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Manpower Study Series-35

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GOVERNMENT OF KERALA

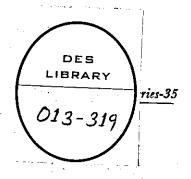
A STUDY ON THE UTILISATION OF POST GRADUATES IN MODERN MEDICINE

MANPOWER DIVISION

DEPARTMENT OF ECONOMICS AND STATISTICS

KERALA

NOVEMBER 1983



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PREFACE

The Manpower Unit of the Department of Economics and Statistics conducted a study on the utilisation of post-graduates in modern medicine in the Kerala Health Services Department. The study was conducted by Smt. K. Parukutty Amma, Manpower Officer attached to the Health Services Department.

The report of the study brings out the under utilisation of specialists, who took their post-graduate degree/diploma at the expense of the Government.

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Director of Economics & Statistics.

25-11-1983.

A STUDY ON THE UTILISATION OF POST-GRADUATES IN MODERN MEDICINE

Introduction.—Modern medicine plays a key role in the prevention and cure of diseases. It has developed to such an extent that this system is the most prominent among the different systems adopted for the cure and prevention of diseases. Large amounts are being provided every year in the State and Central Budgets for this Sector. We have a large number of graduates and post-graduates qualified in this profession. The graduates practising under this system are encouraged to undergo post-graduate courses and get themselves specialised in the different branches of the system. It would therefore be interesting to know how these post-graduates are being utilised in the Health Services Department of the State. A study has therefore been conducted to assess the extent of utilisation of these post-graduates in the different fields of specialisation.

Objectives of the study.—The objectives of the study are:

- (1) to identify the areas of specialisation under modern medicine;
- (2) to evaluate the utilisation of specialists under modern medicine;
- (3) to examine the socio-economic background of specialists in modern medicine; and
- (4) to suggest some measures for better utilisation of specialists in modern medicine.

Method of data collection.—For the study, those who have secured post-graduate degree/diploma in 1976-77, 1977-78 and 1978-79 from the three medical colleges were contacted through mailed questionnaire. Post-graduate studies have not been started at Alleppey and Trichur Medical Colleges at the time of enquiry. 420 doctors secured post-graduate degree/diploma during the three years. All the 420 persons were addressed and only 140 of them responded.

Period of study.—The study was conducted during the year 1980-81. The draft report was completed in 1982. It was finalised only in September 1983.

Role of Modern Medicine in Kerala Health Care.—So far as education in modern medicine is concerned Kerala had a comparatively late start. The first Medical College in Kerala was established in 1951 only. It was really the rapid and vast expansion of health education covering both allopathic and indigenous systems of medicine, that laid the fuoundation for all the

37/144/MC.

remarkable progress since achieved in the sphere of improvement of medical care facilities in the State.

Health Services Department now carried on a comprehensive programme of curative and preventive health services aimed at control and eradication of communicable diseases, improving environmental sanitation, strengthening of laboratory services, developing child health and maternity services, providing an effective machinery to prevent food adulteration and providing facilities for health education and training of medical and paramedical personnel. Kerala is the first State to attain small-pox free status. In the fight against Malaria also, Kerala had achieved spectacular results.

In 1950-51 there were only 197 medical institutions in the State including 15 grant-in-aid institutions and 6 newly started primary health centres. The total number of beds in all these institutions put together was only 6752. As a result of the planned effort during the last few years both the number of medical institutions and beds have increased more than 5 times. During the year 1982-83 there were 991 medical institutions under the allopathic system of medicine in the State and the total number of beds in the above institutions was 30727. The number of medical institutions as on 1-4-1983 and beds under the three systems are given below:—

Table I

Distribution of Medical Institutions & beds in

Kerala as on 1-4-1983

	System of Medicine	Number of Medical Institutions	%	Number of beds	%
	· · · · · · · · · · · · · · · · · · ·				
1.	Allopathy	991	57	30727	95
2.	Ayurveda	531	30	1372	4
3.	Homeopathy	218	13	275	1
-	Total	1740	100	32374	100

The above table shows that 57% of the medical institutions and 95% of of beds are in the allopathic sector. Hence it is evident that inpatient facilities are best, provided under modern medicine system. Apart from this, there are about 1100 private medical institutions under modern medicine rendering services with an appropriate bed strength of 20,000. Thus the system of modern medicine occupies the prime role in health services

with about 2,000 institutions and 50,000 beds. The bed population ratio works out to 2 beds for 1,000 population which is a remarkable achievement.

