



GOVERNMENT OF KARNATAKA

SURVEY TO FIND THE NURSE PATIENT RATIO IN
GOVERNMENT HOSPITALS OF KARNATAKA



MANPOWER AND EMPLOYMENT DIVISION
PLANNING DEPARTMENT, BANGALORE

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Action taken on the recommendations of the report on Survey to find the Nurse Patient Ratio in Government Hospitals in Karnataka.

The recommendation of the report show that there is need to examine the Nurse Patient Ratio in various departments/wards to arrive at certain optimum norms, in the light of resources available and the need and examine the prevailing nursing services in various wards periodically and institute appropriate remedial measures to improve the position. On this it has been pointed out that the Indian Nursing Council act of 1947 has prescribed the Nurse Bed ratio 1:3 and 1:5 in teaching and nonteaching Hospitals respectively. The staff sanctioned and the bed strength has been sanctioned on the same analogy in teaching and non-teaching Hospitals and certain norms have been prescribed in Karnataka Nurses, MidWives, Health Visitors Act of 1961. There are Medical and Health Institutions namely, Hospitals attached to Medical Colleges, Major and Donor Institutions, District Hospitals and General Hospitals, Special Hospitals, Women & Children Hospitals and Maternity Hospitals. Apart from this there are taluka level and below taluka level Hospitals. Uniformity in Nurse bed Ratio may not be possible to maintain on the basis of the bed strength as the figure relating to admission of patients vary from institutions to institution, from diseases to diseases and from season to season and other accidental cases. Moreover the Nurse Staff ratio also vary due to transfers, promotions, retirement and unfilled vacancies in the Hospitals.

To provide some remedy to the Staffing position particularly it has been decided to fill the vacant posts among nurses both under plan and non plan. This has been done because of better services must be rendered in all Hospitals to patients so that patient care may not suffer on account of absence of nurses. Recruitment of nurses has been stepped up to see that all vacant posts of nurses are

filled up as early as possible, leave reserves to the extent of 5 percent of the cadre has been sanctioned. If necessary training of nurses will also be stepped up so that more trainees can be taken to fill up the large number of the vacancies existing. With these measures it is expected that it will be possible to maintain the Bed Nurse Ratio prescribed under the necessary Act and provide better services.

SURVEY TO FIND THE NURSE PATIENT RATIO IN KARNATAKA.

I. Introduction:

Provision of Medical care is one of the important duties of the State in a Welfare State. In medical care, provision of Nursing Service is a major component. Many new discoveries and strides made in the area of medicine have devolved new responsibilities on the medical administration. Additional requirements have been created as a result of specialisation and adoption of new techniques in patient care. Changes in socio-economic patterns of the society have also contributed a great deal to people becoming increasingly conscious of the importance of qualitative nursing care. All this has led to an increasing demand on the nursing services.

Trained nurses are difficult to get. The Mudaliar Committee had recommended a norm of one nurse to 5000 persons and one nurse to 3 patients in teaching hospital and one nurse to 5 patients in non teaching hospitals. Central Council of Health has recommended a nurse-bed ratio of 1:3 and 1:5 in teaching and non-teaching hospital. A large number of studies have been conducted to ascertain the extent of utilisation of nurses for nursing purposes.

In Karnataka the study on Activity Pattern of Nursing Personnel a case study revealed that there is great deal of wastage and time spent on non-nursing and non productive but essential activities.

An important finding of the study was that in surgical, medical, maternity and paediatrics wards of the Bowring and Lady Curzon Hospital, Bangalore, the nurse patient ratio was 1:30. As this is high, when compared to the ratio of \times 1:10. a recommendation was made that efforts should be made to reduce the nurse patient ratio to 1:10.

In a follow up action meeting on this report, it was pointed out by the Health Department that the ratio is not uniform in all the wards and the working of the student nurses has not been taken into account and therefore the findings are not uniformly applicable. Hence it was decided that a quick survey of nurse patient ratio was to be under taken by Manpower and Employment Division of the Planning Department in Major and rural hospitals to find out the correct position. In this study findings of the survey are presented.

