

Existing Record Keeping System in Government Teaching Hospitals of Karachi

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Abstract

Objective: To determine the deficiencies in the existing record keeping system (ERKS) in government teaching hospitals of Karachi.

Study design: Descriptive, qualitative study to determine the deficiencies in the ERKS in government teaching hospitals of Karachi.

Setting: The study was conducted in four government teaching hospitals of Karachi from 1.1.1998 to 1.11.1998. **Methods:** A total of 9725 pre-coded proformas were filled from 136 units of all hospitals including out patient departments (OPD), wards and emergency units.

Results: Majority of the records (52.2%) were retrievable within one hour. The mean \pm S.D of patients seen per day at all hospitals were 122.49 \pm 92.25(57 OPDs), 30.04 \pm 16.24(75 wards) and 186.25 \pm 145.80(4 emergencies). In majority of units (57.4%), the stationary for record keeping system was either not provided or was not enough. Only 39.0% units have 75% or more required information on records. The important information (except age) i.e temperature, pulse rate, blood pressure, diagnosis, weight, history of patient, laboratory findings, previous record and discharge report' and prescribed doses of medicine were lacking.

Conclusion: The ERKS in the government hospitals of Karachi is inadequate. it is therefore essential that uniform OPD, ward and emergency slips should be developed having all-important queries. So that data could be utilized for research purposes along with better planning and management of the hospital and procurement plan for the government (JPMA 52:163;2002).

Introduction

Karachi, one of the major cities of Pakistan, has a population of 9.8 million^{1,2} though estimated to be: 13 million and an annual growth rate of 9-10%. There are four major government teaching hospitals in Karachi 'with a substantial daily turn over of patients. (4600-6900)^{3,4}.

Published data from Pakistan on the availability of records from OPD, wards and emergency units are lacking or not of good quality. It is assumed that data from these sources is not properly analyzed and not easily accessible in government teaching hospitals.

This study was done to assess whether the record keeping system in the government teaching hospitals is deficient and lacks quality or it is an assumption.

Methodology

A descriptive qualitative study including interview, evaluation and observation was done at all departments of government teaching hospitals of Karachi i.e., Civil Hospital (CH), Lyari General Hospital (LGH), Jinnah Postgraduate Medical Center (JPMC) and National Institute of Child Health (NICH) having 136 units including out patient department, wards and emergency.

The data was collected through three major precoded questionnaires i.e., Observation, Interview and Evaluation.

The interview questionnaire was filled from five persons where available at each unit. They were The whole data was collected by the investigators in each hospital by rotation, so that one investigator covered the wards of one hospital and OPD of the other hospital.

Ethical Consideration

The work was started after getting written permission from the Medical Superintendents of the respective hospitals who took permission from the Director General of Health Services if necessary. Medical Superintendents informed each head of the department through letter/circular. The investigators also took verbal consent from each Head of the units after providing verbal information concerning the project.

Statistical Analysis

Data recorded in the pre-coded proformas was stored in computer by means of EPI Info and SPSS 7.0 for Windows 98.

Results

This study covered 57 OPD's, 75 wards and 4 emergency units of the four government teaching hospitals of Karachi. Out of these, 55 were from CH, 46 from JPMC, 24 from LGH and ii from NICH. (Table 1).

Table 1. Number of OPD's, wards and emergency units.

	CHK	JPMC	LGH	NICH	Total
OPD	20	21	14	2	57
Wards	34	24	9	8	75
Emergency	1	1	1	1	4
Total	55	46	24	11	136

From all above 136 units, a total of 9725 proformas (136 observation, 316 interview and 9273 evaluation) were filled for assessment of patients record, load of work, atmosphere and availability of other essential items.

Table 2. Availability of space.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Not Spacious/ Uncomfortable	26	19.1	22	16.2	8	5.9	2	1.5	58	42.7
Spacious/ Comfortable	29	21.4	24	17.6	16	11.7	9	6.6	78	57.3
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

The condition of the records kept in store rooms were also observed. Majority (80.9%) of records were safe and easily readable (Table 3).

