

A CENSUS OF LONG - STAY PATIENTS IN GOVERNMENT MENTAL HOSPITALS IN INDIA

M.VENKATASWAMY REDDY

ABSTRACT

A single day census found that long-stay patients (LSP) numbering 7,307 accounted for about 48% of the total inpatient strength of 15,345 in government mental hospitals in India. A load of 2695 (37%) LSP were in two to five years duration of stay, 2782 (38%) were in five to fifteen years duration of stay, and the remaining 1830 (25%) were staying for more than fifteen years. About 11% of LSP were aged sixty years and above, majority (53%) were males, non-voluntary cases constituted 80%, and more than two-thirds (69%) were schizophrenics. The characteristics distributions associated with high rates of LSP at individual hospitals were identified. The load of LSP was decreased by 9% during the period from 1993 to 1999.

Key words : Census, long-stay patients, government mental hospitals, national indicators

Sufficient data on long-stay patients (LSP) in government mental hospitals were lacking in India, though certain informations about some individual hospitals or a small group of hospitals have been reported (Sathyavathi and Sundararaj, 1996; Bhaskaran, 1970; Gupta et al., 1980; Somasundaram et al., 1982). Two major studies (Sharma et al., 1996; NHRC, 1999) have reported number of LSP at individual hospitals. This paper is based on data collected from all government mental hospitals with the main objectives of determining the load, characteristics distributions and trends of LSP. Also, each hospital indicators were compared with the national indicators in order to identify the characteristics and trends associated with high rates of LSP at individual hospitals.

MATERIAL AND METHOD

A questionnaire was designed incorporating the number of inpatients, and the number of long-stay patients (staying for two years and above) and their characteristics

distributions on duration of stay, age, gender, mode of admission and diagnoses. The questionnaire was mailed to all the government mental hospitals with a request to send the requisite information. All the hospitals have responded to the request by conducting a census on a particular day and sending the informations of their respective institutions. Most of the census were conducted during the year 1999. As the load and characteristics distributions of LSP do not grossly change during a period of six months, it could be assumed that first July 1999 is the date of census of the present study

Presentation and analysis of observations

Thirty six mental hospitals run by seventeen state governments, the central government, and autonomous bodies funded by central/state governments, constituted the mental health delivery system by government mental hospitals in India. There were 15,345 inpatients out of which 7,307 were staying for two years and above. Hence, 48% of inpatients were LSP. The distributions of these LSP according to the five

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basic characteristics are presented in table 1.

It can be derived from the table that 4612

TABLE 1
CHARACTERISTIC DISTRIBUTIONS OF LONG-STAY
PATIENTS IN GOVERNMENT MENTAL HOSPITALS
(N=36) IN INDIA

Characteristics	Total (7307)	Percentage (100)
Period of stay (years)		
2 - 5	2695	37
5 - 15	2782	38
Above 15	1830	25
Age (completed years)		
20 - 39	3580	49
40 - 59	2930	40
60 & above	797	11
Gender		
Males	3842	53
Females	3465	47
Mode of admission		
Voluntary	1437	20
Certified	4889	67
Observation	663	9
Criminals	318	4
Diagnoses		
Organic psychoses	350	5
Schizophrenia	5065	69
Affective disorders	512	7
Mental retardation	679	9
All others	701	10

(63%) of LSP have stayed for five years and above, and 1830 (25%) have stayed for more than fifteen years. About 49% of LSP were in the age group of 20-39 years, 40% were in the age group of 40-59 years and the remaining 11% were aged sixty years and above. The majority (53%) were males. The certified cases (67%), observation cases (9%) and patients with criminal records (4%) put together accounted for 80% for non-voluntary LSP. About 5% have organic psychoses, 69% were schizophrenics, 7% were affective disorders, 9% were mentally retarded and the remaining 10% included psychoses associated with either epilepsy or severe behavioural disturbances.

The number of inpatients, and the number and rate of LSP for individual hospitals are presented in table 2.