At the end of March 1970 the bed population ratio in Karnataka was 1:5948 in rural areas, 1:348 in Urban areas, and the total 1:1126. In 1977 the bed population ratio was 1:1250(Total). Doctor population ratio at 1979 March end was 1:9770 as against the All India Average at 1977 of 1:2780.

ANM/MW population ratio in Karnataka was 1:6300 at 1979 March end where as at All India level it was 1:3665 in 1977.

Nurse bed ratio in Karnataka was approximately around 1:10 at the end of March 1979, whereas the All India average in 1977 was 1:4.

Provision of health care for alies in the country as a whole is not uniform. In Kerala hospitals, there were 1975 beds per lakh of people while All India average was 80.5. In the country as a whole for 4097 people there was only one physician while the corresponding figure is 347 in USSR and 502 in Italy. In 1976 in India about 1,92,981 doctors are employed or 31.7 per lakh of population. Expenditure on health as a percentage of gross domestic product is 0.6, in the country. In Italy it is 5.2%. In a hospital there is

only one bed for 1480 people in India, whereas in the USSR the population per bed is 36, 35 in West Germany and 97 in U.K.

2. Coverage.

After obtaining a list of hospitals and their addresses from the Directorate of Health and Family Welfare Services, a simple Proforma was prepared and sent to all hospitals. 57 hospitals sent the filled in Proforma which have been analysed. (Annexure-I).

3. Functions and duties of Nursing Personnel.

The functions and duties as per the Medical Manual for various categories of Nursing Personnel are as under:

Duties and Responsibilities of Nursing Staff

Nursing Superintendent Gr.II.

1. She shall see that the Operation Room is always kept spotlessly clean.
2. She shall assist at all operations and shall be personally responsible for the efficient sterilization of the dressing and the instruments.
3. She shall be in charge of the surgical apparatus in actual use in the operation theatre, and is responsible for the careful cleansing and putting away of all instruments used during the course of operations.
4. She shall act for the Matron on days she is off duty and shall be responsible for the nursing arrangements of the Hospital in her absence.
5. The Matron and the Nursing Superintendent Gr.II will be off duty on alternate days from 4 to 7 P.M.

Nurses

1. The hour of duty of the Nurses is Eight hours.
2. They take night duty in turn, a month at a time. They are off duty from 7 to 11 and 1 to 4 P.M. One day and from 7 to 1 and 4 to 7 P.M. the next day(Three nurses go on night duty at a time).
3. A nurse may or may not be married. If married, it is distinctly understood that her household affairs have no claim whatever on her time or attention.
4. Nurses are under the immediate orders of the Matron whom they must obey absolutely.
5. Nurses should be always neat and tidy and should see that their wards are also kept always neat and tidy.
6. They should see that beds and teapoyes are kept in correct lines in the Wards, and that no bed is so near a wall that the nurse cannot easily walk round it. Each bed must be provided with a spottoon or mullay.
7. Lockets are always to be kept shut.
8. Contents of almirahs are to be always neatly arranged so as to be readily accessible.
9. The Ventilation of the wards is always to be carefully maintained the lee-ward side to be always open and the wind-ward side shut if the wind is high.
10. Soiled water is never to be kept in the ward.
11. The nurse shall record temperatures at such hours as may be required and in special cases take pulse and respiration, duly recording the result.
12. When handing over charge they shall go round with the incoming nurse, point out the special cases and their requirements entering any special instructions that may be necessary

in the book kept for the purpose.

13. They are to seem that the hospital rules regarding the time of serving the diets are duly observed, reporting any breach of them to the matron for the information of the Medical Officer. Any inferiority in the food served is to be reported to the Resident Medical Officer.