District-wise distribution of bed population ratio shows that there are regional imbalances in the availability of health service facilities. Table No. II gives the number of medical institutions and beds under allopathic system of medicine in Kerala (excluding grant-in-aid institutions) during the year 1981-82.

TABLE II

Number of Medical Institutions & Beds under allopathic system of medicine in Kerala 1981-82

District		Number of institutions	Number of beds	Number of bed per lakh of population
(1)		(2)	(3)	(4)
		97	5678	219
Trivandrum		97 97	2065	. 73
Quilon	- .	97 88	3557	152
Alleppey		66	2723	162
Kottayam	4	46	395	40
Idukki Ernakulam		98	3031	119
Ernakulanı Frichur		84	3511	144
		83	1399	68
Palghat Malannuram		89	1062	44
Malappuram Kozhikode		64	3762	[′] 167
Wynad		29	388	70
VV ynau Cannanore		127	2683	95
`	Kerala	968	30254	119

The bed population ratio is less than the desired norm of one bed per thousand population in six districts of Kerala. Equally important is the problem of inter-district disparities that prevail in each district with regard to medical facilities. The most important programme by which these regional imbalances could be rectified is to start new P. H. Centres in those remote areas which do not have any health care facilities. The public sector medical institutions (category-wise) as on 1-4-1983 are given below.

Table III

Number of Allopathic Medical Institutions in Kerala

(Public Sector) as on 1-4-1983

Sl.No.	Medical Institutions	Number
1	Medical College Hospitals	4
2	District Hospitals	12
3	Taluk Headquarters Hospitals	44
4	Ophthalmic Hospital	1
- 5	C. D. Hospital	- 1
6	Other Govt. Hospitals	78
7	Women & Children Hospitals	8
8	T. B. Hospitals & Clinic	23
9	Leprosy Hospitals & Control Units	5
10	Mental Hospitals	3
11	Primary Health Centres	183
12	Govt. Dispensaries and Govt. Rural Dispensaries	629
	Total	991

Area of specialisation under modern medicine.—A remarkable feature regarding allopathic stystem is that of specialisation in the different areas of treatment. It has 18 important special branches. At present there are 675 seats for MBBS course, 120 seats for post-graduate course, and 100 seats for post-graduate diploma course in the Medical Colleges of Kerala. For post-graduate course, more seats have been allotted for General Medicine and General Surgery which are the important specialities in the system. The post-graduate Degree course is for 3 years and Diploma course for 2 years. All branches of speciality units are provided in Medical College Hospitals since they form part of teaching institutions.

On an average 140 specialists come out every year, and they have to be provided in the speciality units, otherwise the purpose of specialised medical education will not be achieved. At present most of the essential specialities exist in District Hospitals and major Hospitals and Taluk Headquarters hospitals. Paediatric unit has been started in 50 P. H. Centres during last

year. Usually one specialist is posted in a unit. In major hospitals there are more units for each speciality. A statement showing the number of speciality units in District hospitals and Taluk Headquarters hospitals is given in Appendix-I

The percentages of pass in post-graduate course were 49% in 1976-77, 42% in 1977-78 and 53% in 1978-79. The low percentage of pass indicates the difficulty in acquiring specialisation. It is useful to study the utilisation of those who have undergone such a hazardous course of study. Number of students appeared and passed out in post-graduate degree/diploma course (Branch-wise) are given below.