Table 3. Position of records stored.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Not present/ Shifted elsewhere	1	0.7	19	14.0	1	0.7	0	0.0	21	15.4
Available but not readable	0	0.0	1	0.7	0	0.0	0	0.0	1	0.7
Available and readable	54	39.8	26	19.8	23	16.9	11	8.1	114	83.9
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

The information on records was assessed according to the criteria laid down in the evaluation questionnaire. Only in 39.0% units, more than 75% information was available (Table 4).

Table 4. Information available on records.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Information absent/ not available	1	0.7	19	14.0	1	0.7	0	0.0	21	15.4
Upto 25% Information available	19	14.0	12	8.8	13	9.5	2	1.5	46	33.8
>25%---75% information available	6	4.5	5	3.6	4	3.0	1	0.7	16	11.8
>75%---99% information available	24	17.6	8	5.9	6	4.4	7	5.2	45	33.1
100% information available	5	3.7	2	1.5	0	0.0	1	0.7	8	5.9
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

The mean with S.D. of patients seen per day at each OPD was 122.49±92.25 in ward 30.04±16.24 and in emergency was 186.25±145.80 (Table 5).

Table 5. Mean \pm SD of patients seen per day in each OPD / ward / emergency.

	OPD	Ward	Emergency
CHK	127.75 \pm 106.64	30.12 \pm 15.29	400.00 \pm 00.00
JPMC	154.67 \pm 93.55	32.83 \pm 19.47	150.00 \pm 00.00
LGH	68.86 \pm 38.02	18.78 \pm 9.48	120.00 \pm 00.00
NICH	107.50 \pm 60.10	34.00 \pm 11.34	75.00 \pm 00.00
Total	122.49 \pm 92.25	30.04 \pm 16.24	186.25 \pm 145.80

The interview questions were put to different categories of staff. The information regarding stationary, place of storage availability and time required for retrieval of records, was obtained from all 136 units. The questionnaire was filled by 136 doctors, 81 nurses, 60 registration clerks, 30 ward masters and 9 record keepers. In most of the units (57.4%) stationary was either not available at all or was not enough (Table 6).

Table 6. Availability of stationery.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Not available/not present/ not provided	15	11.0	0	0.0	13	9.6	0	0.0	28	20.6
Not enough present	27	19.9	8	5.9	11	8.0	4	3.0	50	36.8
Present enough	13	9.6	38	27.9	0	0.0	7	5.1	58	42.6
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

The working atmosphere was comfortable in most (58.8%) of the units (Table 7).

Table 7. Working atmosphere.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Uncomfortable	23	16.9	9	6.6	19	13.9	5	3.7	56	41.2
Comfortable	32	23.6	37	27.2	5	3.7	6	4.4	80	58.8
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

Majority of records (55.9%) were kept either in the store room or nurses duty room. The rest of the records were stored either at Deputy Medical Superintendent's (DMS) office or statistical unit or in the storeroom of other departments.

As far as record retrieval was concerned, in majority units (61.2%), the record was available for one year or more. In 7.2% units, more than one month but less than one year record was available. In rest of the units, the record was either not available or shifted elsewhere (Table 8).

Table 8. Record retrievable position.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Not available/ shifted elsewhere	9	6.6	25	18.4	6	4.4	1	0.7	41	30.1
> One week but less than one month	2	1.5	0	0.0	0	0.0	0	0.0	2	1.5
>One month but less than one year	6	4.4	1	0.7	2	1.4	1	0.7	10	7.2
One year or more	38	28.0	20	14.7	16	11.8	9	6.7	83	61.2
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

In all the hospitals, the speed for retrieval of records was good. In majority of units (58.8%) records could be obtained within a day (Table 9).

Table 9. Speed for retrieval of records.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Not available/ shifted elsewhere	7	5.1	25	18.4	6	4.4	1	0.7	39	28.6
> One day	14	10.3	0	0.0	3	2.2	0	0.0	17	12.5
>One hour but less than one day	4	3.0	0	0.0	3	2.2	2	1.5	9	6.7
Less than one hour	30	22.1	21	15.4	12	8.8	8	5.9	71	52.2
Total	55	40.5	46	33.8	24	17.6	11	8.1	136	100.0

For evaluation purposes, 5% records from each OPD, ward and emergency were randomly selected.