14. Unused articles of food are to be returned to the Kitchen and the fact reported to the Ward Medical Officer.

15. The nurses are responsible for the safe custody of all Government property in their care, and all damaged or loss should be at once reported through the Matron to the Resident Medical Officer. When loss or damage arises through their carelessness, the matter is to be laid before the Medical Officer for such action as may seem right.

16. In case of dereliction of duty, the Matron may award as she may think proper, in the shape of extra duties. All such awards are to be duly reported to the Medical Officer for approval.

17. Hours of Meals:

Coffee	6:30 A.M.
Breakfast	6.30 A.M.
Lunch	12 Noon
Dinner	6.00 P.M.

All the nurses should not leave the wards simultaneously for meals.

18. Should the work in the case of any particular nurse be not very onerous, the Matron may use her discretion in allowing such nurse to walk about outside occasionally but always within call of her wards. The Matron should try and arrange that nurses attend Divine Service when possible.

19. The nurse are allowed to see visitors with the permission of the Matron, in their own sitting room when they are off duty but never later than 7 P.M.
20. The nurses should not go out with any male members of the hospital staff or medical students.
21. The nurses should not hold conversation with strangers in the wards and verandahs of the hospital.
22. They should see that the ward attendants or other servants do not receive any gratuities from patients and any disobedience or misbehaviour on the part of the ward attendants should be at once reported to the Matrons.
23. They should be in charge and should intimate to the Office Cashier immediately a paying patient is brought into the ward for admission and also before such patients are permitted to leave when discharged.
24. They should see that the ward attendants and others do not shout or create undue disturbance to the patients.
25. All infectious cases linen must be kept in lotion in the zinc tubs kept for that purpose and an indent on the Linen Clerk for wood to boil this linen must be given to the Dhoti when he takes the soiled clothes daily.
26. When any of the patients in the male or female wards are given permission by the Medical Officer, Lady Medical Officer, or Ward Doctor to leave the hospital for a few hours, or even the whole day the nurse in charge of the duty at the time must inform the Resident Medical Officer, at once.
27. The Census of each ward must be entered daily on the slate kept for the purpose by the nurse in charge.

28. All treatment for patients, such as louches, bladder wash, high enemas, nutrient enemas, poultices, fomentations etc., must be carried out by the nurse and not the ward attendant.

29. The nurses will while handing over and taking charge of the wards, invariably make up a list of articles missing, condemned or otherwise and note the condition of the things before receiving charge whether, chipped, broken or cracked etc., as per Resident Medical Officer's stock and Steward's list naming the person or persons responsible for the same. Any neglect in this respect will entail the cost of the same being recovered from nurse responsible for the period between the last and the next report.

30. The nurse incharge of the wards is primarily responsible for the proper preparation of cases for operation.

Student Nurse

I Year Students:-

Beside care to patients (Physical Hygiene of patient, Method of disinfections, personal Hygiene) seeking guidance the staff Nurse and Nursing Superintendent Gr.II of respective wards. Regarding Admission and discharge care of patient property etc.,

II Year Student Nurses:-

Administration of Medicines, Method of Sterilization arrangeing Linen, Surgical Appliances, Measures of disinfections, Health Teaching to patients. Observation on patient illness and other complications.

III Year Student Nurses:-

Carrying of instruction from the Doctors regarding treatment report of complications, incidental teaching to Junior Students, responsibility of indenting drug and other applicances from Stores after seeking guidance from Staff Nurses. Care of equipment, furniture etc., Wards and Units periodical reports of serious ill patients, Medico and legal cases etc.,

Midwifery Students:-

Gynaecological observation, Maintenance of Case Study and Case books, pre-natal and postnatal care, attending to paediatric emergency, knowledge of immunization schedule for various diseases, management of labour, normal and abnormal cases, Knowledge of Statistic health education on family planning immunization, Mother care etc., conducting of Home delivery in Rural Area and other improvization in its adoptability use of various drugs in Obstratical practices overdose and treatment complications providing Nursing care in all aspect of management.

