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Social Treatment as Reflected in the Movement of the Patient Population at Griffin Memorial Central State Hospital, Norman, Oklahoma, from July 1, 1953 to June 30, 1954.

A Research Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Social Work

by

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Norman, Oklahoma

August 1955

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APPROVED BY

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ABSTRACT

Mental health has assumed a very serious aspect over the entire nation during recent years. Oklahoma has made provision for its mentally ill people since statehood. In this study, data on admissions, resident patients, and releases from Central State Hospital have been studied in an attempt to show factors which influence movement of the patient population.

Twenty tables of data have been used in the study, to show trends in movement. Tables on the number and type of personnel have also been included as factors influencing the rate of movement of the patient population. Central State Hospital had almost half the total admissions to mental hospitals in the state for the year July 1, 1953 through June 30, 1954. In the counties having a high proportion of people sixty-five years of age and over, the admissions to mental hospitals were relatively higher than in counties having a smaller proportion sixty-five and over. In 1948 Oklahoma hospitals admitted a higher percent of persons seventy years of age and over per 100,000 of the general population than the United States as a whole.

The resident population of Central State Hospital has more persons in the 45-59 year age group than in any other five year age group. The types of mental illnesses common to this age group

require longer periods of hospitalization than the others. The number of patients on convalescent leave from Central State Hospital conformed to a seasonal trend. The number on leave was larger in the spring and early summer than at any other time of the year. Bed capacity in Central State Hospital was adequate but in other state hospitals the bed capacity was far below the requirements. All hospitals were in need of more trained personnel. Central State had only 44.4 percent of the psychiatrists needed, 36.1 percent of the psychologists needed and 9.1 percent of the social workers needed. The mental illnesses most frequently found in Central State Hospital and in the United States in general are psychoneuroses, manic depressive psychoses, and dementia praecox.

CHAPTER I

NATURE AND SCOPE OF THE STUDY

The Griffin Memorial Central State Hospital is located near the center of the state, at Norman, Oklahoma, in Cleveland County. It opened as early as 1895, which was 12 years before statehood. It was operated as a private sanitorium by the Oklahoma Sanitation Company until it became a state institution in 1915.

Prior to 1895 the Territory of Oklahoma "boarded" its mentally ill patients at the Oak Lawn Retreat for the Insane, at Jacksonville, Illinois, at a rate per month of $25.00 per person. From 1895 to 1915 contracts were made by the Jacksonville, Illinois institution with the private institution in Norman, called the Oklahoma Sanitorium of Norman, for the care of the mentally ill. Prior to statehood the mentally ill in Indian Territory were sent to a similar institution in St. Louis, Missouri.

The purpose in establishing Central State Hospital was to provide care and treatment for the mentally ill white persons who lived in the central part of the state. In addition to serving its own district, Central State Hospital helps care for some patients from other districts. The counties included in the Central State region are: Atoka, Bryan, Canadian, Carter, Cleveland, Coal, Garvin, Grady, Hughes, Jefferson, Johnston, Lincoln, Logan, Love, McClain,

Marshall, Murray, Okfuskee, Oklahoma, Payne, Pontotoc, Pottawatomie, Seminole and Stephens. This area covers some of the most industrialized sections of all Oklahoma, some of the most rugged in terrain, and some of the worst and best farmlands in the state. From this vastly diversified section there is much divergence in numbers of mentally ill who come from the different counties included. This area contains the largest city in the state, Oklahoma City, and thirteen cities with more than 10,000 population. It has eight large schools or colleges.

Shortly after statehood Oklahoma made public provision for its mentally ill people.(1) The first private hospital for the mental diseases was located at Norman, Oklahoma on the present site of Central State Hospital. Later state hospitals were built at Vinita and Fort Supply to care for the mentally ill in the eastern and western parts of the state, while the institution at Norman cares for the mentally ill from the central counties.

More males than females become inmates of hospitals for the mental diseases. Of the 3,561 persons in the three Oklahoma hospitals on June 30, 1926, 56.8 percent were males. Since males constituted only 50.6 of the population of the state at that time it is evident that males have a higher psychosis rate than females. Statistics

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(1) Social and Community Resources of Oklahoma, J. J. Rhyne, Ph.D. p. 178.

show a continued preponderance of male patients over female at the present time. In 1951 Oklahoma had 2,065 admissions to mental hospitals of which 1,209 were male and 856 were female. In this same year the United States showed a total of 151,612 admissions with 82,169 male and 69,443 female.

The first public hospital known as the Oklahoma Hospital for the Insane (now Western Oklahoma Hospital) was established by the Territorial Legislature at Ft. Supply in 1903.(2) The site was donated by the Federal Government. This Hospital was opened in 1908, one year after statehood. In this same year also, the Legislature provided for the establishment of the Eastern Oklahoma Hospital for the insane at Vinita for the benefit of the eastern part of the state. The Hospital at Norman was purchased by the state in 1915 and designated as the Central Oklahoma State Hospital. Negro patients were kept in separate wards at Norman until 1934 when the State Hospital for Negro Insane was opened at Taft. In 1890 provision was made for each county to have a commission of insanity composed of the judge and two persons appointed by the county commissioners. The duties of this commission was to provide for the care of the insane through cooperation with the territorial officials. This plan was not uniform and the services varied with each commission and their feelings toward mental illnesses. Before 1915 the board of trustees

(2) Oklahoma Planning and Resources Board, Division of State Planning, p. 36-39--1938.

at the Supply Hospital was composed of the Governor and two other persons appointed by the governor and confirmed by the Territorial Council. The Board at Supply before 1915 was named by the Governor with Senate approval for a three year term.

Oklahoma now has four state hospitals for the care and treatment of the mentally ill; Central State at Norman, Eastern State at Vinita, Western State at Ft. Supply, and Muskogee State Hospital for Negro Insane at Taft. They are under the supervision of the Department of Mental Health. The Department was created in 1953. The Board of Mental Health has seven members who are appointed by the governor and approved by the Senate.

As the number of resident patients increased at Central State Hospital an effort has been made to increase the facilities for care and treatment. A ward for the care and treatment of children has been arranged and has a bed capacity for 25 patients. At the last report there were 33 patients under 14 years of age receiving treatment. It is felt that this increased attention to the mental health of children in early years will supply much needed information to the mental health program and be a significant factor in the prevention of mental illnesses. Where a plan has been consistently followed it has been found that prevention pays dividends in money as well as in lessened heartbreak. The National Association of Mental Health in their pamphlet, Reporter for February 1955 gives a

progress report on National Mental Health Program activities, in one county.(3)

> "In pointing out the values of prevention in the cost of mental health, Family Service Association of DuPage County, Illinois estimates that the cost of hospital care for a seriously mentally ill patient is from $10,000 to $35,000, while on the other hand, its preventive clinical services cost about $70.00 per person. However the humanitarian value of helping prevent human suffering and personal tragedies cannot be truly measured in dollars and cents. Like every other region, DuPage County has its share of broken homes, suicides, mental breakdowns, and public dependency, and only by maintaining a strong preventive resource for all residents of the county can the tide be turned in community mental health."

According to the reports of the National Institute of Mental Health in 1903, there were 186 persons out of every 100,000 of the general population who were in state mental hospitals. In 1948 this number had increased to 323 per 100,000. Part of the increase may be due to increased knowledge in diagnosing cases, improved hospital facilities, and the increased longevity of the population.

Oklahoma has from statehood made provision for its mentally ill. Even prior to statehood the territories took some responsibility in this area. The number of persons in state mental hospitals is increasing. In this study an attempt has been made to show some of the factors which influence the movement of the patient population of Central State Hospital at Norman. One objective has been to determine whether or not increased longevity is a factor in the

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(3) Prevention Pays Dividends, National Association of Mental Health. Reporter February 1955. Department of Health, Education and Welfare, p. 2.

increase in the number of mental patients admitted to Central State. To do this, data on the admissions to Central State Hospital for the year July 1, 1953 through June 30, 1954 have been studied, as well as data on the number of resident patients and releases from the hospital for this same period. The number and type of personnel has been included in the study in order to show how treatment facilitates movement of the patients and how a more adequate number of personnel might influence increased movement of patients and work toward an active program in the prevention of mental illness. Twenty tables of data have been used to show trends in movement.

The first table takes up the number of persons entering Central State Hospital each month by type of admission and the percent of change from month to month. The second table concerns the number of persons entering Central State Hospital for mental diseases each month and the percent of change over the preceding month. The third table deals with the number of persons entering Central State Hospital for Mental Diseases each month per 100,000 of the general white population in the area which Central State covers. This is compared with the number in the state as a whole on a monthly basis. The fourth table shows the number of patients entering Central State Hospital per 100,000 of the general white population by county. The fifth table shows the admissions to all Oklahoma State Hospitals by age groups and compares this with the United States. This is for the

year 1948.