In OPD's of all the four hospitals (57 0 PD's), a total of 7590 records were randomly selected. Out of these, 3231 were from CH, 2698 from JPMC, 1265 from LGH and 396 Majority of records (55.9%) were kept either in the store room or nurses duty room. The rest of the records were stored either at Deputy Medical Superintendent's (DMS) office or statistical unit or in the storeroom of other departments.

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In OPD's of all the four hospitals (57 0 PD's), a total of 7590 records were randomly selected. Out of these, 3231 were from CH, 2698 from JPMC, 1265 from LGH and 396 from NECH. The mean with S.D. per OPD was 133.16 ± 117.69 . Age of the patient was available on 87.9% of the records. Age was recorded for 100% patients at CH and NICH, whereas at JPMC and

LGH it was 87.7% and 53.6% respectively. The information regarding height and blood pressure was totally missing in all the hospitals. Specific or provisional diagnosis, which is a very important factor, was also missing in the majority (78.4%) of the records. At NICI I it was totally not recorded. The other important information i.e. weight, temperature, pulse rate, prescribed dose of medicine, record of previous visit and signature and designation of the doctor were also lacking at all the hospitals (Table 10).

Table 10. Record of OPD patients available.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Number of randomly selected records	3231		2698		1265		396		7590	
Age	3231	100.0	2366	87.7	678	53.6	396	100.0	6671	87.9
Weight	193	6.0	20	0.7	212	16.8	0	0.0	427	5.6
Height	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Blood Pressure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Temperature	195	6.0	5	0.2	0	0.0	0	0.0	200	2.6
Pulse rate	195	6.0	0	0.0	0	0.0	0	0.0	195	2.6
Specific diagnosis	694	21.5	813	30.1	117	9.3	0	0.0	1624	21.4
Prescribed dose of medicine	257	7.9	230	8.5	0	0.0	0	0.0	487	6.4
Record of previous visit	140	4.3	230	8.5	0	0.0	0	0.0	370	4.9
Signature and designation of doctor	226	7.0	221	8.2	0	0.0	0	0.0	447	5.9

At wards, a total of 417 records selected from all the four hospitals. (CH were randoml 198, JPMC 98,, ward was 5.56 ± 5.14 . Age was recorded for 100% patients at all the hospitals. All the other relevant information were available in majority of the cases (67.6% to 98.8%) except height and discharge report of the patients which was not available in most of the records (Table 11).

Table 11. Record of ward patients available.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Number of randomly selected records	198		98		37		84		417	
Age	198	100.0	98	100.0	37	100.0	84	100.0	417	100.0
Weight	108	54.5	5	5.1	34	91.9	84	100.0	231	55.4
Height	9	4.5	0	0.0	5	13.5	40	47.6	54	12.9
Blood Pressure	165	83.3	64	65.3	9	24.3	44	52.4	282	67.6
Temperature	180	90.9	76	77.6	32	86.5	83	98.8	371	89.0
Pulse rate	180	90.9	76	77.6	37	100.0	84	100.0	377	90.4
Specific diagnosis	197	99.5	94	95.9	37	100.0	84	100.0	412	98.8
Prescribed dose of medicine	185	93.4	89	90.8	37	100.0	84	100.0	391	93.8
History of patients	180	90.9	86	87.7	37	100.0	21	25.0	324	77.7
Laboratory findings	178	89.9	76	77.6	37	100.0	20	23.8	311	74.6
Discharge report	75	37.9	35	35.7	1	2.7	7	8.3	118	28.3

In the emergency units, a total of 1266 records were randomly selected from all the hospitals. (CH 631, JPMC 408, LGH 109 and NICH 118). The mean \pm S.D. per emergency was 3 16.50 \pm 251.49. Age was present on 91.4% of the records. Specific diagnosis was available only in NICH documents (100%). At other hospitals it was totally absent. No other information was available on any record of any hospital at emergency (Table 12),

Table 12. Record of emergency patients available.