4 . Nurse bed ratio:-

Nurse bed ratio fluctuates between different types of hospitals. The ratio is worked out separately for nursing Superintendent, Staff nurse, student nurse and Midwife. For Nursing Superintendent the bed ratio was 1:89 in teaching general hospital. In the specialised teaching hospital for Tuberculosis the ratio was 1:126. In a ophthalmic hospital the ratio was 1:280 and the average works out to 1:148. At the district level in non-teaching hospitals

the ratio was 1:98. In non-teaching specialised hospitals for tuberculosis the ratio was 1:128 and for mental hospital 1:125. In a Leprosy hospital it was 1:280 and the average was 1:141. At the taluka non-teaching general hospitals the ratio was 1:134, and the overall ratio was 1:107. A wide ranging fluctuation in different categories noticed.

Staff nurse-bed ratio was less than 1:10 in teaching general hospitals, non-teaching general district level hospitals, and non-teaching general taluk level hospitals. The average ratio was 1:9. In case of Ophthalmic teaching hospital, non-teaching Tuberculosis, and non-teaching mental hospital the ratio was 1:10.

Among teaching specialised hospitals in Tuberculosis, Leprosy and non-teaching specialised hospitals for leprosy the ratio was 1:11. Unfortunately breakup of comparable figures at All India level is not available. But the overall ratio is below 1:10.

Student nurse bed ratio (without student nurses of nursing course) average was 1:23. The average ratio inclusive of students nurses of non-teaching hospitals works out to 1:17. For teaching hospitals the ratio in specialised hospitals for T.B. was 1:19 and in general district level non teaching hospitals ^{it} was 1:26.

The average midwife bed ratio was 1:53, whereas in non-teaching general taluka level hospitals it was 1:32. In district level non-teaching hospitals the ratio was

1:44, and 1:43 in teaching general hospitals. Taking together the nursing Superintendent, Staff nurse, student nurse and midwife the average ratio works out to 1:6.

(excluding student nurses courses in non-teaching hospitals).

Non teaching general hospital at taluka levels has a ratio of 1:7. In teaching general hospitals the ratio was 1:4, whereas in specialised teaching hospitals of Tuberculosis and leprosy the ratio was 1:7 and 1:10 respectively. In non-teaching specialised hospital for leprosy the ratio was 1:11. The pattern that emerges is that the Nurse bed ratio except in few cases is around 1:10. In a few cases the ratio is slightly high. Staff nurse bed ratio a reasonable indicator of facilities fluctuates between 1:8 and 1:11. Thus Nurse-bed ratio among teaching and non-teaching (both specialised and general) as revealed by the survey shows that the overall nurse bed ratio (all categories) has however varies from 1:4 to 1:11 in Karnataka.

Details are given in table -1.

Table-1: Nurse Patient Ratio according to types of Hospitals in Karnataka.