Table IV

Number of students appeared and passed out in post-graduate degree/
diploma courses during 1976-77 to 1978-79

	Name of course	1976 Appeared	-77 Passed	1977 Appeard	-78 Passed	1978 Appeared	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Degree	e Courses			-			
1.	M. D. (General Medicine)	46	20	53	. 14	74	18
2.	M. D. (Obstetrics & Gynaecology) 34	12	24	9	27	9
3.	M. D. (Paediatrics)	3	2			13	5
4.	M. D. (Anatomy)	. 2	2	7	2	2	. 1
5.	M. D. (Physiology)	2	2	1	1	_ 13	6
6.	M. D. (Biochemistry)	3	2	5	3	6	
7.	M. D. (Pharmacology)	. 3	2	· 2	2	2	. 2
8.	M. D. (Pathology)	4 -	. 3	4	2	17	6
9.	M. D. (Bacteriology)	1	1		••		•
10.	M. D. (Forensic Medicine)	2	1	8	- 4	4	. 2
11.	M. D. (Darmetology & Venereology)	1		4	3	4	2
12.	M. D. (Social & Preventive Medicine)			5	1	9	` '
13.	M. S. (General Surgery)	61	17	74	15	82	2

					.			
	(1	l)	(2)	(3)	(4)	(5)	(6)	(7)
14.	M. S. (Opt	halmology)	12	9	12	4	15	5
15.	M. S. (Ort	hopaedics)	3	. 2	6	3	14	6
16.	M. S. (Mic	robiology)	2	2	. 1	1	. 2	•
Dipl	oma Courses				* %			
1.	'Diploma in	(Obstetrics and Gynaecology)	19	15	44	28	70	33
2.	**	Child health	19	5	16	7.	16	7
3.	"	Anaesthesia	3	3	20	12	30	14
4.	,,	Orthopaedics	12	5	7	7	14	4
5.	72	Opthalmology	9	3	16	8	27	12
6.	DLO		5	4	10	5	10	5
7.,	DPMR	en e	• •	•, •	1 .	1	15	5
8.	D. C. P.		4	2	1	1	14	6
•		Total	, 250	114	321	133	480	173.

Out of the total number of 1051 students appeared for post-graduate degree/diploma examinations during the years 1976 to 1979, only 420 persons (40%) have secured the degree/diploma.

Results of the study.—For the study, the 420 post-graduate degree and diploma holders, who passed in 1976-77, 1977-78 and 1978-79 were contacted through mailed pro forma. (Vide Appendix-II.)

Among those post-graduates who have furnished the information, 46 have secured their MBBS degree from Trivandrum Medical College, 13 from Kottayam Medical College, 2 from Alleppey Medical College, 62 from Calicut Medical College and 17 from outside Kerala. Distribution of Post-graduates according to their MBBS degree is given below.

Table V

Distribution of Post-graduates according to their MBBS Degree

Year of pass	Trivandrum Medical College	Alleppey M.C.	Kotta- yam M.C	Calicut M.C.	Outside Kerala	Total
1961-65	9	• •	••	15	4	28
1966-70	17	••	7	2 5	5	5 4
1971-75	20	2	6	22	8	58
1976-80	••	••	• •	• •		
Total	46	2	13	62	17	140

It is seen that 59% of the post-graduates who replied took their basic degree during the period 1961-70.

The distribution of these persons according to their field of speciality is given in Table No. VI.

Table VI

Distribution of Post-graduates according to the nature of Speciality

	Item of Speciality		Number of Post-graduates			
			Diploma	Degree	Total	
	(1)		(2)	(3)	(4)	
1	General Medicine		• •	22	22	
9	General Surgery		• •	9	9	
3.	Opthalmology	•	13	4	17	
3. 4.	Gynaecology		29	12	41	
5.	Pathology		• •	1	1	
6.	Social & Preventive Me	dicine	1	• •	1	
	Child Health		14	2	16	
7.		**		1	1	
8.	Radio Therapy		R	1	. 9	
9.	Orthopaedics			1.	* * * * * * * * * * * * * * * * * * *	
10.	Physiology	-				

	(1)	(2)	(3)	(4)
11.	Dermatology & Venereology	3	9	5
12.	ENT	8	4	o O
13.	DA	3	••	9
14.	Clinical Pathology	9	• •	0 /
15.	DPM	1	• •	²
16.	Psychiatry	3	••	3
	Total	85	55	140

For post-graduation, one passed with distinction, two with first class, 47 with second class and 90 with third class. 28 have secured post-graduation from Trivandrum Medical College, 22 from Kottayam Medical College and 90 from Calicut Medical College. Post-graduate courses have not been started at Alleppey and Trichur Medical Colleges at the time of enquiry. It is seen that most of the post-graduates from Trivandrum Medical College have not responded.