	CHK	%	JPMC	%	LGH	%	NICH	%	Total	%
Number of randomly selected records	631		408		109		118		1226	
Age	631	100.0	408	100.0	0	0.0	118	100.0	1157	91.4
Weight	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Height	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Blood Pressure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Temperature	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pulse rate	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Specific diagnosis	0.0	0	0.0	0	0.0	0.0	118	100.0	118	9.3
History of patients	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Signature/designation of doctor	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Referral place	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Hospital : [] 1. CHK 2. J.P.M.C. Department: []
 3. L.H.G. 4. NICH

Observation Questionnaire.

No.	Questions	Coding Categories	Answer
1.	Grading of the staff with the registration patients	Actual staff Staff present	
2.	Total number of patients	Actual Estimated	
3.	Behavior of staff with patients	1. Rude 2. Uncooperative 3. Cooperative 4. Pleasant and cooperative 5. Very pleasant and cooperative	
4.	Avaliability of space	1. Not spacious 2. Uncomfortable 3. Spacious 4. Comfortable 5. Comfortable and spacious	
5.	Avaliability of furniture	1. Not present 2. Incomplete 3. Complete and improper 4. Proper 5. Very good condition	
6.	Communication between patient and staff	1. No response, no understanding 2. Partly understands but no response 3. Understands but partial response 4. Promopt response 5. Complete response	
7.	Speed accessibility to record	1. Not available 2. More than one week 3. More than one day and less than one week 4. More than one hour but less than one day 5. Less than one hour	
8.	Storage of records	1. Not present 2. Termite affected and worm out 3. Partially available but not readable 4. Available but not readable 5. Readiable with difficulty 6. Easily readable	
9.	Information on record	1. Absent/Unavialable 2. Upto 25% information is available 3. >25% - 75% information is available 4. >75% - 99% information is available 5. 100% informationis available	

Hospital: [] 1. CHK 2. J.P.M.C. Department: []
3. L.H.G. 4. NICH

Designation of respondent: []

Code: 1. Doctor; 2. Nurse; 3. Clerks; 4. Ward master; 5. Record keeper

(Fill 5 questionnaire, one of each respondent)

Interview Questionnaire.

No.	Questionnaire	Coding categories	Answer
1.	How many patients are seen here per day	Write actual number	
2.	How many hours do you work here to see patients per day?	Write actual hours	
3.	Is there enough stationery available in the department?	1. Not available/Not present/ Not provided 2. Not enough present as well as poor quality 3. Not enough present with good quality 4. Present enough but poor quality 5. Present enough with good quality	
4.	What is your feeling about working atmosphere of the department?	1. Uncomfortable and work is impossible 2. Uncomfortable but work is possible 3. Comfortable but unpleasant 4. Comfortable and pleasant	
5.	Where do you keep the records?	Specify exact place:	
6.	How old a record can be retrieved from this department?	1. Not available in this department. 2. Upto one week 3. >1 week but less than one month 4. >1 month but less than 6 months 5. >6 months but <1 year 6. One year or more 7. Shifted elsewhere	
7.	How quickly can be you retrieve a record?	1. No record available in this department. 2. Can not retrieve at all 3. More than one week 4. More than one day and less than one week 5. More than one hour but less than one day 6. Less than one hour 7. Shifted elsewhere	

Codes for department:

1. Plastic surgery (Burns unit)	2. Cardiology	3. Psychiatry	4. Dermatology
5. E.N.T.	6. Ophthalmology	7. Pediatrics	8. Gynae/Obstetrics
9. Surgery	10. Medicine	11. Neurology	12. Radiology
13. Casualty	14. Orthopaedics	15. Oro-Maxillary	16. Urology
17. Vascular surgery	18. Neuro surgery	19. Paed. surgery	20. Isolation
21. Anaesthesiology	22. Labour room	23. Nursery	24. Ortho workshop
25. Federal Govt. Officers clinic	26. Nephrology	27. Physiotherapy	28. Radiotherapy

Form number: []

Hospital [] 1. CHK 2. J.P.M.C. Dpartment: []
3. L.H.G. 4. NICH

Evaluation Questionnaire (Inpatient).