Table six shows the age distribution of the resident patient population in Central State Hospital and the percent of persons in each age group. Table seven gives the number of resident patients in Central State Hospital at the beginning of each month and the percent of change over the preceding month. Table eight gives the number of resident patients in Central State Hospital for Mental Diseases at the beginning of each month per 100,000 of the general population and compares it with the state as a whole. Table nine shows the number of resident patients in Central State Hospital by counties per 100,000 of the general population. Table ten concerns the number of patients released each month from Central State Hospital and the percent of change over the preceding month. Comparison is made to other state hospitals. Table eleven shows the number of persons released each month from Central State Hospital and the number per 100,000 of the general population. Table twelve is a comparison of admissions and releases by month from Central State Hospital and of all state hospitals. Table thirteen shows average daily population on convalescent leave from Central State Hospital and percent of change over the preceding month. Table fourteen shows the number of the total resident and convalescent population of Central State Hospital on convalescent leave each month and the percent of population on convalescent leave. Table fifteen gives the average length

of hospital residence according to type of diagnosis, on March 1, 1954. Table sixteen shows the bed capacity of Central State Hospital per month. Table seventeen shows the relationship of the bed capacity to the patients under care in Central State Hospital. Table eighteen deals with the number and type of personnel employed at Central State Hospital and the number per 1,000 patients. Table nineteen shows the psychoses of the first admissions to Central State according to age for the year beginning June 30, 1948. This is compared with data on the United States level. Table twenty is a comparison of releases in the state hospitals of Oklahoma and the neighboring states of Kansas, Arkansas, Texas and the United States as a whole. The material shows the number of patients recovered, improved, unimproved, unclassified and the percent by type of release in each area.

CHAPTER II

PATIENTS ADMITTED TO CENTRAL STATE HOSPITAL

During the period from July 1, 1953 to June 30, 1954 there were 1088 persons admitted to Central State Hospital for Mental Diseases. During the same period there were 2174 persons admitted to state hospitals for mental diseases in the entire state. These data indicate that Central State Hospital handled almost half the admissions of people who were admitted to hospitals for mental diseases for that period of time. The latest comparable figures on admissions per year to hospitals for mental diseases for the entire United States were for the year 1952, when there were 157,185 persons admitted to hospitals for mentally ill.

The rate of admissions for the United States per 100,000 was 102.5. For the 24 counties from which Central State draws its admissions, the rate per 100,000 was 121.6. This is rather high in comparison with the national rate. Compared with that of the State of Oklahoma as a whole, the rate is about the same.

The admissions at Central State Hospital for Mental Diseases are classified into six types. They are: first admissions to the institution, re-admissions to the same hospital, re-admissions from other hospitals in the state, returns from convalescent leaves, returns from escapes, and transfers-in to Central State Hospital from other hospitals. During the fiscal year July 1, 1953 to June 30, 1954

Table 1.-- Number of Persons Entering Central State Hospital for Mental Diseases Each Month from July 1, 1953 to June 30, 1954 by Type of Admission.

Type of Admissions	Number Entering by Type of Admission												
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
First Admissions	40	28	33	31	19	42	40	40	50	44	40	45	452
Re-admissions Same Hospital	16	10	8	15	17	22	17	20	23	24	17	18	207
Re-admissions Other Hospitals	11	6	7	9	10	8	2	8	16	9	11	10	107
Returns From Convalescent Leaves	28	34	24	19	14	16	22	14	5	6	13	14	209
Returns From Escapes	0	0	0	7	10	7	12	8	13	8	4	6	75
Transfers In	1	0	27	0	0	0	1	0	1	0	7	1	38
TOTAL	96	78	99	81	70	95	94	90	108	91	92	94	1088

Table 1 --- Number of Persons Entering Central State Hospital for Mental Diseases Each Month from July 1, 1953 to June 30,1954 by Type of Admission. (Continued)

Type of Admissions	Percent of Change Over Preceding Month According to Type of Admission											
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
First Admissions	-	-.03	.18	-.06	-.39	1.21	-.5	0	.25	-.12	-.69	.12
Re-admissions Same Hospital	-	-.31	-.2	.87	.13	.24	-.18	.18	.15	.04	-.29	.06
Re-admissions Other Hospitals	-	-.45	.16	.28	.11	-.2	-.7	3.0	1.0	-.44	-.22	-.09
Returns from Convalescent Leaves	-	.24	-.3	-.20	-.26	.14	.37	-.36	-.64	.2	1.1	.08
Returns from Escapes	-	-	-	7.0	.4	-.3	.7	-.3	-.6	-.38	-.5	.5
Transfers In	-	-1.0	27.	-27	-	-	1.0	-.1	-	-	-	-

Source: Biometrics Division, Oklahoma Department of Mental Health.

there were 452 first admissions to Central State Hospital for Mental Diseases. There were 207 re-admissions of persons who had once been in Central State Hospital and 107 re-admissions from other hospitals in the state. There were 209 returns from convalescent leave and 75 returns from escapes. There were 38 transfers from other hospitals in the state to Central State Hospital for this period. Of these transfers, 27 were made in September of 1953. It has been established that the bulk of these 38 transfers in were from Western State Hospital for Mental Diseases located at Fort Supply. The reason for such a large number of persons being transferred at one time was that the patients sent had been diagnosed as having tuberculosis. They were transferred to Central State from Western State Hospital because Western State Hospital had no facilities for treatment of this type of patient. The transfer of 27 patients in one month is rather large. The average for the year July 1, 1953 to June 30, 1954 was slightly over three per month.

The number of first admissions per month ranged from 19 persons in November, 1953 to 50 persons in March, 1954. The rate of re-admissions from other hospitals ranged from two in January of 1954 to 16 in March, 1954. Re-admissions from the same hospital ranged in number from eight in September of 1953 to 24 in April of 1954. Returns from convalescent leave ranged from five in March 1954 to 34 in August 1953. On returns from escapes there were 13 in March 1954

and four in May 1954. The transfers in ranged from 27 in September 1953 to one in four different months, July, 1953, January, 1954, March, 1954, and June, 1954. All other months showed no transfers at all except May of 1954 when there were seven. This number, however, does not have much effect on the difference in the rate of admissions to Central State Hospital.

In considering the rate of change in the number of first admissions per month it was found that in only one interval, from January 1954 to February 1954, there was no change in rate. The greatest change on first admissions from one month to the next came in December 1953, when there were 42 first admissions. I_n the preceding month of November, there were only 19. This was an increase of 23 persons over the last month. There was an increase of 121% in December over November of 1953. For all types of admissions, however, the percent of change ranged from a difference of 19% in August to 35% in December of 1953.

When the total of all types of admissions by month is considered, it was found that March 1954, with 108 admissions, had the greatest number, while November 1953, with 70 admissions, had the smallest number. The large number of admissions for the month of March seems to follow the general pattern of the last five years.(4)

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(4) Oral interview with Mr. Tolliver, Director of Biometrics Division in the Department of Mental Health of Oklahoma.

Table 2 --- Number of Persons Entering Central State Hospital for Mental Diseases and all Oklahoma State Hospitals for Mental Diseases Each Month and Percent of Change from Preceding Month, from July 1, 1953 to June 30, 1954.

Month	Number of Persons Entering by Month		Percent of Change Over Preceding Month	
	Central State Hospital	All Oklahoma Hospitals	Central State Hospital	All Okla. Hospitals
July	96	178	-19	
Augu	78	167	-19	-6.1
Sept.	99	194	27.	16.2
Oct.	81	178	-19	-8.2
Nov.	70	144	-18.	-19.1
Dec.	95	201	35.	39.5
Jan.	94	169	-15	-15.1
Feb.	90	173	-1.9	2.4
Mar.	108	197	20.	-13.9
April	91	200	-15	3.5
May	92	183	11.	8.5
June	94	196	2.0	7.1

Source: Biometrics Division : Oklahoma Department of Mental Health

There were 1088 admissions to Central State Hospital, 690 to Eastern State Hospital, and 402 to Western State Hospital during the year July 1, 1953 through June 30, 1954. Of the first admissions Central State had 452 for the year July 1, 1953 through June 30, 1954, Western State Hospital,171, and Eastern State Hospital,422. With the exception of four months, Central State Hospital was consistently higher in the number of first admissions. In October and November 1953, Eastern State Hospital had 41 first admissions and Central State only 31. In November 1953 Eastern State Hospital had 34 first admissions and Central State only 19. In April 1954 Eastern State Hospital had 45 first admissions and Central State had 44. In May of 1954 Eastern State Hospital had 46 first admissions and Central State 40. In other types of admissions, Central State Hospital was consistently higher than the other hospitals.

