	0	0	5	7.94	0	0
20	Cotton Swabs	58	92.06	0	0	5	7.94	0	0
S.No.	Equipment	Available	%	Not Available	%	Not Applicable	%	Not Mentioned	%
	DRUGS AND FORMULARY				-				
	EMERGENCY DRUGS								
21	Adrenaline Tratarate, Inj., 1 ml (Adrenergic, Bronchodilator, Cardiac Stimulant)	58	92.06	0	0	5	7.94	0	0
22	Atropine Sulphate, 0.5 mg/ml, Inj, 1ml (Anticholinergic, Anticholinesterase, Antidote)	58	92.06	0	0	5	7.94	0	0
23	Dopamine	58	92.06	0	0	5	7.94	0	0
24	Digosine (Cardiotonic, Antiarrhythmic)	58	92.06	0	0	5	7.94	0	0
25	Decadron vials	58	92.06	0	0	5	7.94	0	0
26	Etcorlin (Hydrocortisone)	58	92.06	0	0	5	7.94	0	0
27	Fortwin	58	92.06	0	0	5	7.94	0	0
28	Calcium Gluconate/(Chloride, 10%, W/V Inj, 10ml (Calcium Replenisher Mineral)	58	92.06	0	0	5	7.94	0	0
29	Sodabicarb7.5% W/V, IV, Inj, 10ml (Electrolyte Replenisher Systemic Alkaliser)	58	92.06	0	0	5	7.94	0	0
30	Morphine 10mg ml.Inj 1ml	57	90.48	0	0	5	7.94	0	0
31	( Analgesic )	56	88.89	0	0	5	7.94	0	1.59
32		57	90.48	0	0	5	7.94	0	3.17
33	Aminophyline, 2.5 W/V, Inj, 10 ml (Bronchodilator)	58	92.06	0	0	5	7.94	0	1.59
34	Denphyline	58	92.06	0	0	5	7.94	0	0
	Drugs for Uterine contraction								
35	i) Oxytocin, 2 units/ml, Inj (Oxytocic)	58	92.06	0	0		7.94	0	0
36	Ii) Methergine, 0.2 mg/ml, Inj, 1 ml (Uterine Stimulant)	58	92.06	0	0	5	7.94	0	0
37	Iii) Prostidin	58	92.06	0	0	5	7.94	0	0
38	Sterile Water for Injection, Inj, 5 ml	58	92.06	0	0	5	7.94	0	0
39	Antiseptic solution	58	92.06	0	0	5	7.94	0	0
	LINEN								

40 Drapes 58 0 0 0 5 7.94 0 92.06										
	40	Drapes	58	0	0	0	5	7 94	0	92.06

# EXAMINATION OF FEW GYNAECOLOGICAL CONDITIONS EQUIPMENT NEEDED TABLE 5.7

# Common Equipment for Gynaecological Examination

S.No.	Equipment	Available	%	Not	%	Not	%	Not	%
	1 1			Available		Applicable		Mentioned	
1	Anterior	57	90.48	3	4.76	3	4.76	0	0
2	Ayer's spatula	53	84.13	7	11.11	3	4.76	0	0
3	Cervical Punch Biopsy Forceps	58	92.06	2	3.17	3	4.76	0	0
4	Colposcope	35	55.56	25	39.68	3	4.76	0	0
5	Culture swabs	55	87.3	5	7.94	3	4.76	0	0
6	Cusco;s speculum Assorted sizes	54	85.71	6	9.52	3	4.76	0	0
7	Examination table	59	93.65	1	1.59	3	4.76	0	0
8	Kidney Basin	60	95.24	0	0	3	4.76	0	0
9	Optimal Microscopes	43	68.25	17	26.98	3	4.76	0	0
10	Sim's speculum Double ended	58	92.06	2	3.17	3	4.76	0	0
11	Sponge holding forceps	60	95.24	0	0	3	4.76	0	0
12	Uterine sound	58	92.06	2	3.17	3	4.76	0	0
13	Volsellum	58	92.06	2	3.17	3	4.76	0	0
14	Notch	60	95.24	0	0	3	4.76	0	0
15	Slides for smeat	58	92.06	2	3.17	3	4.76	0	0

16	Cover slips	58	92.06	2	3.17	3	4.76	0	0	
17	Cheatle forceps with container	59	93.65	1	1.59	3	4.76	0	0	
18	Fivative Jar (Hair spray)	55	87.3	5	7.94	3	4.76	0	0	
19	Bins	60	95.24	0	0	3	4.76	0	0	
20	Trays (Stainless Steel)	60	95.24	0	0	3	4.76	0	0	
S.No.	Equipment	Available	%	Not Available	%	Not Applicable	%	Not Mentioned	%	
21	Waste bucket for used glove and other instruments	57	90.24	3	4.76	3	4.76	0	0	
22	Shadowless lamp/ Angle poise lamp	54	93.65	6	9.52	3	4.76	0	0	
23	Kryo Cautery set with Nitrous Oxide cylinder	59	93.65	1	1.59	3	4.76	0	0	
	DRUGS AND FORMULARY									
24	Antiseptic Cream and Lotion, Jar	57	90.48	3	4.76	3	4.76	0	0	
25	Aqueous solution iodine and potassium iodine	59	93.65	1	1.59	3	4.76	0	0	
26	Formalin	59	93.65	1	1.59	3	4.76	0	0	
27	Water based Jelly	59	93.65	1	1.59	3	4.76	0	0	
	DISPOSABLES									
28	Glove (Rubber)	46	73.02	14	22.22	3	4.76	0	0	
29	Sterile cotton swabs	59	93.65	1	1.59	3	4.76	0	0	
30	Sterile pads	59	93.65	1	1.59	3	4.76	0	0	
31	Sterile small bottles	57	90.48	3	4.76	3	4.76	0	0	
32	Sterile bottles to collect culture swabs	58	92.06	2	3.17	3	4.76	0	0	
33	Instrument sterilizer	51	80.95	9	14.29	3	4.76	0	0	
	GENERAL									
34	Stationery	53	84.13	7	11.11	3	4.76	0	0	
35	Glass marking/ indelible pencils	54	85.71	6	9.52	3	4.76	0	0	
36	Screen (Bed side)	59	93.65	1	1.59	3	4.76	0	0	