No.	Questions	Coding categories	Answer
1.	Total number of records are randomly selected?		Write exact number
2.	In how many records age of the patients are present?		Write exact number
3.	In how many records weight of patients are present?		Write exact number
4.	In how many records height of patients are present?		Write exact number
5.	In how many records blood pressure of patients are present?		Write exact number
6.	In how many records temperature of patients are present?		Write exact number
7.	In how many records pulse rate of patients are present?		Write exact number
8.	In how many record history of patients are present?		Write exact number
9.	In how many records specific diagnosis of patients are present?		Write exact number
10.	In how many records prescribe does of medicine are present?		Write exact number
11.	In how many records laboratory findings of patients are present?		Write exact number
12.	In how many records discharge report of patients are present?		Write exact number

Codes for department:

- | | | | |
|-----------------------------------|-------------------|-------------------|---------------------|
| 1. Plastic surgery (Burns unit) | 2. Cardiology | 3. Psychiatry | 4. Dermatology |
| 5. E.N.T. | 6. Ophthalmology | 7. Pediatrics | 8. Gynae/Obstetrics |
| 9. Surgery | 10. Medicine | 11. Neurology | 12. Radiology |
| 13. Casualty | 14. Orthopaedics | 15. Oro-Maxillary | 16. Urology |
| 17. Vascular surgery | 18. Neuro surgery | 19. Paed. surgery | 20. Isolation |
| 21. Anaesthesiology | 22. Labour room | 23. Nursery | 24. Ortho workshop |
| 25. Federal Govt. Officers clinic | 26. Nephrology | 27. Physiotherapy | 28. Radiotherapy |

Form number: []

Hospital [] 1. CHK 2. J.P.M.C. Department: []
3. L.H.G. 4. NICH 1. Yes 2. No 3. Not available

Evaluation Questionnaire (Inpatient).

No.	P01	P02	P03	P04	P05	P06	P07	P08	P09	P10	P11	P12	P13	P14	P15
1.															
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

No.	Questions
1.	Whether age of the patient is present?
2.	Whether weight of the patient is present?
3.	Whether height of the patient is present?
4.	Whether blood pressure of patient is present?
5.	Whether temperature of patient is present?
6.	Whether pulse rate of patient is present?
7.	Whether history of patient is present?
8.	Whether specific diagnosis of patient is present?
9.	Whether prescribed dose of medicine is present?
10.	Whether a laboratory finding of patient is present?
11.	Whether discharge report of patient is present?

Codes for department:

- | | | | |
|-----------------------------------|-------------------|-------------------|---------------------|
| 1. Plastic surgery (Burns unit) | 2. Cardiology | 3. Psychiatry | 4. Dermatology |
| 5. E.N.T. | 6. Ophthalmology | 7. Pediatrics | 8. Gynae/Obstetrics |
| 9. Surgery | 10. Medicine | 11. Neurology | 12. Radiology |
| 13. Casualty | 14. Orthopaedics | 15. Oro-Maxillary | 16. Urology |
| 17. Vascular surgery | 18. Neuro surgery | 19. Paed. surgery | 20. Isolation |
| 21. Anaesthesiology | 22. Labour room | 23. Nursery | 24. Ortho workshop |
| 25. Federal Govt. Officers clinic | 26. Nephrology | 27. Physiotherapy | 28. Radiotherapy |

Form number: []

Hospital [] 1. CHK 2. J.P.M.C. Department: []

3. L.H.G. 4. NICH

Evaluation Questionnaire (Emergency).