There was a wide variation in the loads of LSP among the government mental hospitals during the year 1999, ranged from 2 LSP at

Calcutta IP hospital to 1848 LSP at the regional hospital Pune. The four regional hospitals in Maharashtra state constituted 3231 LSP, and accounted for about 44% of LSP in the whole country. Eleven hospitals had significantly ($p < 0.05$) high rates of LSP when compared with the national indicator of 48%, as shown in the table. They were the hospitals at Purulia (92%), Srinagar (90%), Amritsar (76%), Pune (73%), Baroda (72%), Calcutta CPH (70%), Indore (68%), Bareilly (66%), Ahmedabad (61%), Nagpur (60%) and Kozhikode (56%).

The characteristics distributions of LSP according to the duration of stay, age and gender for individual hospitals are presented in table 3.

It can be counted that two hospitals (at Hyderabad and Nagpur) had significantly high proportion of cases staying for fifteen years and above, and also had significantly high proportion of cases aged sixty years and above. On the other hand, five hospitals (at Ahmedabad, Srinagar, Trivandrum, Pune and Calcutta LPMH) had significantly high proportion of cases in the 2-5 years duration of stay, and also had significantly high proportion of cases in the young age group of 20-39 years. Two hospitals (at Kozhikode and Varanasi) had significantly high proportion of cases in the 5-15 years duration of stay, and also had significantly high proportion of cases in the age group of 40-59 years.

The hospital at Varanasi had the highest proportion (82%) of males followed by the hospital at Srinagar (81%). On the other hand, the hospital at Kohima had the lowest proportion (22%) of males followed by NIMHANS at Bangalore (25%). Further, it can be noted that all the three hospitals in Kerala had significantly high proportion of males.

The characteristics distributions of LSP according to their mode of admission and diagnoses for individual hospitals are presented in table 4.

The NIMHANS at Bangalore had the highest proportion (98%) of voluntary (Vol.) cases of LSP followed by the hospital at Srinagar (89%). Further, the hospitals in Andhra Pradesh,

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TABLE 2
NUMBER OF INPATIENTS (IP) AND NUMBER AND RATE OF LONG-STAY PATIENTS (LSP) AT
GOVERNMENT MENTAL HOSPITALS

States & names of hospitals	P	LSP	
		Number	%
All hospitals	15,345	7307	48
Andhra Pradesh			
- Institute of Mental Health, Hyderabad	386	71	18
- Institute of Mental Health, Visakhapatnam	300	20	7
Assam			
- LGB Institute of Mental Health, Tezpur	353	103	29
Bihar			
- Ranchi Institute of Neuro-Psychiatr & Allied Sciences, Ranchi	543	191	35
- Central Institute of Psychiatry, Ranchi	360	99	28
Delhi			
- Institute of Human Behaviour & Allied Sciences, Delhi	140	44	31
Goa			
- Institute of Psychiatry & Human Behaviour, Panaji	150	80	53
Gujarat			
- Hospital for mental Health, Ahmedabad	402	247	61*
- Hospital for mental Health, Baroda	181	131	72*
- Hospital for mental Health, Jamnagar	55	8	15
- Hospital for mental Health, Bhuj	25	7	28
Jammu & Kashmir			
- Psychiatric Diseases Hospital, Srinagar	100	90	90*
Karnataka			
- National Institute of Mental Health & Neuro Sciences, Bangalore	364	56	15
- Karnataka Institute of Mental Health, Dharwad	296	84	28
Kerala			
- Government Mental Health Centre, Trivandrum	774	305	39
- Government Mental Health Centre, Trissur	382	61	16
- Government Mental Health Centre, Kozhikode	685	381	56*
Madhya Pradesh			
- Gwalior Mansik Arogyashala, Gwalior	192	38	20
- Mental Hospital, Indore	157	107	68*
Maharashtra			
- Regional Mental Hospital, Thane	1744	835	48
- Regional Mental Hospital, Pune	2540	1848	73*
- Regional Mental Hospital, Nagpur	786	470	60*
- Regional Mental Hospital, Ratnagiri	183	78	43
Nagaland			
- Mental Hospital, Kohima	21	9	43
Punjab			
- Punjab Mental Hospital, Amritsar	415	314	76*
Rajasthan			
Psychiatric Centre, Jaipur	312	56	18
Tamil Nadu			
- Institute of Mental Health, Chennai	1657	692	42
Uttar Pradesh			
- Agra Manasik Arogyashala, Agra	459	142	31
- Mental Hospital, Varanasi	258	133	52
- Mental Hospital, Bareilly	292	192	66*
West Bengal			
- Calcutta Pavlov Hospital, Calcutta	251	175	70*
- Lumbini Park Mental Hospital, Calcutta	129	60	47
- Institute of Psychiatry, Calcutta	36	2	6
- The Menta Hospital, Mankundu	106	10	9
- Berhampore Mental Hospital, Berhampore	214	79	37
- Institute for Mental Care, Purulia	97	89	92*