Sl.No.	Type of Hospitals.	No.of beds	Nursing Superintendent	Staff Nurse	Stu - dent Nurse	Mid- wife.	Nursing Superintendent : Bed ratio	Staff Nurse : Bed Ratio	Stude- nt Nur- se Bed Ratio	Mid- wife Bed Ratio	Nurse Bed Ratio
1	2	3	4	5	6	7	4:3 8	5:3 9	6:3 10	7:3 11	8:3 12
1.	A Teaching (General)	4517	51	555	480	93	1:89	1:8	1:9	1:43	1:4
2.	B. Teaching (Specialised)										
	a. Tuberculosis	758	6	70	40	-	1:126	1:11	1:19	-	1:7
	b. Mental	-	-	-	-	-	-	-	-	-	-
	c. Cancer	-	-	-	-	-	-	-	-	-	-
	d. Ophthalmic	280	1	28	-	-	1:280	1:10	-	-	1:10
	e. Leprosy	-	-	-	-	-	-	-	-	-	-
	Total B.	1038	7	98	40	-	1:148	1:11	1:26	-	1:8
3.	C. Non-Teaching (General-District level)	2461	25	317	210*	56	1:98	1:8	-	1:44	1:7
4.	D. Non-Teaching (Specialised)										
	a. Tuberculosis	894	7	90	-	-	1:128	1:10	-	-	1:10
	b. Mental	375	3	37	-	-	1:125	1:10	-	-	1:10
	c. Cancer	-	-	-	-	-	-	-	-	-	-
	d. Ophthalmic	-	-	-	-	-	-	-	-	-	-
	e. Leprosy	280	1	25	-	-	1:280	1:11	-	-	1:11
	Total D.	1549	11	152	-	-	1:141	1:10	-	-	1:10
5.	E. Non-Teaching General Taluk level.	2553	19	272	-	80	1:134	1:9	-	1:32	1:7
6.	Grand Total	12118	113	1394	520 730*	229	1:107	1:9	1:23 1:17*	1:53	1:6 1:5*

* Figures corresponding to Non-Teaching Hospitals where students nurses (Nursing courses) have been included.

5. Nurse bed ratio Ward-wise.

A meaningful analysis of the nurse bed-ratio would be to go by the position prevailing in each of the wards rather than by the hospitals. In case of dental radiology, anaesthesia, out patient and operation theatre, ward/departments analysis was not attempted at. Excluding these departments the average ratio for all departments works out to 1:9. In case of Leprosy, Psychiatry, tuberculosis, the ratio was 1:11. In Thoracic surgery, and ENT departments, the ratio was 1:16 and 1:26. In Opthomology, skin and V.D. Paediatrics, the ratio was 1:10. In surgery, obstrics and gynaecology the ratio was 1:8 and 1:9, whereas the department of medicine and in post-partum centre it was 1:5 and in casualty 1:3. There is wide ranging variation from department to department,

the nurse bed ratio is not always the average ratio of 1:10 which was observed when a hospital was taken as a unit of measurement. The wide variation noticed in the ratio in various departments/wards requires to be examined in the light of the requirements in each wards. Though the average could be 1:10. The requirements of Nursing services varies from ward to ward. As there is no yard-stick or a norm to compare, it is difficult to arrive at any difference on the adequacy or otherwise of the services available in the Wards. It is necessary for the Directorate of Health & Family Welfare to arrive at certain optimum norms, in the light of resources available and the need and examine the prevailing nursing services in various wards periodically and institute appropriate remedial measures to improve the position. Details are given in table-2.

Table-2.

Ward/Departmentwise Nurse-Bed Ratio in Hospitals of Karnataka.

Sl.No. ward/departments	No.of Hospitals responded	No.of beds	No.of Nurses (excluding Nursing Supdt.& Midwife)	Nurse-bed - ratio
1. Medicine	10	493	91	1:5
2. Surgery	7	368	48	1:8
3. Obstetrics & Gynaecology	11	535	57	1:9
4. Orthopaedics	5	73	10	1:7
5. Tuberculosis	13	1764	167	1:11
6. Skin & VD	2	30	3	1:10
7. Ophthalmology	4	364	35	1:10
8. E.N.T.	3	51	2	1:26
9. Paediatrics	7	188	19	1:10
10. Thoracic Surgery	2	16	1	1:16
11. Post Partum Centre	7	94	19	1:5
12. Dental*	-	-	-	-
13. Dermatology	-	-	-	-
14. Psychiatry	3	395	37	1:11
15. Neurology	-	-	-	-
16. Radiology*	-	-	-	-
17. Casualty	5	28	11	1:3
18. Anesthesia*	-	-	-	-
19. Out Patient*	-	-	-	-
20. Operation Theatre*	-	-	-	-
21. Leprosy	2	300	28	1:11
Total	-	4699	528	1:9