Central State Hospital for Mental Diseases for the year July 1, 1953 to June 30, 1954, handled almost half the total admissions to all state hospitals, as was noted in Table 1. Central State Hospital handled 1088 admissions of all types compared with 2174 for the entire state. In examining the total admissions per month it was found that Central State admissions were consistently twice as many as the other hospitals. The highest number of admissions to Central State came in March 1954 with 108. For Eastern State Hospital the month of highest admissions was April 1954 with 73. For Western State Hospital, however, August of 1953 with 40, was the month with the highest number

of admissions.

At Central State Hospital and at Western State Hospital, the month of November 1953 had the lowest number of admissions for the year, with only 70 at Central State and 22 for Western State Hospital. In this same month Eastern State Hospital had 52 admissions. This was also considerably lower than usual for that area. The lowest number for the year in admissions to Eastern State Hospital was for January 1954 with 39. These figures show a general lag in admissions during November, 1953.

The greatest difference between the number of admissions to Central State Hospital and in the entire state occurred in April 1954. There were 91 for Central State and 109 for the other two hospitals. The least difference in number of admissions came in November 1953 when there were 70 admissions to Central State and 74 to the other two hospitals.

In comparing the percent of change from month to month for admissions to Central State Hospital, it is noticed that the largest percent of change (35) was for the month of December, 1953. The least change was in January 1954, where the percent of change was less than one percent. On the state level the greatest percent of change was also in December, 1953, with 39 percent and the lowest rate of change was one percent in April 1954.

In a study of the number of persons admitted to Central State Hospital per 100,000 of the general white population, it was found that the number was consistently higher than in the State of Oklahoma as a whole. This situation is true for the month by month admissions as well as for the entire year. The month of March had 12 persons per 100,000 of the general white population admitted to Central State Hospital for mental diseases. This was the highest number for the 12 months period from July 1, 1953 through June 30, 1954. As brought out in the interpretation under Table I, this is again following the trend on admissions in March for the last five years. The month of November 1953, with eight admissions per 100,000 population was lowest. This figure again follows the state trend toward a lag in admissions in this month. The lowest rate for the state was 7.1 per 100,000 in November as shown in Table II. The month with the highest number of per 100,000 of the general white population was December 1953, with 9.9 persons.

The area from which Central State Hospital draws its admissions is comprised of 24 counties. There were 13 cities with a population of more than 10,000 persons in 1950 in these counties. Included in these are Midwest City with 10,166 population and Oklahoma City with 243,504 population. Although most counties in the section served by Central State Hospital lost population from 1930-1950, three counties gained considerably in population during this period. These

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Table 3 ---Number of Persons Entering Central State Hospital for Mental Diseases and All Oklahoma Hos itals for Mental Diseases Each Month per 100,000 of the General White Population from July, 1953 to June 30, 1954.

	Number of Persons per 100,000 of the General White Population Entering in											
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Central State Hospital	11	9	11	9	8	11	10	10	12	10	10	11
All Oklahoma Hospitals	8.8	8.2	9.5	8.7	7.1	9.9	8.3	8.5	9.7	9.8	9	9.7

Source: Compiled from data from Biometric Division, Oklahoma Department of Mental Health.

* The rate per month is based on the number of persons in the counties served by Central State Hospital in 1950 (2,032,526).

were Oklahoma County, Payne, and Cleveland Counties. These three counties are all contained in the area covered by Central State Hospital services. The considerable growth in these three particular counties may be traced to the industrial development of Oklahoma County during the war years and the fact that two of the largest schools in the state are located in Payne and Cleveland County; Oklahoma A. and M. College at Stillwater and University of Oklahoma at Norman.

It was during this period that Midwest City, with a present population of 10,116, came into being with the construction of Tinker Field Air Force Base. Because of the continuing need for a base such as this, the nature of the work there did not discontinue with the cessation of hostilities, but is continuing to grow in importance as an air depot. Persons seeking an education under the G. I. Bill naturally gathered in the counties containing the best schools. The location of Central State Hospital in Norman, Cleveland County, could have drawn the families and friends of patients who wished to be near them while they were hospitalized. It is also noticed that with the growth in population of the industrial centers there came to be fewer and fewer people living on farms. This massing of the population, with the additional complications and stresses occasioned by a more urban life, may be a factor in the high rate of admissions to Central State Hospital.

Another factor could be the increasing age of the population. It is noticed that in both the admissions to Oklahoma hospitals and the United States hospitals, the highest number of admissions come in the age range of 70 and over. In studying the counties in the Central State area it is noticed that the persons over 65 years of age seemed to congregate in the more rural areas.

Of the twenty-four counties served by the hospital, Atoka had the highest number 65 and over, with 833 persons over 65 years per 1,000 of the white population. Next were Bryan with a rate of 814 per 1,000 population, Coal with 749 per 1000, and Johnston County with 779 per 1,000 of the population. These counties, for the most part rural in character, have a predominance of small villages rather than industrial centers. From the statistical report on old age assistance in Oklahoma in 1953-54, it was found that the rate of recipiency of old age assistance in these same counties was higher than for state as a whole. In letting the state be represented by 100 the rate of old age recipiency in Atoka County is 155. This is one and a half times the state average. In Bryan County the rate was 152, in Coal County 139, in Hughes County 139, and in Johnston County 145.

In the more industrialized counties like Oklahoma, Payne, and Cleveland, the rate of old age assistance recipiency was much lower. In Oklahoma County the rate was 70, in Payne County 74, and in

Cleveland County 57. The rate in Cleveland County, 57, was the lowest of any of the 24 counties in the Central State Hospital area. These figures give some basis for the belief that recipients of old age assistance tend to retire to the calm and quiet of the rural areas where they gather in small villages and towns. The schools and industrial areas draw people who are actively pursuing careers in industry, and furthering their education.

Another factor in the recent trend in population groupings in counties which have good range land such as Pontotoc, Pottawatomie, Grady, Logan and McClain is a tendency to buy up the range land in large blocks. Great tracts have been acquired by one owner and the tenant farmer who once eked out a living from the soil, has moved into more industrialized centers. The rancher needs the help of very few persons to watch the cattle and mend the fences. In all of the above named counties it should also be noted that there is a college. In Logan County, in Edmond, a Teacher's college is located. In Ada, in Pontotoc County, there is another Teacher's college. In Pottawatomie County there is the Baptist University and in Grady County, the Oklahoma College for Women. This situation may be another reason for the gathering of the younger people in the towns. It again follows that in the counties mentioned, the rate of old age assistance recipiency was lower or only slightly above the state level.

In Logan County the rate was 71; in Pottawatomie County the rate was 101; in Grady County the rate was 107; and in Pontotoc County the rate was 115.

Table 4 shows the number of persons admitted to Central State Hospital from each county in the district. This was for the year ending December 31, 1953. The numbers range from four persons entering from Love County to 321 persons entering from Oklahoma County. Some of the counties with relatively sparse population had a large number of persons entering the hospital for treatment. Information for this table came from the commitment records and include the persons who were not residents of the county from which they were committed but were from some other part or parts of the state. The commitment was done in that particular county because of the convenience that county offered. Oklahoma and Cleveland Counties, especially, use the reciprocal agreement the county judges have worked out. By this agreement they are refunded for any commitments made for the other county so as to save transportation costs for the families who have not understood the procedure concerning the three day waiting period.

Love County had only four persons entering Central State Hospital for the period studied but the rate per 100,000 of the general population was 55. Murray County had 22 persons entering the hospital and the rate per 100,000 of the general population was 214. This is the highest rate shown in the Central State

Table 4 --- Number of Persons Entering Central State Hospital for Mental Diseases and all Oklahoma Hospitals for Mental Diseases per 100,000 of the General Population by Counties for the Year Ending December 31, 1954.

County	Number of Patients from County *		Rate of Admission per 100,000 Population by County	
	Central Hospital	All Hospitals	Central Hospital	All Hospitals
Atoka	7	7	54	54
Bryan	18	18	66	66
Canadian	14	15	59	63
Carter	36	36	111	111
Cleveland	45	48	112	117
Coal	6	6	80	80
Garvin	20	20	71	71
Grady	24	24	72	72
Jefferson	16	16	146	146
Johnston	9	10	92	103
Lincoln	8	8	39	39
Logan	20	20	116	116
Love	4	4	55	55
McClain	10	10	71	71
Marshall	7	8	92	105
Murray	22	27	214	263
Okfuskee	13	13	108	108
Oklahoma	321	332	107	112
Payne	29	29	63	63
Pontotoc	18	19	62	63
Pottawatomie	42	42	103	103
Seminole	25	26	73	75
Stephens	27	30	81	89

Source: Compiled from Data from the Oklahoma Department of Mental Health and United States Census 1950: Population Oklahoma, Number of Inhabitants

* Refers only to the Counties served by Central State Hospital.

district. Oklahoma County had 321 persons entering from that county but the rate per 100,000 of the general population was 107. Jefferson County had 16 persons entering and had a rate of 116. Some reasons for the difference in rate will be considered later.