# **Physical facilities in private hospitals:**

#### Normal delivery facilities:

## New Born Room:

New born room: New born room was mentioned as must in hospitals more than 30 bedded in the reproductive health care standards. According to the assessment it was found that 25% hospitals in 31-50 & 14% in 51-100 bedded hospitals do not have new born rooms. (Table 6.1a)

#### Changing room/Ante Room:

It was suggested in the standards document that for less than 15 bedded hospitals, change room was not necessary and it is mandatory for hospitals more than 15 beds. Study reveals that in the hospitals more than 15 beds 5% of them do not have changing rooms (Table 6.1b)

#### Dirty area/Sluice area/Washing area:

Dirty area was considered as must in all the category of hospitals. Six percent of hospitals do not have washing area or dirty area (Table 6.1c)

## Labour Room:

Labour room was suggested in all category of hospitals and 3% of the hospitals were using theatre as labour room (Table 6.1d)

# Lavatory for patient:

This facility is available in all the category of hospitals (Table 6.1e)

## 1st stage room/Observatory room:

In the standards laid down panel suggested that for smaller hospitals less than 5 beds a separate room is not necessary but a partition should be constructed in the ward itself. As high as 57% in 6-15 category of hospitals, 55% in 16-30 bedded 25% in 31-50m 14% in 31-100 category bed strength separate observatory rooms were not available (Table 6.1f)

## Nursing station:

Nurses need some space for preparation of all the nursing care procedures, space for stocks and supplies, writing registers, labelling samples and packing the sterile packs etc. In the norms mentioned, for less than 15 bedded hospitals this facility need not be provided seperately. About 22% of the hospitals in the category 31-50 bedded do not have Nursing station in their hospitals (Table 6.1g)

# Store Room:

Standards suggested that separate store room is not needed in less than 30 bedded hospitals. According to the information given all the hospitals above 30 bedded were having store room in their hospitals (Table 6.1h)

#### *Waiting space:*

Waiting space was provided in all the hospitals for the attendants (Table 6.1i)

#### Laundry:

Laundry was suggested as optional for all the category of hospitals. Seventeen percent of the hospitals do not have laundry facility (Table 6.1j)

#### Eclampsia Room:

According to the standards, eclampsia room is not necessary for hospitals smaller than 15 beds, but a separate space should be provided atleast for one bed by partition if needed. There is no eclampsia room in 55% of the hospitals under 31-50 bedded category and 14% in the category of 51-100 bedded (Table 6.1k)

## Septic Labour room:

Septic labour room was suggested as not needed in less than 30 bedded hospitals. Ordinary labour room can be used preferably it should be fumigated after septic labour. Seven percent of the hospitals do not have a septic labour room in 51-100 bedded hospital (Table 6.11)

# **Gynaecological facilities:**

## Examination room:

Sixteen percent of the hospitals under the category 1 - 5 bedded said that separate examination room is not available. (Table 6.2a)

#### Hand washing facility:

Ninety eight percent of the hospitals having the examination room also has hand washing facility. (Table-6.2b)

#### *Lighting facility:*

All the 98.4 % of the hospitals having an examination room were having adequate lighting facility. (Table-6.2c)

## Waiting room facility:

Three percent of the hospitals under the category of 16-30 bedded hospital waiting room facility was lacking. (Table-6.2d)

#### Physical facilities for Caesarean section and Medical Termination of pregnancy (MTP):

Out of the total sample of 63 hospitals about 58 hospitals were providing were providing caesarean section services and Medical termination of pregnancy services. As both are done in the operation theatre information was provided for only one service either caesarean or MTP. Please refer Tables-6.3a, b, c, d, e, f, g, h, Table-6.4a, b, c, d, e, f, g, h, I for the services provided by the hospital owners out of the 58 hospitals, almost 93 % of the hospitals were providing all the facilities mentioned in the physical facilities section in the standards document. This could be biased because many of the hospitals did not allow the investigators to inspect personally as operations were going on or few did not allow saying one theatre dress is not available.

	Table 6.1b													
Facilities for Normal Delivery-Changing room or Anteroom with Hand washing facility & Toilet														
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%				
Normal Delivery	bedded		bedded		bedded		bedded		bedded					
Available	6	100	18	94.74	24	88.89	4	100	7	100				
Not Available	0	0	1	5.26	3	11.11	0	0	0	0				
Total	6	100	19	100	27	100	4	100	7	100				

Table 6.1c											
Facilities for Normal Delivery-Sluice room or Dirty area or Washing area											
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%	
Normal Delivery	bedded		bedded		bedded		bedded		bedded		
Available	6	100	18	94.74	24	88.89	4	100	7	100	
Not Available	0	0	1	5.26	3	11.11	0	0	0	0	
Total	6	100	19	100	27	100	4	100	7	100	

				Tal	ble 6.1d							
Facilities for Normal Delivery- Labour room												
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%		
Normal Delivery	bedded		bedded		bedded		bedded		bedded			
Available	6	100	19	100	26	96.3	4	100	6	85.71		
Not Available	0	0	0	0	1	3.7	0	0	1	14.29		
Total	6	100	19	100	27	100	4	100	7	100		

	Table 6.1e       Facilities for Normal Delivery- Lavotary for patients												
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%			
Normal Delivery	bedded		bedded		bedded		bedded		bedded				
Available	6	100	19	100	27	100	4	100	7	100			
Not Available	0	0	0	0	0	0	0	0	0	0			
Total	6	100	19	100	27	100	4	100	7	100			