6. Nurse Population ratio at Taluk level:

To assess the adequacy or otherwise of the nursing services available, another indicator constantly used is nurse population Ratio. Using the information received on the number of nurses working in the various taluka level hospitals and the provisional figures of Population of 1981 Census the ratio shows wide fluctuations. In general hospital Gokak, Belgaum district, the ratio was 1:89747 whereas in general hospital(W&C) Davanagere, Chitradurga district, the ratio was 1:4240. In all the 31 hospitals analysed the fluctuations are very wide as the number of nurses working differ from place to place. In Karnataka the number of staff nurses were 2839 at the end of April 1980 and the nurse Population ratio with 1981 Census Provisional figures as the case works out to 1:13,048. Thus the nursing services are spread out unevenly.

Details are given in table-3.

Table-3.

Nurse Population Ratio - Taluk level Hospitals in Karnataka.

Sl.No.	Name of the Hospital	No.of Nurses	Popula- tion (81 Census)	Nurse Popula- tion Ratio
1.	General Hospital, Gokak, Belgaun Dist.	4	358986	1:89,747
2.	" Soundatti "	7	222442	1:31,777
3.	" Basavakalyana, Bidar Dist.	3	199919	1:66,640
4.	" Kadur, Chickmagalur Dist.	3	231099	1:77,003
5.	" Tarikere, " Dist.	8	179303	1:22,413
6.	"(W&C), Davanagere, Chitradurga Dist.	95	402804	1:4,240
7.	D.M.Pai, Memorial Hospital, Harihar "	6	173200	1:28,867
8.	General Hospital, Udupi, Dakshina Kannada Dist.	14	459060	1:20,860
9.	"(W&C) Udupi, "	8		
10.	" Coondapur "	8	212055	1:39,007
11.	" Karkala "	8	255524	1:31,941
12.	" Gadag, Dharwar Dist.	6	253396	1:42,233
13.	" Haveri, "	7	180922	1:25,846
14.	" Shorapur, Gulbarga Dist.	3	222229	1:74,076
15.	" Chincholi, "	3	158173	1:52,724
16.	" Holenarasipur, Hassan Dist.	3	131167	1:43722
17.	" Arasikere "	7	253373	1:36,196
18.	" Sakalespur "	13	113103	1:8,700
19.	" Channarayapatna "	2	218203	1:109,102
20.	" Somwarpet, Kodagu Dist.	12	163182	1:13,599
21.	" Gowribidanur, Kolar Dist.	4	213414	1:53,354
22.	"Nagamangala, Mandya Dist.	-	157385	-
23.	"Kollegal, Mysore Dist.	13	263068	1:20,236
24.	" K.R.Nagar "	4	183766	1:45,942
25.	" Hunsur, "	3	179229	1:59,743
26.	" Hooppal, Raichur Dist.	1	199605	1:199605
27.	" Bhadravathi, Shimoga Dist.	3	291318	1:97,273
28.	" Sagar, Shimoga Dist.	4	160105	1:40,026
29.	" Tiptur, Tumkur Dist.	10	174802	1:17,480
30.	" Bhatkal, Uttar Kannada Dist.	6	96777	1:16,130
31.	" Sirsi, "	4	135058	1:33,765

7. District-wise Nurse Population ratio.

Making use of the Provisional results of 1981 Census and estimating the number of nurses for hospitals which had not responded on the basis of number of beds in the year book on the Health for the year 1978-79. Nurse Population ratio for all the 19 districts have been worked out. In Bangalore district the ratio works out to 1:8773 whereas in Raichur it is 1:71198. In Chitradurga, Dakshina Kannada, Bellary and Kodagu, the ratio is 1:7303, 1:9570, 1:9012 and 1:6055 respectively and there is no uniform pattern. The State average of Nurse Population ratio works out to 1:15,089. This give a misleading picture.

Details are given in table-4.

Table - 4.

Estimated Nurse - Population Ratio according to District
in Karnataka.