It is noted again in looking at the counties with the highest rate of admissions per 100,000 population, that the counties with a more or less rural way of life have much higher rates of admission. Murray County, which is located in the southern part of the state, has few industrial centers. It is the locale of Platt National Park and contains most of the Arbuckle Mountains. The climate is conducive to relaxation and outings and as a result the county has many retired people who have made this their home. Of the 10,256 of the white population 1,375 are 65 years of age or over. This is a little over 1/10 of the entire white population of the county. In Murray County the rate of admissions to Central State Hospital and to the state as a whole is higher than in any of the other counties. Murray County had a rate of 214 per 100,000 and the state had 108. Johnston County, just east of Murray by location, had a white population of 9,725 and 1,065 persons 65 years of age or over. Johnston County had a rate of 146 per 100,000 of the population. In Coal County, which was once an industrial and mining county, the 1950 population was 7,482. Of these, 790 were 65 years of age or over. The rate of admissions to Central State was 80. In these particular

counties the age of the population seems to have direct bearing on the number of admissions to Central State Hospital.

In connection with these findings an article published by the American Association for Advancement of Science is used.(5)

> "The highest rates of hospitalization are found along the Northern Atlantic and Pacific seaboards, and the lowest in the Central Southern states. The seaboard states are wealthier, more inclined toward social reform, and include larger cities than the South Central states. Consequently the former provide greater facilities for the hospitalization of their insane while the latter, both because of economic necessity and lesser urbanization, permit their insane to remain under home or county care.
>
> In a study made in the State of New York it was found that increases in the incidence of mental diseases occurred in the older population. Figures show that about the same proportion of adults up to the age of 50 years were being hospitalized today as in former years. For the group 50 to 60 the incidence rates have been gradually increasing since 1925. Increases have been more marked for the ages 60 to 70, while for the age group 70 and over the incidence rate during the past quarter century have more than doubled.
>
> Contributing to this increase in mental diseases for older age groups are such factors as the failure of social agencies to provide adequate facilities for the care of the increasing number of aged individuals, the greater willingness of families to send their aged to mental hospitals, and medical advances which have saved individuals from the diseases of early life only to let them succumb to the psychoses of old age."

These figures bear out the findings made above, that where the aged have gathered in rural and semi-rural counties, the rate of admission is greater.

(5) Mental Health, Publication of the American Association for the Advancement of Seience, #9, Forest Ray Moulton, Editor, p. 187.

A mentally ill person is generally accepted as a person (6) afflicted with a mental illness to such an extent that he is incapable of managing himself or his affairs. For his own welfare and the welfare of others it is necessary or advisable for him to be under care. Mental disturbances are responsible for more sickness than any other diseases except the arthritic diseases. Patients suffering from mental illness occupy more than half the hospital beds in the United States. Mental illness is usually of a chronic nature and of long duration. Unfortunately, most mental illness cannot be studied under a microscope and the study of them is so young there is yet no comprehensive definition or classification which can be understood by the lay person. Interpretation of the need for treatment of the mentally ill has been accepted slowly by the public. The stigma associated with the social problem of mental abnormalities is gradually disappearing and new terminology is being used in relation to care and treatment of the illnesses.

Treatment of mental diseases, mental defectiveness, and epilepsy has become an important public function. As it is recognized that mental diseases are abnormal conditions of the brain or nervous systems which are characterized by deficiency of rational control, more and more people are able to accept commitment and treatment for themselves and their affected relatives instead of hiding them as they formerly did.

(6) State Mental Hospitals in Oklahoma-Oklahoma Planning & Resources Board Division of State Planning, p. 36-39.

The reasons for more mental illness than formerly might hinge on such factors as the speed, complexity, and strains of modern life, ability of people to accept such a diagnosis, and the aging population.(7) In studying the age of patients admitted to Oklahoma State Hospitals for Mental Illness, comparable figures for the year 1948 are used on the national level. The number of admissions to Oklahoma Hospitals agrees consistently with the ages of admissions to United States Hospitals for mental diseases. Table 5 shows age of admissions to Central State Hospital. The age of least admissions for both the state of Oklahoma and the United States was the 10-14 year group and the 15-19 year group. In Oklahoma only four admissions were made in the 10-14 year group. There are some realistic reasons for this small number. Until recently Oklahoma has had no separate treatment ward for the patients in this age group. They had to be placed with other patients of all ages and in all stages of illness. Private sanitoria was preferable to this. With little treatment available in any of the Oklahoma Hospitals until after 1950, these young children had little or no chance for improvement if committed. Incidence of mental illness does not seem to occur in this age group so frequently, probably because they have not at that time been exposed to many stresses which would cause a breakdown. The small number of admissions of children also holds

(7) Mental Health Publication of the American Association for the Advancement of Science, #9. Forest Ray Moulton, Editor, p. 156.

Table 5 --- Admissions to All Oklahoma State Hospitals for Mental Diseases and to All State Hospitals for Mental Diseases in the United States by Age Groups for the Year 1948.

Age Groups	Admissions to United States Hospitals	Admissions to Oklahoma Hospitals	Percent of Admissions	
			United States	Okla.
10-14	898	4	.8	.3
15-19	3,479	50	3.4	4.0
20-24	5,845	71	5.7	5.8
25-29	7,040	87	6.9	7.0
30-34	7,980	118	7.8	9.5
35-39	8,840	103	8.7	8.2
40-44	8,360	114	8.2	9.2
45-49	7,435	99	7.3	7.9
50-54	6,553	78	6.4	6.3
55-59	5,909	66	5.8	5.3
60-64	5,899	67	5.8	5.4
65-69	6,135	89	6.6	7.1
70-Over	18,525	275	18.3	22.2
Unknown	8,320	19	8.3	1.5
TOTAL	101,218	1240		

Source: Compiled from Data Taken from Report by United States Department of Health, Education and Welfare. Patients in Mental Institutions 1950-1951.

true on the national level. The percent of admissions for the State of Oklahoma is 0.3% and for the United States it is 0.8%.

In the next age group of admissions from 15-19, Oklahoma had an increase of 50 for the year of 1948 and the United States, 3,479. The percent of increase was greater in Oklahoma than for the United States. Oklahoma had 4% of all admissions in this age group while the United States had 3.4%. With the exception of the age groups 30-34 and 40-44, Oklahoma and the United States had about the same percent of admissions to hospitals for mental diseases. In these two age groups Oklahoma had 9.5% of admissions from the 30-34 age group, compared to 7.8% for the United States. Oklahoma had 9.2% in the 40-44 age group, compared to 8.2% for the United States. This seems to hold true until the older group of 70 and over is reached. In this group there is considerable divergence. Oklahoma hospitals admitted 275 persons who were over 70 years of age in the year 1948. The United States as a whole admitted 18,525 who were 70 years of age and over. The proportion for Oklahoma was 22.2% and the proportion for the nation was 18.3%.

In trying to show the reasons for the increase in rate of admissions to hospitals for mental diseases in this age group for Oklahoma, it is important to look into the conditions of strain or stress under which these persons probably lived. Oklahoma was settled by people who are now 70 years of age and over. They grew

up during the years when Oklahoma was in a tumultuous state of change. They were accustomed to long hours of hard work with little satisfactory return. They had little in the way of medical attention or advice as to how to protect themselves from disease. They led relatively active lives and had a strong feeling for adequacy. With age and an inability to continue to make their living in the usual way, they were forced to accept public assistance, or live in idleness from the resources they had earlier accumulated. Medical care, which has been available to many in their later years, prolonged their lives but did little to keep their minds alive.

The 65 years and over group is becoming an increasingly larger proportion of the total population over the entire country. In Oklahoma, this growth has been at a faster rate than the United States as a whole. In 1940, 6.1 percent of Oklahoma's population was aged, whereas in mid-1952 the percent was estimated at 9.0. For the same dates the figures for the United States were 6.8 and 8.4 percent. One of the major factors contributing to this increase is the longer average length of life throughout the United States. The expected lifetime of the average American has been lengthened by almost 40 percent since the beginning of this century.

CHAPTER III

PATIENTS IN RESIDENCE AT CENTRAL STATE HOSPITAL

For the year ending June 30, 1953 the total patient population in Central State Hospital for Mental Diseases was 3,064. For the state of Oklahoma the patient population at that time was 6,983. This indicates that Central State Hospital cares for almost half of the entire number of mental patients who are hospitalized in Oklahoma. The same proportion was noticed in admissions to institutions for mental diseases in Oklahoma in Table 1. The reason for this is that Central State Hospital serves the most populous portion of Oklahoma and has better facilities for treatment and care than the other and smaller hospitals. In the last year, 1953-54, facilities have been added to Central State Hospital for treatment of children.(8) In November, 1953, the first admissions of children under 16 years of age were made for treatment. They had been admitted for custodial care only but were housed with older and more severely ill patients. At that time four persons under 16 were admitted; three boys and one girl. Since then great strides have been made in an effort to care and treat children who become mentally ill in Oklahoma. Central State Hospital is the only hospital in the state with facilities for such treatment. There is space now for 25 beds and as many as 33 children have been under treatment at one time. Dr. Harold B.