	Table 6.1f											
Facilities for Normal Delivery - Ist stage room/Observatory room/ Post partum room												
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%		
Normal Delivery	bedded		bedded		bedded		bedded		bedded			
Available	6	100	8	42.11	12	44.44	4	75	6	85.71		
Not Available	0	0	11	57.89	15	55.56	0	25	1	14.29		
Total	6	100	19	100	27	100	4	100	7	100		

	Table 6.1 g       Facilities for Normal Delivery - Nursing station											
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%		
Normal Delivery	bedded		bedded		bedded		bedded		bedded			
Available	6	100	15	78.95	21	77.78	4	100	7	100		
Not Available	0	0	4	21.05	6	22.22	0	0	0	0		
Total	6	100	19	100	27	100	4	100	7	100		

Table 6.1h	
Facilities for Normal Delivery-Store room	

Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Normal Delivery	bedded		bedded		bedded		bedded		bedded	
Available	6	100	19	100	26	96.3	4	100	7	100
Not Available	0	0	0	0	1	3.7	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

Table 6.1 I												
Facilities for Normal Delivery - Waiting space for patient's attendants												
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%		
Normal Delivery	bedded											
Available	6	100	19	100	27	100	4	100	7	100		
Not Available	0	0	0	0	0	0	0	0	0	0		
Total	6	100	19	100	27	100	4	100	7	100		

	Table 6.1 j Facilities for Normal Delivery - Laundry (Optional)												
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%			
Normal Delivery	bedded		bedded		bedded		bedded		bedded				
Available	4	66.67	16	84.21	21	77.78	4	100	7	100			
Not Available	2	33.33	3	15.79	6	22.22	0	0	0	0			
Total	6	100	19	100	27	100	4	100	7	100			

	Table 6.1k											
Facilities for Normal Delivery - eclampsia room												
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%		
Normal Delivery	bedded		bedded		bedded		bedded		bedded			
Available	4	66.67	7	36.84	12	44.44	4	100	6	85.71		
Not Available	2	33.33	12	63.16	15	55.56	0	0	1	14.29		
Total	6	100	19	100	27	100	4	100	7	100		

	Table 6.1 l   Excilition for Neuron Dulingue South laboration												
Facilities for Normal Delivery - Septic labour room													
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%			
Normal Delivery	bedded		bedded		bedded		bedded		bedded				
Available	5	83.33	9	47.37	19	70.37	4	100	6	85.7			
Not Available													
Total													

	Table 6.2 a.       Gyneac Facilities Examination Room												
Gyneac Facilities Examination Room   Gyneac Facilities 1-5 % 6-15 % 16-30 % 31-50 % 51-100 %													
Gyneae Paennies	bedded	/0	bedded	70	bedded	/0	bedded	70	bedded	/0			
Available	5	83.33	19	100	27	100	4	100	7	100			
Not Available													
Total													

Table 6.2 b.	
Gyneac Facilities Hand Washing Facility	

Gyneac Facilities	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
	bedded		bedded		bedded		bedded		bedded	
Available	5	83.33	19	100	27	100	4	100	7	100
Not Available	1	16.67	0	0	0	0	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

	Table 6.2c												
Gyneac Facilities Lighting Facility													
Gyneac Facilities	Gyneac Facilities     1-5     %     6-15     %     16-30     %     31-50     %     51-100     %												
	bedded		bedded		bedded		bedded		bedded				
Available	5	83.33	19	100	27	100	4	100	7	100			
Not Available	1	16.67	0	0	0	0	0	0	0	0			
Total	6	100	19	100	27	100	4	100	7	100			

	Table 6.2d												
Gyneac Facilities Waiting Room for patients													
Gyneac Facilities     1-5     %     6-15     %     16-30     %     31-50     %     51-100     %													
	bedded		bedded		bedded		bedded		bedded				
Available	4	64.67	19	100	25	22.59	4	75	7	100			
Not Available	0	0	0	0	0	40.41	0	25	0	0			
Not Applicable	1	18.66	0	0	0	0	0	0	0	0			
Not Mentioned													
Total	6	100	19	100	26	100	4	100	7	100			

	Table 6.3a.     MTP Facilities Change room/ Scrub area													
MTP Facilities 1-5 % 6-15 % 16-30 % 31-50 % 51-100 %														
	bedded		bedded		bedded		bedded		bedded					
Available	4	66.67	18	94.74	24	88.89	4	100	7	100				
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0				
Not Mentioned	0	0	0	0	1	3.7	0	0	0	0				
Total	6	100	19	100	27	100	4	100	7	100				

	Table. 6.3b       MTP Facilities Dirty utility/Sluice room													
MTP Facilities 1-5 % 6-15 % 16-30 % 31-50 % 51-100 %														
	bedded		bedded		bedded		bedded		bedded					
Available	4	66.67	18	94.74	24	88.89	4	100	7	100				
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0				
Not Mentioned														
Total	6	100	19	100	27	100	4	100	7	100				

	Table 6.3c												
MTP Facilities-Instrument sleriliza (autoclave room)													
MTP Facilities	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%			
	bedded		bedded		bedded		bedded		bedded				
Available	4	66.67	18	94.74	24	88.89	4	100	7	100			
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0			

Not Mentioned	0	0	0	0	1	3.7	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100
				Table	6.3d.					
			MTP Fac	cilities-O	peration	Theatre				
Facilities MTP	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
	bedded		bedded		bedded		bedded		bedded	
Available	4	66.67	18	94.74	25	92.59	4	100	7	100
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0
Not Mentioned	0	0	0	0	0	0	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