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TABLE 3
CHARACTERISTIC DISTRIBUTIONS OF DURATION OF STAY, AGE AND GENDER OF LONG STAY
PATIENTS AT GOVERNMENT MENTAL HOSPITALS (FIGURES IN %)

Hospitals at (LSP)	Duration of stay			Age (years)			Males
	2-5	5-15	above 15	20-39	40-59	60 & above	
All hospital (7307)	37	38	25	49	40	11	53
Hyderabad (71)	25	23	52*	25	28	47*	58
Vishakapatnam (20)	70*	25	5	55	40	5	65
Tezpur (103)	51*	22	27	56	31	13	72*
Ranchi (191)	19	51*	30	44	42	14	61*
Ranchi CIP (99)	8	28	64*	24	52*	24*	54
Delhi (44)	27	21	52*	50	39	11	52
Panaji (80)	26	41	33	47	34	19*	53
Ahmedabad (247)	47*	37	16	57*	35	8	77*
Baroda (131)	36	32	32	45	48	7	57
Jamnagar (8)	88*	12	--	62	38	--	50
Bhuj (7)	72	14	14	57	43	--	57
Srinagar (90)	67*	28	5	91*	9	--	81*
Bangalore (56)	32	36	32	48	36	16	25
Dharwad (84)	10	41	49*	45	44	11	50
Trivandrum (305)	66*	29	5	62*	34	4	66*
Trissur (61)	33	46	21	31	44	25*	56*
Kozhikode (381)	50*	46*	4	43	49*	8	67*
Gwalior (38)	37	55	8	61	39	--	42
Indore (107)	21	49	30	64*	28	8	43
Thane (835)	35	35	30*	42	44*	14*	44
Pune (1848)	47*	36	17	61*	32	7	37
Nagpur (470)	31	34	35*	42	42	16*	52
Ratnagiri (78)	19	45	36*	50	41	9	69*
Kohima (9)	67	33	--	67	33	--	22
Amritsar (314)	22	39	39*	23	58*	19*	64*
Jaipur (56)	39	46	15	46	43	11	45
Chennai (692)	23	43*	34*	39	48*	13	62*
Agra (142)	16	42	42*	36	49	15	51
Varanasi (133)	19	47*	34*	32	53*	15	82*
Bareilly (192)	43	41	16	68*	30	2	48
Calcutta CPH (175)	16	73*	11	57	41	2	62*
Calcutta LPMH (60)	53*	45	2	70*	27	3	60
Calcutta IP (2)	50	50	--	50	50	--	50
Mankundu (10)	60	30	10	50	50	--	70
Berhampore (79)	46	35	19	44	51	5	46
Purulia (89)	16	10	74*	9	56*	35*	67*

Assam, Bihar, Goa, Jammu & Kashmir, Karnataka and Kerala had significantly high proportion of voluntary cases. All the LSP in four hospitals (at Baroda, Jamnagar, Bhuj and Calcutta CPH) were certified cases. Six hospitals (at Calcutta IP, Jaipur, Agra, Thane, Panaji and Kozhikode) had significantly high proportion of observation (Obs) cases. Similarly, six hospitals (at Varanasi, Trivandrum, Purulia, Tezpur, Trissur and Amritsar) had significantly high

proportion of criminal (Cri) patients.