(8) Mental Health, Bill Askin, Norman Transcript, 2-9-55, p. 1.

Witten, who recently resigned as Director of the Institution, estimated that Oklahoma had 200 psychotic children in need of care and treatment and 1,500 maladjusted children who can't fit into community life or school. In 1951 the staff assigned to the children's department at Central State Hospital consisted of a psychiatrist, a clinical psychologist, an occupational therapist, 14 attendants and half time workers in recreational therapy, a social worker and a registered nurse supervisor. Volunteers gave their time. Seven boys had been discharged from Central State Hospital after treatment and were back in normal society.

In studying the ages of the patients present in Central State Hospital for Mental Diseases it was found that the largest number of resident patients were in the age group 45-49. In this group in July, 1953, there were 365 persons. The next age group with 362 persons in residence was the 55-59 year group. The third highest group was in the 50-54 year age group with 335 persons. In comparing this with the State of Oklahoma as a whole,it was noticed that the greatest number for the state resident population was in the same age group as Central State. This was in the 45-49 year group. In the state the next highest group of resident patients was in the 50-54 year group. The third highest was in the 55-59 year group.

The smallest number of resident patients came in the 10-14 year

Table 6 --- Age Distribution of Resident Population in Central State Hospital for Mental Diseases and in All State Hospitals for Mental Diseases on July 1, 1953.

Age in Years	Number of Persons in Each Age Group		Percent of Persons in Each Age Group	
	Central State Hospital	All State Hospitals	Central State Hospital	All State Hospitals
10-14	1	2	*	*
15-19	7	22	.2	.3
20-24	66	137	2.1	1.9
25-29	123	259	4.0	3.7
30-34	177	387	5.7	5.5
35-39	224	526	7.3	7.5
40-44	293	742	9.6	10.6
45-49	365	878	11.9	12.6
50-54	335	833	10.9	11.9
55-59	362	748	11.1	10.7
60-64	316	680	10.3	9.7
65-69	258	594	8.6	8.9
70-74	209	489	6.8	7.0
75- Over	308	665	8.1	8.0
Unknown	20	21	2.6	1.0
TOTAL	3064	6983		

* Too small to compute.

Source: Biometrics Division, Oklahoma Department of Mental Health

year group, as Central State at the time was not admitting children except for custodial care. In the 15-19 year old group there were seven resident patients in July of 1953. The next lowest was in the 85 to 89 year old group with 59. The same situation exists in the state figures. The lowest number of resident patients in all Oklahoma Hospitals in July 1953 was for the age group 10-14. The next lowest was in the 15-19 year old group with 22 patients. The next lowest was again, as in Central State, in the 85 to 89 year group.

The rate of resident patients according to age group in Central State Hospital remained slightly below that of the State rate. In the age group of 45-49 Central State had a rate of 11.9 and the state had a rate of 12.6. In the age group of 50-54 Central State had a rate of 10.9 and the state rate was 11.9. In the 55-59 year old group Central State Hospital had a rate slightly above the state rate. Central State had a rate in this group of 11.1. The state rate was 10.7.

In determining some of the reasons why there are more resident patients in the age group 45-59 years, some of the mental illnesses which are most common to this group should be studied. Arthur P. Noyes goes into some of the age factors which contribute to mental

illnesses in this age.(9)

> "While subject to considerable individual variation in age of incidence the involutional psychoses occur most frequently in women during the late forties and in men during the late fifties. It will be noted that this is the period when the endocrine and reproductive glands begin to suffer a decrease in functional activity--age generally known as the involutional period. As the activity of these glands declines there are extensive changes in the metabolic and vegetative activities of the body. With the cessation of ovarian activity there may be a change in functioning of the remainder of the endocrine system involving an increased irritability of the sympathetic nervous system. Just what part these changes in essential physiological functions play in the genesis of the psychosis is uncertain, but there is much to suggest that they are not so important per se as are their psychological implications. The threat to the personality through the loss of prized biologic functions and the imminence of the aging process with all it connotes may be more disturbing to the personality than endocrinologic changes. The period is one of psychophysiologic stress and one when increasing threats to an insecure personality are prone to elicit anxiety, depression, and paranoid reactions, a period which threatens the security one has established at a time when he can least afford to lose it. It is a period which has been anticipated with exaggerated fear."

Noyes points out that in a significant number of cases of involutional depressive reaction a certain type of general personality make-up and habits of life are found. They are often found to have been an anxious child with early and fundamental insecurity, inhibited types with a tendency to be quiet, unobtrusive, serious, chronically worrisome, intolerant, reticent, sensitive, honest, frugal, even penurious, stubborn, of stern, unbending moral code, lacking in

(9) Arthur P. Noyes, M.D. Modern Clinical Psychiatry, p. 321

humor, over-conscientious, and given to self-punishment. They are prone to have feelings of guilt if not perfect. Not rarely their sex life has been poorly adjusted or inadequate. Their interests are narrow and they have very few close friends. They rarely have been confident leaders in any sort of undertaking but rather the less aggressive follower . They are often characterized by caution and indecision.

The age when these illnesses develop is one when adjustments are hard to make. New circumstances and new adjustments are not easily made. Life has not brought the satisfactions that have been cherished. The fact that opportunity no longer exists for repairing old errors or achieving new successes creates a sense of frustration and increases the feeling of insecurity. In women loneliness and the fear of the loss of physical attractiveness may be a contributing factor. The high value placed on youth, beauty, and sex in our culture contributes to the drastic re-orientation which must be made. They rebel against aging with depression and self-hate. Regrets and a sense of failure contribute to the prevailing mood. Children are grown and are either out of the home with other interests or are preparing to leave. An ebbing potency in the male and the realization in a woman that the most prized possession she had, that of child bearing, is gone are more of a loss to some people than any other possession. They become disconsolate often. As

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Ibid, p. 322.

the flush of maturity fades thoughts of death are suggested and these contribute to the anxiety so common in this disease. It is not hard to see that any sudden shock, deprivation, or physical illness at this particular time to certain already insecure persons might easily be the factor in precipitating them into mental illness. These things often happen to persons at this time of life and lead to a great number of breakdowns which are lengthy in nature and take long periods of therapy to eradicate.

Before the introduction of shock treatment about 40% of cases of involutional melancholia recovered. Convalescence, however, was slow and those who recovered were frequently ill for two or three years. The more narrow and rigid the prepsychotic personality, the poorer the prognosis.

The patient suffering from involutional depressive reaction should be cared for in an institution for mental disorders, particularly since there is no other type of mental disorder in which so large a percentage of the patients attempt suicide. Stress is placed at the beginning of treatment on building and sustaining physical well being. This takes time and attention.

In the paranoid psychosis which comes at the involutional period there is less hope of cure from shock treatment. The patients are very suspicious and defensive and resistant to treatment. In early

life these people were found to have been obstinate, jealous, unforgiving, secretive, unhappy, dissatisfied, given to nursing grievances, resentful and suspicious. It is necessary that they be confined because of the nature of the illness. There is also the likelihood of long hospitalizations.

The greatest factor to be noted in the above information is that these illnesses tend to demand long hospitalizations. Even though the rate of admissions to Central State Hospital showed a greater number in the 70 and over age group, they did not remain in the hospital as long as those in the 45-59 age group because of the very nature of their illness. Many died from old age. Many were ill because of arteriosclerosis, hypertension, and other senile diseases which either responded to medical treatment or caused the death of the patient.

In June 1954, Central State Hospital had 3,106 patients resident in the institution. In this same month there were 252 persons out of the hospital on convalescent leave. The number of resident patients was lower than in the preceding month of May when there were 3,116 patients in residence. This was the highest number for the year. The smallest number of resident patients was in November 1953 when there were 3,010. During the next month, October, there were 3,017 residents in the hospital. It is interesting to note that

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Ibid, p. 323.

Table 7 --- Number of Resident Patients in Central State Hospital for Mental Diseases and for All Oklahoma Hospitals for Mental Diseases at the Beginning of Each Month and Percent of Change over the Preceding Month from July 1, 1953 to June 30,1954.