Employment Status of the respondents.—Of the 140 post-graduates responded, 119 were employed before commencing post-graduate studies. Twenty of them got employment after post-graduation. Only one post-graduate who has secured diploma remains unemployed during the period of enquiry. He had secured diploma in 1979 only. Unemployment problem is lacking among post-graduates since 80% of them form service candidates.

Among the respondents who were employed before commencing post-graduates studies 101 were in Government service and 18 in private sector, 15 are in Government service and 5 in private sector. Among those in private sector, 8 post-graduates are self-employed 11 of the diploma holders are MD students. 28 post-graduates have done research work during their course of study.

The medical graduates in service are considered as on duty during their post-graduation period for non-clinical post-graduation. All others are given an allowance of Rs. 500 per month. Hence post-graduate studies are at the expense of the Government.

Registration in the Medical Council.—Nineteen post-graduates have registered in the Medical Council as post-graduates and four of them have applied for registration. The remaining 117 post-graduates have not registered as post-graduates in the Medical Council.

Socio-Economic Background of specialists.—Among the 140 post-graduates (respondents), 100 are males and 40 females. Their distribution according to native district is given below.

TABLE VII

Distribution of post-graduates according to native district

		Nı	mber of post-	%age to total	
	District	Mai	e Female	Total	respondent s
1.	Trivandrum	7	3	10	. 7
2.	Quilon	8	7 .	15	11
3.	Alleppey	. 13	3	16	- 11
4.	Kottayam	13	3	16	11
5.	Idukki		• •		• •
6.	Ernakulam	12	7	19	14
7.	Trichur	. 13	5	18	13
8.	Pälghat	-10	3	13	9
9.	Malappuram	3	2	5	4
10.	Kozhikode	9	7	· 16	11
11.	Cannanore	11	• •	. 11	. 8
12.	Outside Kerala	1	• •	1	1
	Total	100	40	140	100

Age distribution of the respondents.—Majority of the respondents (72%) were in the age group of 31-40. Age composition of the respondents is given below:

TABLE VIII

Distribution of post-graduates according to age

		Numbe	% age to		
Age group		Male -	Female	Total	total
26-30		17" "	وع	26	18
31-35		40	13	53	38
36-40		32	15	47	34
41-45	2.4	11 🦻	3	· 14	10
46-50		-(**			• •
51-55		• •	••	• •	• • • •
· •	Total	100	. 40	140	100

All the post-graduates responded are below the age of 46. 37/144/MC.

Occupation of the guardian.—The distribution of post-graduates according to occupation of their guardian is noted below:

TABLE IX

Distribution of post-graduates according to occupation of guardians

Occupation of the guardian	Number of post- graduates	Percentage	
Government Servants	60	43	
Medical Officer	21	- 15	
Agriculturists	16	11	
Others	43	31 .	
Total	140	100	

58% of the guardians are Government Servants (including 15% Medical Officers). 11% belong to agricultural families.

Scheduled Caste representation.—Out of the 140 post-graduates, 7 belong to scheduled caste (5%), 36 belong to other backward communities (26%) and the rest 97 (69%) belong to other communities. Distribution of the post-graduates according to their caste is given below:

Table X

Caste-wise distribution of post-graduates

Caste	Number	% age
Scheduled Caste	7	5
Scheduled Tribes	• •	. ••
O. B. C.	36	26
Other Communities	97	69
Total	140	100

The above table reveals that among the 140 post-graduates responded, no scheduled tribe medical graduate has secured post-graduate degree/diploma during the years 1976 to 1979.