Five hospitals (at Nagpur, Trissur, Ranchi CIP, Kozhikode and Baroda) had significantly high proportion of organic psychoses (OP) cases. Seven hospitals (at Kozhikode, Trivandrum, Ranchi CIP, Srinagar, Varanasi, Calcutta LPMH and Bareilly) had significantly high proportion of affective disorders (AD) cases. Six hospitals (at Indore, Chennai, Ratnagiri, Dharwad, Tezpur and

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TABLE 4
CHARACTERISTIC DISTRIBUTIONS OF MODE OF ADMISSION AND DIAGNOSES OF LONG-STAY PATIENTS AT GOVERNMENT MENTAL HOSPITALS (FIGURES IN %)

Hospitals at (LSP)	Mode of admission				Diagnoses				
	Voi	Cer	Obs	Cri	OP	Schi	AD	MR	Oth
All hospitals (7307)	20	67	9	4	5	69	7	9	10
Hyderabad (71)	83*	17	-	-	-	89*	11	-	-
Vishakapatnam (20)	60*	40	-	-	5	50	10	20	15
Tezpur (103)	56*	33	-	11*	5	76	-	18*	1
Ranchi (191)	78*	19	1	2	4	78*	4	8	6
Ranchi CIP (99)	75*	25	-	-	11*	50	26*	9	4
Delhi (44)	25	68	-	7	-	80	2	2	16
Panaji (80)	74*	-	26*	-	1	80*	5	11	3
Ahmedabad (247)	1	98*	-	1	-	91*	4	-	5
Baroda (131)	-	100*	-	-	9*	78*	9	2	2
Jamnagar (8)	-	100*	-	-	-	75	12	12	-
Bhuj (7)	-	100	-	-	-	100	-	-	-
Srinagar (90)	89*	11	-	-	2	72	25*	1	-
Bangalore (56)	98*	2	-	-	-	66	12	11	11
Dharwad (84)	53*	38	4	5	-	67	3	19*	11
Trivandrum (305)	76*	-	-	24*	-	62	27*	5	6
Trissur (61)	44*	46	-	10*	12*	70	3	15	-
Kozhikode (381)	66*	13	18*	3	10*	47	29*	-	14
Gwalior (38)	42*	58	-	-	10	61	-	29	-
Indore (107)	1	95*	-	4	-	45	1	33*	21*
Thane (835)	3	49	47*	1	1	59	7	7	26*
Pune (1848)	2	95*	-	3	5	75*	1	8	11
Nagpur (470)	-	99*	-	1	19*	62	2	14*	3
Ratnagiri (78)	3	97*	-	-	8	69	-	23*	-
Kohima (9)	22	78	-	-	-	89	-	11	-
Amritsar (314)	1	89*	-	10*	-	76*	11	4	9
Jaipur (56)	23	-	77*	-	-	95*	-	5	-
Chennai (692)	22	70	6	2	7	63	1	26*	3
Agra (142)	7	32	61*	-	-	97*	2	1	-
Varanasi (133)	2	40	-	58*	-	44	19*	6	31*
Bareilly (192)	6	94*	-	-	-	81*	15*	4	-
Calcutta CPH (175)	-	100*	-	-	11	70	15	-	4
Calcutta LPMH (60)	55*	45	-	-	2	62	17*	3	16
Calcutta IP (2)	-	-	100*	-	-	50	-	-	50
Mankundu (10)	70*	30	-	-	-	100	-	-	-
Berhampore (79)	18	78*	4	-	6	67	8	11	8
Purulia (89)	-	84*	-	16*	1	87	2	6	4

Nagpur) had significantly high proportion of mental retarded (MR) cases.

The data on the number of LSP for the year 1993 were collected in a survey to study the summary trends of mental health delivery system by government mental hospitals (Reddy et al., 1996). This information is used to study the trends of LSP during the period from 1993 to 1999, as shown in table 5.

For the group of thirty six mental hospitals, there were 7988 LSP during the year 1993. Thus, there was a decrease of 681 (9%) LSP during the period of seven years. It can be noted that the hospital at Thane had the highest number (182) of increase of LSP followed by the hospital as Kozhikode (151). But the highest rate of increase was reported for the hospital at Berhampore followed by the hospital at Srinagar.