Sl.No.	Districts	Total No. of Nurses* (Estimated)	Population 1981 Census.	Nurse - Population Ratio.
1.	Bangalore	561	4921828	1:8,773
2.	Belgaum	110	2974861	1:27,044
3.	Bellary	165	1487062	1:9,012
4.	Bidar	68	994106	1:14,619
5.	Bijapur	74	2399124	1:32,421
6.	Chickmagalur	72	908626	1:12,798
7.	Chitradurga	243	1774717	1:7,303
8.	Dakshina Kannada	248	2373359	1:9,570
9.	Dharwar	180	2939988	1:16,333
10.	Gulbarga	85	2075368	1:24,416
11.	Hassan	65	1351923	1:20,799
12.	Kodagu	76	460164	1:6,055
13.	Kolar	98	1898984	1:19,377
14.	Mandya	33	1414383	1:42,860
15.	Mysore	192	2584878	1:13,463
16.	Raichur	25	1779942	1:71,198
17.	Shimoga	62	1657564	1:26,735
18.	Tumkur	64	1975331	1:30,865
19.	Uttara Kannada	35	1071243	1:30,607
(State) Total		2455	37043457	1:15,089

8. Ratio of number of beds to number of class IV Officials

The average ratio between the number of beds and number of class IV officials in the various hospitals works out to 1:5. In general teaching hospitals it was 1:9. In non-teaching general hospitals (district level) it was 1:3 and at teaching hospitals specialised it was 1:4. At the non-teaching hospitals (taluka level) it was 1:4. Specialised non-teaching hospitals have a ratio of 1:4. The variation in the ratio was limited, to 1:9 in general teaching hospitals to 1:3 in non-teaching general (district level) hospitals. Details are given in table-5.

Table-5

Class IV and Bed Ratio according to type of Hospitals in Karnataka.

Sl.No.	Type of Hospitals	No.of Beds	No.of Class IV Officials	Class IV Bed ratio
1.	A. Teaching Hospitals (General)	4517	484	1:9
2.	B. Teaching Hospitals (Specialised)			
	a. Tuberculosis	758	182	1:4
	b. Mental	-	-	-
	c. Cancer	-	-	-
	d. Ophthalmic	280	76	1:4
	e. Leprosy	-	-	-
	Total B.	1038	258	1:4
3.	C. Non-Teaching Hospitals (General - District level)	2461	794	1:3
4.	D. Non-Teaching Hospitals (Specialised)			
	a. Tuberculosis	894	224	1:4
	b. Mental	375	90	1:4
	c. Cancer	-	-	-
	d. Ophthalmic	-	-	-
	e. Leprosy	280	51	1:5
	Total D.	1549	365	1:4
5.	E. Non-Teaching (General - Taluk level)	2553	700	1:4
6.	Grand Total	12118	2601	1:5

9. Doctor Bed Ratio

Doctor bed ratio in all the hospitals studied works out to 1:16. In general, teaching hospitals it was 1:15, whereas in non-teaching hospitals, (general at district level) it was 1:13. Whereas in non-teaching specialised hospitals it was 1:38. In non-teaching (taluka levels) hospitals the ratio observed as 1:13. The ratio was as high as 1:54 in Tuberculosis hospital and it was 1:20 in the teaching hospital in Ophthalmology. Among non-teaching hospitals, specialised, the ratio for Tuberculosis was 1:33, for mental ratio 1:75 and for Leprosy it was 1:35. Though the average ratio is 1:16 considerable variation in the ratio is noticed. Details are given in table-6.

Table -6

Doctor and Bed Ratio according to type of hospitals in Karnataka.