Service conditions.—At present, post-graduates are not paid any additional remuneration in Health Services Department. Their salary is equivalent to that of the Medical Officer. Those who are working in private sector are better paid than in Government service. Post-graduates are not satisfied with the working conditions and desire better remuneration. Hence 34% of the post-graduates have intention to leave the country. Their preference to foreign countries is given below:

Name of country	No. of post-graduates desiring to go abroad	·
1. Gulf countries	7	
2. United Kingdom & Middle East	9	,
3. Africa	1	٠.
4. UAE	, · 2	
5. USA	1	5
6. Any other developed countries	27	
Total	47	

Utilisation of post-graduates.—Among the 139 post-graduates employed only 92 are working as specialists, others are working as Assistant Surgeons in Health Services Department. It is essential that the post-graduates should be posted in the concerned speciality units itself so that their knowledge and experience may be utilised to the maximum extent. But at present, 31% of the post-graduates are not working in units of their speciality. Details of post-graduates working as specialists in their respective fields are given in Table XI

 $T_{ABLE} \ XI$ Details of post-graduates working as specialists

· ·	Item of speciality		Number of post-graduates responded	Number of post-gra- duates work- ing as spe- cialists	% age
	(1)		(2)	(3)	(4)
1	General Medicine		22	16	73
2.	General Surgery	:	9	8	89
3.	Opthalmology		17,	14	82

	(1)	(2)	(3)	(4)
4.	Gynaecology	41	21	51
5.	Pathology	1	1	100
6.	Social & Preventive Medicine	1	1	100
7.	Child Health	16	10	63
8.	Radiotherapy	1	. 1	100
9.	Orthopaedics	9	3	33
10.	Physiology	1	1	100
11.	Dermotology & Veneralogy	5	3	60
12.	ENT	8	6	7 5
13.	DA	. 3	3	100
14.	Clinical Pathology	2	. 1	50
15.	DAM	1	1	100
16.	Psychiatry	3	2	67
	Total	140	92	69

The above table shows that some of the post-graduates in General Medicine, Gynaecology, Child Health, Orthopaedics etc., are not working as specialists in their respective fields.

Summary and Conclusions.-All post-graduates are dissatisfied with the working conditions and desire better remuneration. At present post-graduates are not given any additional remuneration in Health Services Department. As a result 34% of the post-graduates intend to leave the country for better prospects.

About one third of the post-graduates are not working in the field of their specialisation. Since post-graduation is at the expense of the Government, it is essential that post-graduates should be posted in the concerned speciality unit so that their knowledge may be utilised to the maximum extent.

An important programme by which the non utilisation of specialists could be avoided is to provide more speciality units in Government Medical Institutions. Most of the taluk hospitals have 100 or more beds. Immediate steps should be taken to raise the bed strength of these hospitals in order to meet the growing demand for hospital beds.

The mere raising of the bed strength in taluk hospitals will not be enough to improve the hospital services. The taluk hospitals should have all the specialist services. All major taluk headquarters hospitals with more

than 100 beds already have surgical, medical, obstetrics and gynaecology specialists. In addition to these specialists, the taluk hospitals, should provide specialist facilities for Eye, ENT, Dentistry, Paediatrics, Skin and Veneral diseases. Post graduates those who are working as general doctors should be posted in the concerned speciality units. Thus the unemployment of General medical officers as well as the misutilisation of specialists would be solved to a considerable extent.

Specialists should be allowed to continue in their respective speciality units irrespective of promotion post in the Administrative cadre. They should be given additional remuneration and allowed to continue as specialists. A separate specialist cadre creation solves this problem.