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**TABLE 5
TREND IN LONG-STAY PATIENTS AT GOVERNMENT MENTAL HOSPITALS IN INDIA DURING 1993 TO 1999**

Hospitals at	1993	1999	Decrease (-) or increase (+) Number	%
All hospitals	7988	7307	- 681	- 9
Hyderabad	76	71	- 5	- 7
Vishakapatnam	18	20	+ 2	+11
Tezpur	307	103	-204	-66
Ranchi	363	191	-172	-47
Ranchi CIP	243	99	-144	-59
Delhi	74	44	- 30	- 41
Panaji	98	80	- 18	- 18
Ahmedabad	219	247	+ 28	+ 13
Baroda	175	131	- 44	- 25
Jamnagar	4	8	+ 4	+100
Bhuj	7	7	--	--
Srinagar	28	90	+ 62	+ 221
Bangalore	116	56	- 60	- 52
Dharwad	91	84	- 7	- 8
Trivandrum	684	305	- 379	- 55
Trissur	166	61	- 105	- 63
Kozhikode	230	381	+ 151	+ 66
Gwalior	34	38	+ 4	+ 12
Indore	96	107	+ 11	+ 11
Thane	653	835	+ 182	+ 28
Pune	1830	1848	+ 18	+ 1
Nagpur	436	470	+ 34	+ 8
Ratnagiri	111	78	- 33	- 30
Kohima	6	9	+ 3	+ 50
Amritsar	353	314	- 39	- 11
Jaipur	63	56	- 7	- 11
Chennai	701	692	- 9	- 1
Agra	168	142	- 26	- 15
Varanasi	200	133	- 67	- 34
Bareilly	135	192	+ 57	+ 42
Calcutta CPH	133	175	+ 42	+ 32
Calcutta LPMH	32	60	+ 28	+ 88
Calcutta IP	2	2	--	--
Mankundu	11	10	- 1	- 9
Berhampore	15	79	+ 64	+ 427
Purulia	110	89	- 21	- 19

Both the hospitals in Madhya Pradesh was increased the number of LSP during the period.

In conclusions, the long stay admissions are necessary only for a small group of patients who are non-responders to treatment or have several associated disabilities. For the majority, long duration of stay in the hospitals is not only a burden on the state, but more importantly detrimental to the patients and their families. The Purulia centre had the highest rate of LSP. This

institute was started functioning after receiving mental patients from Alipore central jail, Calcutta. There after patients from the two institutes at Ranchi were transferred to this hospital

The long-stay patients occupied more than seven thousand valuable hospital beds consuming a significant share of meager resources which otherwise could be of immense help to many poor patients. The regional hospital at Pune had accounted for about 25% of LSP in

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the country. At this hospital, patients from eleven districts were admitted and due to long distances in time and space, patients tended to cluster in the long-stay categories.

The 7307 LSP in this system represented about 0.7 per one lakh population. Based on the population projection of India (RGI,1996), the representation for the age sixty years and above can be worked out at 1.1. per one lakh population. As in the case of general population, males were the majority in LSP in this system.

The major mental hospitals at Pune (with 1848 LSP), Thane (835) and Chennai (692) put together accounted for about 46% of the total LSP in this system. The national indicators of LSP in this system may be unduly effected by the hospital indicators in these three major hospitals. But none of the hospital indicators was significantly high in all these three hospitals, indicating the internal stability of the national indicators.

The rates of LSP were 60%, 56% and 51% for the year 1977, 1983 and 1993 respectively (Reddy et al.,1996) It was decreased to 48% for the year 1999 means that there is a linear decreasing trend of the rate in this mental health care system. This is mainly due to the implementation of national mental health policy and mental health act 1987. This has given rise to development of community mental health at district level in some of the states.

In the absence of determining the optimum indicators for LSP in this system, the national indicators may serve as optimum values. The hospital indicators and trends which were significantly high may aid in planning rehabilitation facilities and services, and sets the guidelines for discharge procedures in order to make the inpatient service more effective with the existing bed strength. This report may also serve as a baseline data for evaluating the services rendered by this system at national and individual hospital levels.

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M VENKATASWAMY REDDY, PhD, Additional Professor of Biostatistics, National Institute of Mental Health & Neuro Sciences (NIMHANS), Bangalore - 560 029.