			MTP Fa		e 6.3e. Operation	Theatre					
MTP Facilities     1-5     %     6-15     %     16-30     %     31-50     %     51-100     %											
	bedded		bedded		bedded		bedded		bedded		
Available	4	66.67	18	94.74	24	88.89	4	100	7	100	
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0	
Not Mentioned	0	0	0	0	1	3.7	0	0	0	0	
Total	6	100	19	100	27	100	4	100	7	100	

	Table 6.3f.     MTP Facilities - Safety measures e.g. Insulation													
MTP Facilities 1-5 % 6-15 % 16-30 % 31-50 % 51-100 %														
	bedded		bedded		bedded		bedded		bedded					
Available	4	66.67	12	63.16	13	48.15	3	75	6	85.71				
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0				
Not Mention	0	0	6	31.58	12	44.44	1	25	1	14.29				
Total	6	100	19	100	27	100	4	100	7	100				

			MT		le 6.3g. ies-Store	room						
MTP Facilities     1-5     %     6-15     %     16-30     %     31-50     %     51-100     %												
	bedded		bedded		bedded		bedded		bedded			
Available	4	66.67	18	94.74	24	88.89	4	100	7	100		
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0		
Not Mentioned	0	0	0	0	1	3.7	0	0	0	0		
Total	6	100	19	100	27	100	4	100	7	100		

	Table 6.3h.												
MTP Facilities-Theatre pack preparation room													
MTP Facilities 1-5 % 6-15 % 16-30 % 31-50 % 51-100 %													
	bedded		bedded		bedded		bedded		bedded				
Available	4	66.67	17	89.47	24	88.89	4	100	7	100			
Not Available	2	33.33	1	5.26	2	7.41	0	0	0	0			
Not Mention	0	0	1	5.27	1	3.7	0	0	0	0			
Total	6	100	19	100	27	100	4	100	7	100			

	Table 6.4b.									
Caesarean Section Facilities - Dirty utility/cluice room										
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Caesarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	18	94.74	25	92.59	4	100	7	100

Not Available	3	50	1	5.26	1	3.7	0	0	0	0
Not Mentioned	0	0	0	0	1	3.7	0	0	0	0
Total	6	100	19	100	27	99.99	4	100	7	100

Table 6.4c.										
Caesarean Section Facilities - Instrument sterilization (autoclave) room										
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Caesarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	18	94.74	26	96.3	3	75	7	100
Not Available	3	50	1	5.26	1	3.7	1	25	0	0
Not Mentioned	0	0	0	0	0	0	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

	Table 6.5 d.									
<b>Caesarean Section Facilities - Operation theatre</b>										
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Casarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	16	84.21	24	88.89	4	100	7	100
Not Available	3	50	1	5.26	1	3.7	0	0	0	0
Not Mentioned	0	0	2	10.53	2	7.41	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

Table 6.4 e.       Caesarean Section Facilities - Recovery room										
Facilities for     1-5     %     16-30     %     31-50     %     51-100     %										
Caesarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	13	68.42	15	55.56	4	75	5	71.43
Not Availablle	3	50	1	5.26	1	3.34	0	0	0	0
Not Mentioned	0	0	5	26.32	12	41.1	0	25	2	28.57
Total	6	100	19	100	28	100	4	10	7	100
								0		

Table 6.4 f       Caesarean Section Facilities - Safety measure e.g. Insulation										
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Caesarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	18	94.74	25	92.59	4	100	7	100
Not Available	3	50	1	5.26	1	3.7	0	0	0	0
Not Mentioned	0	0	0	0	1	3.71	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

Table 6.4 g.							
<b>Caesarean Section Facilities - Store Room</b>							

Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Caesarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	17	89.47	24	88.89	4	100	7	100
Not Available	3	50	1	5.26	1	3.7	0	0	0	0
Not Mentioned	0	0	1	5.27	2	7.41	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

Table 6.4 h. Caesarean Section Facilities - Theatre pack preparation Room										
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%
Caesarean Section	bedded		bedded		bedded		bedded		bedded	
Available	3	50	17	89.47	24	88.89	4	100	7	100
Not Available	3	50	1	5.26	1	3.73	0	0	0	0
Not Mentioned	0	0	1	5.27	2	7.38	0	0	0	0
Total	6	100	19	100	27	100	4	100	7	100

	Table 6.4 I       Caesarean Section Facilities - Waiting room (Attendants)										
Facilities for	1-5	%	6-15	%	16-30	%	31-50	%	51-100	%	
Caesarean Section	bedded		bedded		bedded		bedded		bedded		
Available	3	50	18	94.74	24	88.89	4	100	7	100	
Not Available	3	50	1	5.26	1	3.7	0	0	0	0	
Not Mentioned	0	0	0	0	2	7.41	0	0	0	0	
Total	6	100	19	100	27	100	4	100	7	100	

# **DISSEMINATION:**

Institute of Health Systems has organised State wide workshop on "The Private Health Sector in Andhra Pradesh" on May 23rd & 24 the 1998. One of the main aim of the

workshop is dissemination of project activities and results of this project. Participants were invited from all over the state. Some participants from institutions outise of A.P. And known to have an understanding of various issues regarding development of private health sector were invited. An effort was made to identify persons with intimate knowledge and understanding of the private hospitals and nursing homes in A.P. Representatives of the AP Nursing Home Association, State Branch of the Indian Medical Association, persons associated with the Medical Council of India, persons associated with the Medical Council of India, Nursing Council, media and press etc, were invited. During the workshop various issues were discussed on quality of health care services in private hospitals in A.P and the present project activities, women's perception on private sector, formulation of standards and implementation were also discussed. (Mahapatra P & Nagarjuna, 1998)

#### CONCLUSION

In the procedure of Quality Assurance specification of standards, observation of practice, comparision of practice with standards and initiation of action for improvement is the basic model (Ellis and Whittington 1993). Hence conclusion of this report would be the end of the project but not the end of the process of quality assurance. This project is the pioneering step of r implementation of standards in private hospitals in future.