APPENDIX I

Distribution of speciality units in District Hospitals/
Headquarters Hospitals in Kerala

District	ENT	Ortho	Eye	Dental	Physio- therapy	Paedia- tric	Psychia- , tric	Skin & V.D.
(i)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	3	1	2	4	1	4	1	.1
Trivandrum			4	5	1	7	1	1
Quilon	3	Ţ	=		1	4	1	1
Alleppey	5	• •	6	6	1		1	1
Kottayam	4	2	, 5	5	• •	5	1	- 1
Idukki	1		i	2	• •	. 1	• •	• •
	4	2	5	6	1	8	••	2
Ernakulam	. 6	_	6	7	. 1	7	••	I
Trichur	_	••	J.	5	. 1	5	1	1
Palghat	. 3	1	- 1		•	5	1	1
Malappuram	. 4	1	3	4	1	-	•	1
Kozhikode	3	1	3	3	7	3	••	1
	1		1	2	• •	2	. ••	* *
Wynad Cannanore	6	1	6	5	1	6	1	1
Total	43	10	46	54	<u>.</u> 9	57	7	11

APPENDIX I (Contd.)

	X-ray Blood bank	Obste- trics & gyna- ecology	TB	Cancer	Cardio	Anes- thesia	Leprosy	Total
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17
m ! 1	1	•••						18
Trivandrum	•							24
Quilon	••	••						24
Alleppey	• •	3	1	••				27
Kottayam	• •	J			•			
Idukki	• •	••	•		•			3
Ernakulam	1	4	ı	1	1	••		3
Trichur		. 5	2	2	1	••		2
Palghat		• •	1	••	••	• • •	• •	2
Malappuram	ì	I	• •	I	••	1	• • •	
Kozhikode	1	**			• •	• •		1
			4.		• •	• •	• •	_
Wynad Cannanore	1	2	3	1		1		3
Total	5	15	8	5	1	2		27

APPENDIX II

Study on the Utilisation of Post Graduate in Medicine

PROFORMA

	•		٠		
1.	Name (In block lette	ers)	:		
2.	Address (a) Perma	nent	:		
	(b) Presen	t	:		
3.	Native District		:		
4.	Date of birth and ag	ge in completed	:	•	
5.	Sex		:		
6.	Marital Status: (Ur married, widowed, separated)	married, Divorced,	:		
7. :	Name of father/Gua Occupation	•	:	,	
8.	Whether you belong O.B.C. if 'yes' pleas	g to S.C./S.T., e specify	: ,		
9.	Year of passing the Examination	MBBS	:		
10.	Class or Division of	otained	:	•	
11.	Name and Address College from which taken	degree was	:		
12.	Details of Post Gra Diploma taken (ple special subjects tak	ase specify	:		
13.	Year in which Post Diploma was taken		:		
14.	Class or division of	otained	:	•	
15.	Name and Address from which Post G diploma was taken	raduate degree/	:		
16.	Whether you have special training in above qualificatio	addition to the	:		
17.	If yes, please ment	tion the details	:		
-	(a) Research wo		:	Yes/No	
•	(b) If you please research wor Institution a	give details of the k (ie. Subject, perion nd result)	rd :		
18.	Are you Employe Post Graduation)	d (after Graduation	·/ :	Yes/No	
19	. If employed, plea you are an emplo self employed	se state whether yer/employee/	:	-	

20.	Name and address of institutions Period of work	:
	Monthly Emoluments	:
	If previously employed	:
	Name and address of institutions	:
	Period	:
	Nature of work	:
	Monthly emoluments	:
	Reason for leaving the job	:
21.	If presently unemployed	
	(a) How long have been unemployed	:
	(b) Whether you have registered in the Employment Exchange	: Yes/No
	If 'yes' Register No.	:
	(c) Whether previously employed	: Yes/No
22.	If 'yes' Name and address of the Institutions worked	:
•	Period and reasons for termination	•
23.	If a student, please furnish the name of the course and institution in which studying with period	:
	(2)	÷
24.	Whether you have registered as a post graduate in the Medical Council	: Yes/No
	(b) If yes, please furnish Register No. and year of Registration	:
25.	Have you got an institution to leave the country	: Yes/No
	If yes, please mention the reasons if any for leaving the country intends to proceed	
26.	Please mention your suggestion if any for the proper utilisation of Post graduates	:

Signature

Place:

Date:

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Government of Kerala 1984

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