Month	Number of Persons in Residence		Percent of Change over the Preceding Month	
	Central State Hospital	All Hospitals	Central State Hospital	All Hospitals
July	3048	6944	-	-
Aug.	3023	6920	-.8	-.3
Sept.	3040	6905	.5	-.2
Oct.	3017	6898	-.7	-10
Nov.	3010	6883	-.2	-2
Dec.	3031	6945	7	.9
Jan.	3058	6972	9	.4
Feb.	3092	7007	14	.5
Mar.	3110	7015	6	-11
April	3101	7030	-.3	1
May	3116	7054	.5	.3
June	3106	7035	-.3	-2

Source: Data from Biometrics Division of Oklahoma Department of Mental Health.

when the number of persons on convalescent leave increases, the number of resident patients is lower. Thus it may be assumed that the persons on convalescent leave were later returned to the hospital for further treatment, as the resident patient load is higher in the months when convalescent leave is low. The highest number of convalescent leaves for the entire year from Central State Hospital was in July when there were 472 persons on leave. The lowest number on leave was in June of 1954 when there were only 252.

In studying the patient population in the entire state the same situation was found. The highest number of patients in residence was in May 1954, when there were 7,054 resident patients in state hospitals in Oklahoma. The next highest number was in June with 7,035 resident patients. In June there were 688 persons on convalescent leave in the state and in July there were 648 on leave. This again was reflected in Table 1 when it was pointed out that the returns to Central State Hospital constituted the second highest reason for admissions. In the same year, 1953-54, the returns from convalescent care to Central State constituted 209 of the 1,088 admissions for the year.

The rate of change from the preceding month for Central State Hospital varied. The greatest change was in February over the month of January. There was a 9% increase. In the state the greatest

change over the preceding month was December over November in 1953. The increase was 9%. The month to month change stays rather close to the state level of change.

There seems to be a definite relationship between the number of persons on convalescent leave and the number of resident patients in Central State Hospital as well as on a state level. Why these patients tend to return to the hospital cannot definitely be established. It is reasonable to suppose that they can stay in their home environment only so long before a return is necessary. The greater number of returns from convalescent care seems to be in the spring and summer months. It could be that families ordinarily able to care for the patient adequately in the other months find the heat of the summer too much for them. It is also time for vacations and families do not wish to risk having mental patients with them on trips of any great distance. They return these patients to the hospital where they will have more stable care.

Another factor in considering the number of convalescent patients on leave from the hospital is the time of year at which they are released. It seems that this is a seasonal condition and may in some way be connected with the types of work available which these patients could do successfully. The types of farm work available in the months when there is a high rate of patients on convales-

cent leave are the months in which the harvesting of crops is under way.

The number of resident patients in Central State Hospital for Mental Diseases is greater than that of any other state institution. Since the Central State area is more populous and urbanized than the other districts, this is more or less expected. Although Central State takes care of almost half the total resident population in mental hospitals in Oklahoma, the rate per 100,000 population is considerably higher than the state rate.

In the months of July, August and September of 1950, Central State Hospital had 384 resident patients in the hospital per 100,000 of the general population. In these same months the state as a whole had 408 per 100,000 of the general population. The number in Central State for October still was 384 but the state had only 382 per 100,000. In November the state rate was 381 which was more than Central State with 379 per 100,000. In the other months, January, February, March, April, May and June, Central State had a rate higher than the state by from one to five persons per 100,000 of the general population.

In some of the counties from which Central State Hospital

Table 8 --- Number of Resident Patients in Central State Hospital for Mental Diseases and All State Hospitals for Mental Diseases at the Beginning of Each Month per 100,000 of the General Population from July 1,1953 to June 30, 1954.

Month	Number of Patients per 100,000 Population by Month.	
	Central State Hospital	All Hospitals
July	384	408
Aug.	384	408
Sept.	384	408
Oct.	384	382
Nov.	379	381
Dec.	382	382
Jan.	385	384
Feb.	389	386
Mar.	392	387
Apr.	390	387
May	391	390
June	391	390

Source : Biometrics Division of Oklahoma Department of Mental Health and the United States Census 1950 Population, Oklahoma Number of Inhabitants.

draws its patients there are numerous abandoned farms, rocky and hilly terrain, and in some counties abandoned mining sites.[10] They are mostly inhabited by an aging population who have gathered there, not for industrial purposes, but in retirement. As was pointed out before, a large percentage of these elderly people are recipients of old age assistance or old age and survivor's insurance and add nothing to the industrial development of the county. In general, they live very sedentery lives, which is altogether different from their former way of life. With a very limited income they are unable to secure proper medication. Housing is, as a general rule, very poor, and the opportunity to keep the mind active and interested is not great. The aged become depressed mentally and physically ill and commitment is necessary in many instances as there is no relative living, able or willing to care for them. The children of these aged people for the most part are living in the industrial centers. Their own facilities for caring for the aged and ill parent are not adequate. It is often necessary that the aged and ill parent be placed in a nursing home or sent to Central State Hospital for treatment until they can again maintain their home.

The average age of the greatest number of admissions to Central State Hospital was found to be in the 70 and over group. In the resident patients it was found that the largest number was in the

(10) Eighteen Years of Public Welfare in Oklahoma, Annual Report of Dept. of Public Welfare for Fiscal Year Ending June 3, 1954, p.84

45-59 age group. It follows that the older persons admitted do not stay long in the hospital, or they are the ones who constitute a large proportion of those on convalescent leaves.

Another factor in the age of the persons admitted to the hospital at Central State is that the district or area covered is more urbanized and people are more aware of the cause of mental illness than those in the rural areas. Less stigma is placed on the fact that a parent is old and his mind is at a stage where treatment is necessary. These urban people are in a better position to know of the more recent advancements in treatment for the mentally ill and more willing to commit relatives because they are sure, or at least relatively sure, of improvement or cure if treated. In the rural areas the population for the most part remains superstitious, withdrawn and fearful of mental institutions.

An examination of the number of resident patients in Central State Hospital for Mental Diseases from each county offers some significant data. Many of the counties with a smaller number of resident patients in the hospital show a very high rate per 100,000 of the general population. In Atoka County, for instance, there were 16 persons committed and in residence at the institution. The rate per 100,000 of the general population was 124. In Love County there were 17 resident patients in the hospital, but the rate per 100,000

Table 9 ---Number of Resident Patients in Central State Hospital for Mental Diseases by Counties per 100,000 of the General Population on December 31, 1953.

County	Number of Patients from County	Number of Patients from County per 100,000 Population
Atoka	16	124
Bryan	44	162
Canadian	46	194
Carter	128	391
Cleveland	147	358
Coal	20	267
Garvin	97	344
Grady	114	345
Jefferson	48	439
Johnston	29	298
Lincoln	80	394
Logan	73	425
Love	17	97
Mc Clain	47	334
Marshall	35	458
Murray	61	592
Okfuskee	56	468
Oklahoma	913	309
Payne	102	222
Pontotoc	95	322
Pottawatomie	181	442
Seminole	97	282
Stephens	96	288

Source: Biometrics Division, Oklahoma Department of Mental Health and the United States Census 1950 Population, Oklahoma Number of Inhabitants.

of the general population was only 97. In Coal County there were 20 resident patients and the rate per 100,000 was 267. Oklahoma County had the largest number of resident patients in Central State Hospital. The number of resident patients from Oklahoma County in Central State Hospital was 913 and the rate per 100,000 of the general population was 307.

The county showing the highest rate per 100,000 of the general population was Murray County with 61 resident patients and a rate per 100,000 of 592. In the interpretation under Table 4 some reasons were given for this number of mentally ill people from the rather sparsely populated counties. The population in these rural counties is getting older. Prosperous elderly people seek retirement in beautiful surroundings. People living on a meager income find it much more economical to live in these counties where gardens supplement their small grants. Age, poor health and idleness take their toll, however, and it is necessary for them to be hospitalized with physical diseases as well as mental illnesses.

The counties with the highest rate per 100,000 of the general population were Murray with 592; Okfuskee with 468; Marshall with 458; Pottawatomie with 442; Jefferson with 439; Logan with 425; Lincoln with 394; Carter with 391; Cleveland with 391; Grady with 345. The ten counties with low rates per 100,000 of the general

population were Love with 97; Atoka with 124; Bryan with 162; Canadian with 194; Payne with 222; Coal with 267; Seminole with 282; Stephens with 288; Johnston with 293; and Oklahoma with 309. It is significant that Oklahoma County is included in the ten with the lowest rate of resident patients in Central State Hospital. It may be that the population is made up of the middle age and younger groups of people who have come to the industrial center in order to earn a better living.