It is quite appreciating that private sector is providing majority of health care services where there is no access for health care services at all. It is also important to note that provision of minimum quality of services is a vital point to be considered. In the present Quality assessment study in the private hospitals it was found that

- Number of untrained personnel are more who are called as Nurses, Compounders and Lab Technicians.
- 2. Basic minimum infrastructural facilities, equipment and specific physical facilities are lacking in many hospitals which are presented in the report in detail.
- In management of emergencies there is no proper referral system, lack of availability of blood bank/bleeding facilities in many of the hospitals, no proper transport system was noticed.
- 4. There is no proper maintenance of Medical Records in many of the hospitals.

From the quality assessment field based study few recommendations are to be considered.

- 1. Private health care sector need proper Regulation
- 2. Proper Registration of Nursing Homes, renewal of licenses should be strictly enforced.
- 3. Regulation of cost in private health sector
- 4. Consumer awareness about the services provided by private hospitals
  - Their rights
  - Involvement of private practitioners in National Health Programems
  - Incentives or any policies regarding treatment in private hospitals need to be disseminated

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Annexure

**Interview Schedule** 

# THE INSTITUTE OF HEALTH SYSTEMS

5-9-22/27, Adarsh Nagar, Hyderabad 500 063 TEL: 23211013/4, 23210136/9, FAX: 23241567, email: ihs@ihsnet.org.in (Information provided will be used only for aggregate analysis and will be treated as confidential. The names & identity of respondents will not be disclosed under any circumstances)

# AN ENQUIRY INTO QUALITY OF REPRODUCTIVE HEALTH CARE PROVIDED AT PRIVATE HOSPITALS AND NURSING HOMES & WOMEN'S PERCEPTION **IN ANDHRA PRADESH**

SC	HEDULE NUMBER:		
1.	Name & Complete Address of the Institution	:	
2.	Rural / Urban	:	
3.	District	:	
4.	Name of Respondent/Incharge Doctor	:	
5.	Qualification & Designation	:	
	Whether Owner	:	Yes / No
	Type of ownership	:	
	JI I I I I I I I I I I I I I I I I I I		1.Individual Proprietorship
			2.Partnership
			3.Trust
			4.Society
			5.Co-operative
			6.Corporate
			7. Any other specify
8.	Ownership	:	1.Owned
	1 I		2.Rented
			3.Lease
			4. Any other specify
9.	Year of establishment	:	
10	. Total Area	:	Sqft
11	. Number of Beds	:	
11	aNumber of Maternity Beds.	:	
12	. Services Provided	:	
			1.Medical
			2.Surgical
			3. Obstetrics & Gynaecology
			4.Paediatrics
			5.Others specify:
13	. If Obstetric and Gynaecological services are	e av	ailable do they perform the followin

ıg procedures:

- 1. Normal delivery
- 2. Caesarean Section
- 3. Medical Termination of Pregnancy
- 4. Common Gynaecological Diseases
- 5. Any other specify

14. V	Who are	providing	the Obstetric	c & Gynaec servic	es
-------	---------	-----------	---------------	-------------------	----

- 15. Is there a visiting room
- 16. Is there a separate room for consultation/examination room
- 17. Is there a preparation room

- : Male / Female Doctor
- : Yes/No
- : Yes/No
- : Yes/No
| <ul><li>18. Is there a treatment room</li><li>19. Do the hospital have Lab Facility</li></ul>   | : Yes/No<br>: Yes/No  |
|---|---|
| If yes list of tests:   | 1         2         3         4         5         6         7 |
| <ul><li>20. Is there a Blood Bank facility</li><li>21. If no, what do you do when there is need of blood?</li></ul>   | : Yes/No<br>:   |
| <ul> <li>22. Is there a pharmacy/medical shop in your hospital</li> <li>23. If no, is there a pharmacy/medical shop nearby</li> <li>24. In the case of Obstetric emergencies, where do you refer t</li> </ul>   | : Yes/No<br>: Yes/No<br>he patient? Give details.             |
| <ul><li>25. Did you come across any mother with HIV/AIDS</li><li>25.1 If yes, give details.</li></ul>   | : Yes/No  |
| <ul> <li>26. Do you maintain any medical records: <ol> <li>Births</li> <li>Deaths</li> <li>Deaths</li> <li>Admissions</li> <li>Out Patients</li> <li>In Patients</li> <li>Referrals</li> <li>Operation Records</li> <li>Others specify</li> </ol> </li> </ul> |   |
| 27. Area per bed (approximately)       :  | ne/Intercom) : Yes/No<br>ngs : Yes/No                         |

 36. Number of lavatories
 :
 Staff
 : Yes / No Number:\_\_\_\_\_

Patients :	Yes	/ No	Number:
------------	-----	------	---------

37. Number of bathrooms	:	Staff	: Yes / No Number:
38. Sterilisation facility	:	Patients 1. Dry Steam 2. Vertical Au 3. Steam Steri 4. Boiling 5. Any Other	itoclave iliser
		•	· ·

39. Is there an Ambulance

: Yes / No

40. If no, how do you transfer / refer patient? What is the mode of transport?

41. Waste disposal method:	Is there a dust bin	: Yes / No
42. Treatment of waste		: 1. Landfill
		2. Burning
		3. Common Garbage
		4. Incineration
		5. Any other specify
43. Note on waste disposal	:	
1. Disinfection of was	ste:	
2. Special bins as per	APPCB:	
44. How is the water facility	:	
1. 24 hours		
2. Limited hours		
3. Any other please sp	pecify:	
45. Do the hospital get 1. Put	rified water 2. Unpu	rified ?
46. Number of Out patients p	er day	
47. Number of In patients per	r day	
48. What do you think are the	e factors for getting	more patients to your hospitals?