No.	Questionnaire	Coding categories	Answer
1.	Total number of records are randomly selected?		Write exact number
2.	In how many records age of the patients are present?		Write exact number
3.	In how many records weight of patients are present?		Write exact number
4.	In how many records height of patients are present?		Write exact number
5.	In how many records blood pressure of patients are present?		Write exact number
6.	In how many records temperature of patients are present?		Write exact number
7.	In how many records pulse rate of patients are present?		Write exact number
8.	In how many records history of patients are present?		Write exact number
9.	In how many records specific diagnosis of patients are present?		Write exact number
10.	In how many records signature and designation of doctors are present?		Write exact number
11.	In how many records referral place are present?		Write exact number

Codes for department:

- | | | | |
|-----------------------------------|-------------------|-------------------|---------------------|
| 1. Plastic surgery (Burns unit) | 2. Cardiology | 3. Psychiatry | 4. Dermatology |
| 5. E.N.T. | 6. Ophthalmology | 7. Pediatrics | 8. Gynae/Obstetrics |
| 9. Surgery | 10. Medicine | 11. Neurology | 12. Radiology |
| 13. Casualty | 14. Orthopaedics | 15. Oro-Maxillary | 16. Urology |
| 17. Vascular surgery | 18. Neuro surgery | 19. Paed. surgery | 20. Isolation |
| 21. Anaesthesiology | 22. Labour room | 23. Nursery | 24. Ortho workshop |
| 25. Federal Govt. Officers clinic | 26. Nephrology | 27. Physiotherapy | 28. Radiotherapy |

Form number: []
 Hospital [] 1. CHK 2. J.P.M.C. Department: []
 3. L.H.G. 4. NICH

Evaluation questionnaire (Outpatient).

No.	Questions	Coding Categories	Answer
1.	Total number of records are randomly selected?	Write exact number	
2.	How many records are retrievable?	Write exact number	
3.	In how many records age of the patients are present?	Write exact number	
4.	In how many records weight of patients are present?	Write exact number	
5.	In how many records height of patients are present?	Write exact number	
6.	In how many records blood pressure of patients are present?	Write exact number	
7.	In how many records temperature of patients are present?	Write exact number	
8.	In how many records pulse rate of patients are present?	Write exact number	
9.	In how many records specific diagnosis of patients are present?	Write exact number	
10.	In how many records prescribe dose of medicine are present?	Write exact number	
11.	In how many records previous visit of patients are present/	Write exact number	
12.	In how many records signature and designation of doctor are present?	Write exact number	

Codes for department:

- | | | | |
|-----------------------------------|-------------------|-------------------|---------------------|
| 1. Plastic surgery (Burns unit) | 2. Cardiology | 3. Psychiatry | 4. Dermatology |
| 5. E.N.T. | 6. Ophthalmology | 7. Pediatrics | 8. Gynae/Obstetrics |
| 9. Surgery | 10. Medicine | 11. Neurology | 12. Radiology |
| 13. Casualty | 14. Orthopaedics | 15. Oro-Maxillary | 16. Urology |
| 17. Vascular surgery | 18. Neuro surgery | 19. Paed. surgery | 20. Isolation |
| 21. Anaesthesiology | 22. Labour room | 23. Nursery | 24. Ortho workshop |
| 25. Federal Govt. Officers clinic | 26. Nephrology | 27. Physiotherapy | 28. Radiotherapy |

Discussion

At all the hospitals, no proper record keeping system was observed. The poor status of record keeping can be assessed from the fact that 136 units of all the hospitals, only 9 units have the post of a record keeper. Of these 8 were at JPMC and 1 at CH. This shows a lack of interest of the administration to develop a proper record keeping system. It was also observed in this study that more than 90% of the departments did not have a computer for record keeping and records were being maintained by pencil/pen on registers manually.

Only 39% units have 75% or more relevant information on records, due to which it could not be utilized for any planning or research purposes. Improved record keeping can only be done by the personal interest of the head of the units and management of the hospitals. As there is no such study

available in the region, a comparison could not be made with this study.

it is concluded that basic information essential for records is missing at all the hospitals especially at OPD's. No proper system was developed to keep records at all the hospitals. No proper place was available for record rooms.

Stationary was not available in sufficient quantity and good quality for maintenance of records. No trained person was appointed as record keeper in all the hospitals. Doctors do not give adequate attention towards documenting important information.

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