Arthur P. Noyes gives some data regarding the increase in the number of people over 65 years of age and some of the steps which a person goes through in aging. (11)

> "In 1900, 1 in 25 persons was over the age of 65; in 1950 this ratio had changed to 1 in 13. The total population of the United States doubled between those years but the number of persons of sixty-five years or over almost quadrupled. This has naturally been reflected in the number of aged people who develop mental disorders. Persons with senile psychoses (not including arteriosclerotic psychoses) now comprise approximately 17 percent of first admissions to New York State psychiatric hospitals.
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> A gradual wearing down of energy, a decline in responsiveness, a waning of initiative and of creative imagination, a narrowing of interests, an increase in egocentricity and a certain warping of personality must be looked upon as a normal involutional process operating with the passage of time. With advancing age there is a progressive loss of physical and mental resources, a loss which tends to arouse feelings of helplessness. These feelings serve to create anxiety which the individual tries to

(11) Modern Clinical Psychiatry, Noyes, Arthur P. M.D. p. 271.

overcome by mechanisms which he has long employed in making his adjustments. As one grows older, therefore, he "grows more like himself." The stress of increasing physical and mental limitations, loneliness resulting from the loss of friends and relatives, and perhaps rejection by children produce an anxiety which may evoke various protective mechanisms. Among them may be a turning to and perhaps embellishment of the past, a paranoid projection or self-assertiveness to the point of being domineering. Other elderly persons, through feelings of insecurity or inadequacy, become ill-natured and contentious or regress to a dependent state. Both biological and sociopsychological factors contribute therefore to the personality changes of old age.

From these mild, senescent mental changes there is a sliding scale to the extreme impoverishment of mental resources that characterize senile dementia. The dividing line may be a matter of individual opinion. Often the senile dement is one who has not felt secure and whose pattern of living has long been constricted. The person of cheerful disposition who maintains contact with the outside world, has been well adjusted for years, and has built up emotional and intellectual resources is more apt to escape the dementia of senility. The person who develops senile dementia has been often characterized by rigid and static habits. Persons who have always had difficulty in adjusting to the demands of life are more apt to react to the inevitable loss of work, deaths of friends and relatives and the loosening of family and social ties that accompany old age by the development of mental symptoms. That social activities and a wholesome variety of mental occupation may retard mental senility has long been recognized. In one of his famous dialogues Cicero stated: "Old men retain their intellects well enough if they keep their minds active and fully employed." It will therefore be seen that although of great importance, organic disease of the brain is often not the only factor in the development of psychoses. It is increasingly accepted that frequently the senile psychoses result from the interaction of organic and psychological factors."

The transition from usual old age to senile dementia is ordinarily gradual. A dislike of change, a reduction in ambition

and activity, a tendency to become constricted and self-centered in interests, and increased difficulty in comprehension, an increase in time and effort necessary for the performance of familiar duties, and an increasing difficulty in adapting to new circumstances, a lessened sympathy for new ideas and views and a tendency to reminescence and repetition are signs of senile dementia. Physical illness or severe emotional disturbance may quicken mental deterioration.(12)

> Altruistic sentiments are usually lost early, while egoistic, selfish ones are intensified and, like the instinctive ones, may be crudely manifested. Irritability, either as an expression of egocentric trends or a defensive reaction to the impairment of memory, is common. Exaggerated sexual activity or sexual indecencies may be exhibited, in which case they usually represent not merely a weakening of inhibitions but a defensive effort at psychological compensation for the waning of a fundamental function. Some senile become careless in habits of toilet and dress; pride of appearance is forgotten. At times there is a tendency to be distrustful, prying and suspicious. Exaggerations and caricatures of the previous personality betray its earlier tendencies. Anxiety, irritability, timidity and other personality changes frequently seen in senility are not attributable solely to changes in the brain. Many of them are due to the fact that the individual has been shoved into a position that frustrates his wishes and deprives him of his usefulness and of his status as an autonomous person. A failure to find the satisfactions necessary to replace those the elderly person had when he felt needed, important and productive tends to lead to regressive changes."

It seems to be especially true of the elderly people of

(12) Modern Clinical Psychiatry, Noyes, Arthur P., M.D., p. 273.

Oklahoma that they cling to the belief in their own value in the community in which they live. A great number rest on the laurels of their pioneer days and live vicariously in reciting experiences over and over. It seems to give them a reason for being and a sense of being needed because of the good they once brought to society in coming into a new land and taking it from the wilderness. Many cannot accept the assistance program as a legal right to needy people but persist in thinking of it as a pension given them as a reward for good work. They think of their assistance grant as veterans think of their compensation for war services. This is the way they would like it to be and in their senility they will accept nothing else.

Death of friends and relatives have a great emotional effect on most senile people. They feel personally threatened by death because of the physical evidence of their own growing weakness. Many senile men, upon the loss of a mate in death, continue to try to live alone rather than make the change to a more adequate way of living. Even when they are unused to cooking and keeping house, many try for years to continue in the way they have known. This leads to many tragic situations such as malnutrition, physical illnesses which are uncared for until they become acute, and mental disorders brought on by loneliness and depression. Yet, so long as the rights of the individual are respected, there is little hope of making a change in

some of these senile people in time to ward off mental illnesses.

CHAPTER IV

PATIENTS RELEASED FROM CENTRAL STATE HOSPITAL

The number of patients released from Central State Hospital for Mental Diseases per month varies as much or more than the number of admissions to the hospital for the same period of time. The number of releases per month is not usually the same as the number of admissions. The number of admissions to Central State Hospital over releases was slightly higher than in the other two hospitals during the year under consideration. Central State admitted 1,088 persons for the year July 1, 1953 to June 30, 1954 and released 1,046, a difference of 42 patients. The total admitted for this same period to the other two hospitals was 1,086 and releases 1,082, a difference of only 4 patients. The number of deaths included in either estimate of releases is not known and are not being considered in this study.

It was found that the number of releases from Central State (112) was highest in July 1953. There were 103 in August of that same year. In October there were 104 and the same number in June 1954. February of 1954 was the month with the smallest number of releases. The number in February was 56, which is slightly lower than in January 1954 when there were 67 releases. With a few exceptions, the number of releases generally from Central State Hospital are in accord with those made in the other two hospitals. It is noticed that in Eastern State Hospital the number of releases was about half

Table 10 --- Number of Patients Released Each Month from Central State Hospital for Mental Diseases and Percent of Change from the Preceding Month from July 1, 1953 to June 30,1954.

Month	Number Released from Central State Hospital	Percent of Change over Preceding Month
July	112	---
Aug.	103	-.09
Sept.	82	-.20
Oct.	104	.27
Nov.	77	-.24
Dec.	74	-.04
Jan.	67	-.09
Feb.	56	-.16
Mar.	90	.79
Apr.	100	.11
May	77	-.23
June	104	.35

Source: Biometrics Division, Oklahoma Department of Mental Health.

those made in Central State month by month except for the month of June 1954 when Eastern State Hospital had 77 releases compared with 104 releases in Central State and 34 in Western State Hospital. A reason for this sudden increase in releases has not been found in this study.

It is to be expected that the facilities for treatment in the various hospitals have a direct relationship with the number of releases. Although Central State has more bed capacity and possibly less crowding than the other two hospitals, a study made in April of 1954 shows that in the number of psychiatrists serving all hospitals there were 23. Of this number, Central State had nine, or only slightly over one-third of all psychiatrists. The same situation is true with the other physicians available to state hospitals. The state as a whole had 21 physicians other than psychiatrists and Central State had only seven of these. In registered nurses Central State was more fortunate. Of the 40 registered nurses in all state hospitals Central State had 31. In attendants Central State also was low. The state as a whole had 1,338 and Central State had 490. In psychologists, Central State had five of the nine available in the state. These figures are cited to show some of the reasons why the releases from Central State have not been as high as in the other two hospitals. The lack of adequate staff to give treatment naturally has a great effect on the number released.

The rate of change from month to month in the releases from Central State Hospital varied greatly. The greatest change came from February to March. There was a 79% increase in the number of releases. The increase in June over May of 1954 was 55%. It is interesting to note that in the month of March the trend was toward higher rates of admissions to Oklahoma hospitals.

One factor in the number of releases to the Western State Hospital is the plan for foster care for patients who are eligible for public assistance. Another factor is the effort to work with some of the released patients on an outpatient basis in order to keep the persons released to society functioning in the local community. So far little progress has been made at Central State in these areas because of lack of a sufficient number of trained personnel.

There were several months in which Central State Hospital had more releases than admissions. In July 1953, Central State had 16 more releases from the hospital than it had admissions. In August there were 25 more releases than admissions. In October there were 23 more releases than admissions. In April of 1954 there were nine more releases than admissions and in June there were 26 more releases than admissions.

The months in which admissions were greater than the releases

were September and December of 1953 and January, February, March and May of 1954. The total of admissions for the twelve month period was 42 more than the number of releases.