Sl.No.	Type of Hospital	No.of Beds	No.of Doctors	Doctors: Bed Ratio
1.	A. Teaching Hospitals(General)	4517	306	1:15
2.	B.Teaching Hospitals(Specialised)			
	a. Tuberculosis	758	14	1:54
	b. Mental	-	-	-
	c. Cancer	-	-	-
	d. Ophthalmic	280	14	1:20
	e. Leprosy	-	-	-
	Total B.	1038	28	1:37
3.	C.Non-Teaching Hospitals(General-District level)	2461	138	1:13
4.	D.Non-Teaching Hospitals(Specialised)			
	a. Tuberculosis	894	28	1:32
	b. Mental	375	5	1:75
	c. Cancer	-	-	-
	d. ophthalmic	-	-	-
	e. Leprosy	280	8	1:35
	Total D.	1549	41	1:38
5.	E. Non-Teaching(General Taluk level)	2553	202	1:13
6.	Grand Total	12113	765	1:16

10. Summary

While providing medical care, one of the integral component is nursing services. In the study on activity pattern of nursing personnel a case study in Karnataka a ratio of 1:30 in the sample was recorded. As the Health Department pointed out that this was not uniform in all the wards and the working of the student nurses has not been taken into account and therefore the findings are not uniformly applicable. A quick survey to find out the nurse patient ratio was undertaken. Out of a total of 85 hospitals addressed, 57 responded.

2. Nurse bed ratio among teaching and non-teaching both specialised and general as revealed by the survey shows that the overall nurse bed ratio (all categories together) varies from 1:4 to 1:11; in Karnataka.

3. As the aggregate analysis by type of hospital would not be of help, a ward-wise analysis of the nurse bed-ratio was undertaken. It was found that the nurse bed ratio was not always the average of 1:10 and there was wide variation. It is necessary that this wide variation observed among the various departments/wards has to be examined in the light of the requirements in these wards. Though the average could be 1:10, the requirement of nursing varies from different ward to ward and there is no yardstick or a norm to compare it. It is difficult to arrive at any inferences on the adequacy or otherwise of the services available in the wards. It is necessary for the Directorate of Health & Family Welfare services to arrive at certain optimum norms in the light of resources available and the need to examine the prevailing nursing services in various wards periodically and institute appropriate remedial measures to improve the position.

4. Wide fluctuations are noticed in the nurse population ratio at the taluka level hospitals. In General Hospital, Gokak, Belgaum District, the ratio was as high as 1:89747, whereas in general hospital (V&C) Davanagere, Chitradurga District the ratio was 1:4,240.

Making use of the provisional results of 1981 census the nurse-population ratio works out to 1:13048. All this proves that the nursing services are spread out unevenly.

5. Using the total number of beds available as given in the information available from the Health department and estimating the response from Hospitals that have not responded the nurse population ratio varies widely from district to district. In Raichur it was 1:71198. The overall ratio was 1:15089. Overall ratio gives a misleading picture and conceals the wide variations.

6. Ratio of number of beds to number of class IV officials in various hospitals fluctuate unevenly. Here again the variation is from 1:9 to 1:3.

7. Doctor bed ratio works out to 1:16. Considerable variation is noticed from hospital to hospital.

Annexure-I

Proforma

Study to find Nurse-patient ratio in Karnataka.

Name of the Hospital:

Sl.No.	Name of the Department or ward	No.of beds.	No.of doctors attached.	No.of nurses attached			Mid-wife	No. of children
				Nursing Superintendents.	Staff Nurse	Student Nurse		
1	2	3	4	5	6	7	8	9

- 1. Medicine
- 2. Surgery
- 3. Obstretrics & Gynaecology
- 4. Orthopaedics
- 5. Tuberculosis
- 6. Skin & S.T.D.
- 7. Ophthalmology
- 8. E.N.T.
- 9. Paeditrics Medicine.

- 10. Thoraic Surgery

- 11. Post Partum Centre.

- 12. Dental
- 13. Dermatology
- 14. Psychatry
- 15. Neurology
- 16. Radiology
- 17. Casualty
- 18. Anesthesia
- 19. Out-patient

- 20. Operation theatre.

Superintendent,
.....Hospital,
.....