#### HUMAN POWER

### • Type of personnel needed

S.No.	Personnel	Total number	Number of staff Partime/ Full time/ Consultants	Qualifications	Remarks
1	Auxiliary Nurse Midwife				
2	Diploma Nurse				
3	Graduate Nurse				
4	MBBS graduate				
5	MBBS graduate with Diploma and Gynaecology and Obstetrics				
6	MBBS graduate with MD in Gynaecology and Obstetrics				

S.L.	Personnel	Total number	Number of staff Part time/ Full time/ Consultants	Qualifications	Remarks
7	MBBS with MD in Anaesthesis/ Diploma in Anesthesia				
8	MBBS with MD in Paediatrics/ Diploma in Paediatrics				
9	Lab Technician				
10	Class four employees				
11	If any other staff please specify and mention in detail their qualifications				

	Available(A) / Not	Remarks			
Equipment	Available (NA)	(Please check whether the equipment are			
	If Available Number	in working condition)			
<b>EQUIPMENT/INSTRUMENTS</b>					
INSTRUMENTS SPECIFIC FOR NORMAL DELIVERY					
Apron (Plastic)					
Delivery Set					
2.1. Bowl, Stainless steel (4")					
2.2. Dissecting forceps (6")					
2.3. Artery forceps 8-10" (Kelly's)					
2.4. Square tray big (Steel) for placenta					
2.5. Scissors, cord cutting					
2.6. Thread for cord tying					
2.7. Sterile pads					
2.8. Large cotton swabs to clean perineum (for mother) in the bowl					
2.9. Small Cotton swabs (to clean baby's eyes)					
2.10. Mucus sucker					
2.11. Drapes					
Baby resuscitation Tray					
3.1. Ambu bag (Paediatric)					
3.2. Oxygen mask					
3.3. Endotracheal tubes (2" & 2.5")					
3.4. Paediatric Laryngoscope (2" & 2.5")					
3.5. Suction Catheters (Preferably disposable, paediatric)					
3.6. Disposable Syringe					
Episiotomy Tray					
	Equipment         EQUIPMENT/INSTRUMENTS         INSTRUMENTS SPECIFIC FOR NORMAL DELIVERY         Apron (Plastic)         Delivery Set         2.1. Bowl, Stainless steel (4")         2.2. Dissecting forceps (6")         2.3. Artery forceps 8-10" (Kelly's)         2.4. Square tray big (Steel) for placenta         2.5. Scissors, cord cutting         2.6. Thread for cord tying         2.7. Sterile pads         2.8. Large cotton swabs to clean perineum (for mother) in the bowl         2.9. Small Cotton swabs (to clean baby's eyes)         2.10. Mucus sucker         2.11. Drapes         Baby resuscitation Tray         3.1. Ambu bag (Paediatric)         3.2. Oxygen mask         3.3. Endotracheal tubes (2" & 2.5")         3.4. Paediatric Laryngoscope (2" & 2.5")         3.5. Suction Catheters (Preferably disposable, paediatric)         3.6. Disposable Syringe	EquipmentAvailable(A) / Not Available (NA) If Available NumberEQUIPMENT/INSTRUMENTSINSTRUMENTS SPECIFIC FOR NORMAL DELIVERYApron (Plastic)Delivery Set2.1. Bowl, Stainless steel (4")2.2. Dissecting forceps (6")2.3. Artery forceps 8-10" (Kelly's)2.4. Square tray big (Steel) for placenta2.5. Scissors, cord cutting2.6. Thread for cord tying2.7. Sterile pads2.8. Large cotton swabs to clean perineum (for mother) in the bowl2.9. Small Cotton swabs (to clean baby's eyes)2.10. Mucus sucker2.11. DrapesBaby resuscitation Tray3.1. Ambu bag (Paediatric)3.2. Oxygen mask3.3. Endotracheal tubes (2" & 2.5")3.4. Paediatric Laryngoscope (2" & 2.5")3.5. Suction Catheters (Preferably disposable, paediatric)3.6. Disposable Syringe			

#### CONDUCTING SINGLE INSTITUTIONAL NORMAL DELIVERY

	4.1. Bowl, Stainless steel for Xylocaine		
	4.2. Forceps dissecting Toothed		
	4.3. Forceps dissecting Non toothed		
S.N.	Equipment	Available (A)/ Not Available (NA) If Available Number	Remarks (Please check whether the equipment are in working condition)
	4.4. Episiotomy Scissors		
	4.5. Sponge holder		
	4.6. Needle holder		
	4.7. Cotton balls/Swabs to clean perineum		
	4.8. Sterile pads		
	4.9. Sterile drape (Fenestrated))		
	4.10. Sutures and ligatures. 1-0 Chromic catgut, ties and with		
	needles- (curved, cutting & round body)		
	4.11 Try (to accommodate all the instruments and pads etc., mentioned above)		
	/		
5	4.12. Disposable 10 c c Syringe needles for Xylocaine		
	Obstetric Forceps Tray           5.1 Mid low forceps/ Obstetric Furguson		
	5.2 Obstetric. Wringly's		
	5.3 Obstetric Cream Jar with cover		
	5.4 Urethral Catheter		
6	Vacuum extractor		
7	Foetoscope		
8	Cheatle forceps with jar		
9	I/V Stand		
10	Jugs		
10	Mackintosh (for Labour table & Examination table)		
11	Opthalmoscope		
12	Air way		
15			

14	Oxygen Cyling\der/Trolley/gas		
15	Pint measure		
16	Ryles Tubes (Paediatric)		
		Available (A)/ Not	Remarks
S.N.	Equipment	Available (NA) If	(Please check whether the equipment are in
		Available Number	working condition)
17	Shadow less lamp		
18	Angle poice lamp		
19	Spygmomanometer with Stethoscopoe(Free and Standing)		
20	Thermometer Rectal		
21	Torch working with cells		
22	Labour table		
23	Labour foot stool		
24	Patient Trolley		
25	Dressing Trolley		
26	Wheel chair		
27	Weighing machine for baby		
28	Bed Pan (Steel preferably)		
29	Needle breaker		
30	Refrigerator Frost Free (165 Litres)		
	DRUGS AND FORMULARY		
31	Methergin 0.2 mg/ml, Inj. 1ml		
32	Oxytocin 0.2 units/ml, Inj.,2units/ml		
	I/V Fluids		
33	i) 5% Dextrose, Inj. 540 ml		
34	ii) 5% Dextrose Saline 540 ml.		
35	iii) Ringer lactate 540 ml.		
36	iv) 25% Dextrose 100 ml.		

37	v) Sodium Chloride 0.9 % W/VInj. 450 ml		
	List of Emergency Drugs		
38	Soda bicarbonate 7.5% W/V. IV.Inj 10ml		
39	Atropine Suophate. 0.5 mg/ml. Inj. 1ml		
40	Adrenaline Tratarate. Inj. 1ml		
		Available (A) / Not	Remarks
S.N.	Equipment	Available (NA) If	(Please check whether the equipment are in
		Available Number	working condition)
41	Hydro cortsome Sodium Succinate Inj. 100mg OR Hydrocortisone		
	Acetate		
42	Calium Gluconate 10% W/V Ijnj. 10ml		
43	Diazepam, 5mg.ml. Inj 2ml		
44	Prostidine		
	BLOOD BANK FACILITY		
45	Blood Bank		
46	Plasma expanders		
	STERILISATION FACILITY STANDARD		
47	Instrument sterilizer (Autoclave with two bins)		
	LINEN		
48	Bed sheets		
49	Towels (80 x 80 cm)		
50	Gowns		
51	Wrappers		
52	Drapes		
53	Towels for hand washing		
54	Surgical mops		
55	Cleansing mops		
56	Caps		

			1
57	Masks		
58	Mattresses		
	HOUSE KEEPING		
59	Cabinet for instruments		
60	Buckets Stainless steel		
61	Placenta disposing bin		
62	Dustbin for labour room waste		
		Available (A) / Not	Remarks
S.N.	Equipment	Available (NA) If	(Please check whether the equipment are in
		Available Number	working condition)
63	Screen (Screen Stand)		
64	Chappals		
	CONSUMABLES		
65	Soap for hand washing		
66	Disinfectants/Antiseptic solutions		
67	Spirit		
68	Savlon (sterilising solution)		
	DISPOSABLES		
69	Sterile gloves (Preferably disposable)		
70	Suction Catheters (P referably disposable, paediatric)		
71	Intravenous sets		
72	Sterile pads		
73	Sterile cotton swabs		
74	Syringes and needles 10cc, 5 cc, 2cc (disposable)		
75	Urinary Catheters (Preferably disposable)		

## CONDUCTING SINGLE CAESAREAN SECTION EQUIPMENT NEEDED

### **w EQUIPMENT FOR OPERATION THEATRE**

S.No.	Equipment	Available (A)/ Not available (NA) If available number	Remarks
1	Operating-room light (shadowless movable)		
2	Formalin vaporizer for fumigation		
3	Portable room lights with stands (for emergencies)		
4	Vertical Steam autoclave		
5	Electric sterilizer for boiling instruments		
6	Jar with Cheatle Forceps		
7	Cylindrical sterilizing bins (size of the bins according to the autoclave)		
8	Instrument trolleys		
9	Table to keep the sterile linen / glove		
10	Foot stools		
11	Trolley/strecher with combination wheel and adjustable sides		
12	Titable Operating table, universal frame-type with headpiece		
13	Instrument stands with trays (Mayo stand)		
14	Stands with hooks for swabs		
15	Portable aspirating surgical suckers, foot-operated		
16	Stainless steel buckets with covers		
17	Dressing trays Medium		
18	Dressing trays Large		
19	Covered instrument trays 8" x 12"		
20	Instrument trays with handles		
21	Instrument and catheter trays		
22	Stainless-steel jugs, 4 litre, graduated		
23	Utility basins, 3 litre stainless steel		
24	Washable foot wear (Shock proof)		

S.No.	Equipment	Available (A)/ Not available (NA) If available number	Remarks
25	Graduated drainage (Collecting ) bottles, glass 1.5 liter bottles for suction apparatus		
26	Heavy-duty "counter" scissors		
27	Latex tubing :10.0 mm inner diameter (for suction apparatus)		
28	Connector for tubing, assorted, ins		
29	Utility apron, opaque plastic		
30	Rubber sheeting, double-coated, (mackintosh)		
31	Eye shields		
32	Instrument Clips		
33	Clipboards		
34	Battery-operated wall clock with hands showing time in seconds, minutes,		
	and hours		
35	Pillow (for hypo tension)		
36	Mercury sphygmomanopmeter with cuff on stand		
37	Stethoscopes, binaural (bell and diaphragm)		
38	Fetal stethoscope		
39	Tape measure		
40	Clinical thermometers: oral		
41	Rectal Thermometer		
42	Torch, battery-operated		
43	Clothes-pegs		
	DISPOSABLES		
44	Self-retaining ballon urinary catheters (disposable), sizes 8,10,12 and 14 ch.		
	(Follwy's)		
45	Scalpel blades, No.11,22		
46	Urethral catheters, sizes 8,10,12,14 and 16 ch		
47	Urinary bags (disposable)		

S.No.	Equipment	Available (A)/ Not available (NA) If available number	Remarks
48	Surgeon's latex glove, sizes 6, 6.5, 7, 7.5, 8 (disposable is preferable)		
49	Nasogastric tubes (Levine), 12ch (disposable)		
50	Spinal needles		
51	Infant feeding tube Infant-size, 5-6 ch, 38 cm long (disposable)		
52	Intracath Disposable (Webster Luer)		
53	Scalp-vein infusion sets disposable		
54	Face masks and caps (should be adequate)		
55	Guaze bandages (should be adequate)		
56	Absorbent Guaze for dressing, Swabs, abdominal packs, petrolatum guaze)		
57	Absorbent Guaze (for dressings, swabs, abdominal pads, packs, petrolatum		
	guaze etc.,)		
58	Absorbent cotton wool		
	LINEN		
59	Gowns (Should be adequate)		
60	Drapers (Should be adequate)		
	CONSUMABLES		
61	Linen tape		
62	Umbilical tape		
63	Indelible pencils (marks the uterine fungus in accidental haemorrhage etc.)		
64	Surgical adhesive tape		
65	Double edged safety razor blades		
66	Chromic catgut and (3/0, 2/0)		
67	Plain catgut, 0. with and without needles (sub cutaneous)		
68	Nylon and silk with and without needles 0. No 1, Barbers thread No.20		
	SPECIFIC INSTRUMENTS FOR CAESAREAN SECTION		
69	B.P. Handle		

70	Scissors (Straight-1, Curved-1)		
S.No.	Equipment	Available (A)/ Not available(NA) If available number	Remarks
71	Needle holders		
72	Artery forceps 6" (Straight -6, Curved - 6)		
73	Thumb forceps toothed		
74	Thumb forceps Non-toothed		
75	Doyen's bladder retractor		
76	Simpson's Speculum		
77	Babcocks		
78	Sponge holders		
79	Towel clips (Large-6, small - 6)		
80	Suction tube (Poole's pattern)		
81	Green armytage		
82	Allis forceps		
83	Needles (Skin-2, Rectus Sheath-2, Peritoneum -2 (RB), Uterus -2 (RB)		
84	Catgut 1/0, 2/0 ch.		
85	Kidney Trays		
86	Small Bowls		
87	I/V Stand		
88	Basin Stands		
89	Buckets with Sodium Hypo Chloride solution or Bleaching powder		
	solution		

# CONDUCTING SINGLE CAESAREAN SECTION EQUIPMENT NEEDED ANAESTHESEA EQUIPMENT (For Caesarean Section)

S.No.	Equipment	Available / Not Available (NA) If available number	Remarks
1	Anaesthetic vaporizers, for ether, halothone		
2	Anaesthetic face masks large adult size (2 of each size total 14)		
3	Ambubag (Anaesthetic breathing bags)		
4	Boyel's apparatus		
5	Sphygmomanometer		
6	Pulse Oxymeter for measuring SPO2 & PP		
7	POET (Pulse Oxymeter and Enditidal Carbondioixide monitor)		
8	E.C.G. Monitor with Defibrillation Unit		
9	Central venous pressure monitoring unit		
10	Catheter mounts (sometimes also called endotracheal tube connectors), antistatic		
	rubber		
11	Endortracheal tubes, m sizes, 6, 6.5, 7, 7.5, cuffed (Rubber) with amendment No.1		
12	Endotrachesl tube connectors, 15mm plastic (can be connected directly to the		
	breathing valve)		
13	Epidural needles No.16		
14	Epidural catheters		
15	Intravenous infusion sets		
16	Intracaths No.18		
17	Laryngeal mask airways (Anesthetic airways)		
18	Laryngoscopes (2 handles + 3 pairs of blades or 4 plastic laryngoscopes (2 adult + 1		
	Paediatric ) Functional		
19	Magill's intubating forceps (in an emergency ovum forcep can be used)		
20	Needles and cannuals for intravenous use, including paediatric sizes		
21	Oxygen supply by poly mask		
22	Oropharyngeal airway, sizes 00 to 3.5 one inch size (2 of each size total 12)		
S.No.	Equipment	Available / Not Available (NA) If available number	Remarks

23	Spare bulbs for laryngoscopes		
24	Spinal needles range sizes 22 guage to 24 guage		
25	Urethral bougies, for use as intubating stylets		
26	Guaze swabs		
27	Antiseptic solution (Formalin/Savlon/Cydex/Concetrated dettol/Formalinevaporizers)		
28	Sterile drapes		
29	Sterile glove.2		
30	Suction apparatus		
	Mother (30 pounds negative pressure)		
31	Sodalime absorber Boyel's - Sodalime canisters for use with gas anesthetic apparatus		
32	Xylocaine Jelly		
33	Spirit		
34	Cotton Swabs		
	DRUGS & FORMULARY		
	Anaesthetic drugs		
35	Atropine Sulphate 0.5 mg/ml, Inj 1 ml		
36	Diazepam, 5mg/ml, Inj. 2ml		
37	Ketamine		
38	Pavalon		
39	Pentothal vial		
40	Scoline		
41	Prostigmine		
42	5% Xylocaine		
43	0.5% Bupivicaine		
44	Vecromine		
45	2% Xylocaine		
46	Morphine 10 mg/ml, Inj, 1 ml		
	EMERGENCY DRUGS		
S.No.	Equipment	Available / Not Available	Remarks

		(NA) If available number	
47	Atropine Sulphate, 0.5 mg/ml, Inj., 1ml		
48	Adrenaline Tartarate, Inj, 1 ml		
49	Dopamine		
50	Digoxine		
51	Decadron vials		
51	Decadron vials		
52	Etcorlin (Hydrocortisone)		
53	Fortwin		
54	Calcium Gluconate / Chloride, 10%, W/V Inj 10ml		
55	Sodium bicarbonate, 7.5% W/V, IV, Inj, 10ml		
56	Morphine 10mg/ml, Inj 1ml		
57	Voveran		
58	Frusamide, 10mg/ml Inj, 2ml		
59	Aminophyline, 2.5% W/V or 2.5 W/V Inj. 10 ml & 2 ml		
60	Deriphyline		
	Drugs for Uterine contraction		
61	Methergin 0.2 mg/ml, Inj, ml		
62	Oxytocin .2 units/ml, Inj . 2 units / ml		
63	Prostidin		