The number of persons released from Central State Hospital per 100,000 of the general population agrees with the rate shown on admissions to the hospital from this district. This is seen in looking at table 3 of this study. For the first three months of the year the releases per 100,000 of the general population were higher than the admissions. In July of 1953 the rate of releases per 100,000 was 14 and the rate of admissions was 11. In August 1953 the rate of releases was 13 and the rate of admissions was nine. In September 1953 the rate of releases was 10 and the rate of admissions was 11. In October 1953 the rate of releases was 14 and the rate of admissions was nine. In November the releases were nine per 100,000 and the admissions eight. In December 1953 the releases were eight per 100,000 and the admissions were 11. In January 1954 the releases were eight and the admissions 10. In February 1954 the releases were seven per 100,000 and the admissions 10. In March the releases were 12 and the admissions 12. In April the releases were 12 per 100,000 of the general population and the admissions were 10. In May the releases were nine per 100,000 of the general population and the admissions were 11.

Table 11 --- Number of Persons Released Each Month from Central State Hospital for Mental Diseases per 100,000 of the General Population from July 1,1953 to June 30, 1954.

Month	Number of Persons Released	Number per 100,000 of General Population
July	112	14
Aug.	103	13
Sept.	82	10
Oct.	104	14
Nov.	77	9
Dec.	74	8
Jan.	67	8
Feb.	56	7
Mar.	90	12
Apr.	100	12
May	77	9
June	104	14

Source: Biometrics Division, Oklahoma Department of Mental Health and United States Census 1950 Population of Oklahoma, General Population of District.

Total releases from state hospitals were 2,128 as of June 30, 1954. Of these 1,046 were made by Central State Hospital. According to these figures, Central State had slightly less than half the releases whereas in Table 1 it was shown that Central State had slightly more than one-half the admissions to all hospitals. However, there is a difference in the month by month releases. In July 1953, Central State had 112 releases compared with the total state releases of 217. In August 1953, Central State had 103 releases compared with 191 for the entire state. In September, on the other hand, the state had 209 releases compared with only 82 for Central State. In October, Central State had 104 releases and the state had 185. In November, Central State had 77 releases and the state 159. In December, Central State had 74 and the state had 139. In January 1954, Central State had 67 releases and the state had 142. In February 1954, Central State had the smallest number of releases of the entire 12 months period. This number was 56 and the state total was 138. In March, Central State had 90 releases compared with 189 for the state. In April, Central State had 100 releases compared with 185 for the state. In May, Central State released 77 and the state 159. In June, Central State had 104 and the state 215.

This tendency toward fewer releases in the winter months is reflected in the rate of releases per 100,000 of the population.

In Central State the number of persons released per 100,000 of the general population in November 1953, December 1953, January 1954, and February 1954 were nine, eight, eight and seven, respectively. In the state during these same months the rate of releases per 100,000 of the general population was seven, six, seven and six. It is noticed that the rate of releases for Central State Hospital per 100,000 of the general population was higher than for the state.

In making these comparisons only the three state institutions serving the white population were considered. These were the three mental institutions and did not include the Schools at Enid or at Pauls Valley. The institution at Taft was also excluded. The schools and the institutions draw their patients from the entire state.

As has been pointed out before, Central State had more admissions than releases in the fiscal year of July 1, 1953 through June 30, 1954. In the other two institutions for white patients at Western State Hospital and Eastern State Hospital it was shown that their releases were in excess of those at Central State. This table should give a better picture of the movement of patients in the state as a whole.

As a general rule, the admissions to Central State Hospital were about one-half those of the entire state. There were some instances when Central State had only about one-third of the admissions.

Table 12 --- A Comparison of Admissions and Releases from Central State Hospital for Mental Diseases and All State Hospitals for Mental Diseases from July 1, 1953 to June 30, 1954.

	Number Admitted		Number Released		Excess of Admissions over Releases		Percent of Admissions Over Releases	
	Excess of Admissions Over Discharge							
Area--Month	Central	All	Central	All	Central	All	Central	All
July	96	284	112	265	-16	19	-15	07
Aug.	78	194	103	237	-25	-43	-24	-8
Sept.	99	244	82	277	17	-33	21	-12
Oct.	81	198	104	219	-23	-21	-22	-09
Nov.	70	177	77	168	-7	-9	-9	-5
Dec.	95	224	74	170	21	54	28	32
Jan.	94	195	67	163	27	32	40	19
Feb.	90	196	56	161	34	35	60	21
Mar.	108	212	90	205	18	7	20	3
Apr.	91	230	100	197	-9	33	-9	16
May	92	203	77	188	15	15	19	8
June	94	215	104	241	-9	-26	-9	-10

Source: Biometrics Division, Oklahoma Department of Mental Health.

The actual number of all state admissions for the year July 1, 1953 to June 30, 1954 was 2,523 and for Central State the total admissions for the same period was 1,088. This shows somewhat less than one-half the admissions made at that institution. Central State has facilities for the physical care of more patients but lacks psychiatric and social work personnel, which would greatly facilitate the release of patients.

In considering the month by month admissions to the state institutions, it was found that the greatest number were admitted in July, when the state had 284, while Central State had 96. The month with the smallest number of admissions over the entire state (168) was November 1953. At that time Central State had 70 admissions. This was also the lowest number of admissions for any month. The month in which Central State had the greatest number of admissions was March 1954. At that time the state as a whole had 212.

A comparison of the releases on the state level and at Central State Hospital showed a somewhat wider variation. The total number of patients released in the state as a whole for the year July 1, 1953 to June 30, 1954 was 2,500. The number of releases made from Central State for the same period was 1,046. This is a difference of 454 patients. The condition of the patients released has not been taken into account. Whether they were improved, recovered, unimproved or unclassified is not known.

The largest number of releases for the entire state was in September of 1953. At that time Central State had only 82 releases. The lowest number of releases for the state was in February 1954 when there were 161. The highest number of releases made at Central State Hospital was in the month of July 1953, when there were 112. February, 1954, the month with the lowest number of releases from Central State again agrees with the number of releases for the state as a whole.

The months which had the greatest difference in the number of admissions over releases from Central State Hospital were February 1954, with 34 difference, and January 1954 with 27. At the state level the months showing the greatest difference in admissions over releases were December 1953, with 54 and February 1954, with 35. In only five months the releases on a state level exceeded the admissions. These were August, September, October, November 1953 and June 1954.

The difference in the number of admissions over releases for the entire state was 23 persons. For Central State the difference between the number of admissions over releases was 42.

When patients are on convalescent leave from Central State Hospital they are not removed from the active books of the institution. The length of time for successful convalescent leave is a

year. After that time they are no longer carried on the books of the institution as patients.

As has been noted before, there seems a trend toward having more patients out on convalescent leave in certain months than in others. It has also been noted that this is in some way related to the number of admissions to the hospital.

There was a very definite decline in the average daily population on convalescent leave from Central State Hospital during the winter months of the year July 1, 1953 through June 30, 1954. The daily average of persons on convalescent leave ranged from 52 in July 1953 to eight in February 1954. After February 1954 there was a gradual increase in the number on leave. In June 1954 there were 38 on leave.

It is believed that the weather may affect the number on convalescent leave in Oklahoma in general. During warm weather the patient is able to be out and is not confined with others as closely as in the colder winter months. If there is not too much pressure put on the ill person they have a better chance of staying on leave than if placed in close confinement with an incompatible environment. Another reason could be the opportunity for employment is greater. The simpler tasks, such as yard work, gardening and certain types of farming can be handled by these convalescent patients.

The tendency to have more patients on convalescent leave during the summer and spring is not only prevalent at Central State Hospital but is also noted in the other two hospitals for white patients in Oklahoma.

The average daily population on convalescent leave from hospitals for the entire state during the year July 1, 1953 through June 30, 1954 shows some fluctuation. There were 119 on leave in July 1953. This was the largest number for the year. The average daily population on leave for January 1954 was 46, the smallest for the year. At Central State Hospital the month of greatest average daily population on convalescent leave was also July 1953. During this month Central State had an average of 52 persons on leave. The smallest number on leave was in February 1954 when there were eight on leave. In Eastern State Hospital the number on convalescent leave is not so small as in the other two institutions. At that institution the smallest number on leave at any time during the year was in January. At that time a daily average of 16 persons were on leave. The smallest number on leave at any one time from Western State Hospital was seven in December of 1953.

In Central State Hospital the percent of change over the preceding month coincides with the changes in the number of patients on leave. The great changes noticed are in the winter months. Perhaps the greatest change of all was in the months of March and February of 1954. There was a 3% change in March over February.

Table 13 --- Average Daily Population on Convalescent Leave from Central State Hospital for Mental Diseases per Month and Percent of Change over the Preceding Month from July 1, 1953 to June 30, 1954.

Month	Number on Convalescent Leave	Percent of Change over Preceding Month
July	52	---
Aug.	45	-.13
Sept.	35	-.22
Oct.	29	-.14
Nov.	25	-.14
Dec.	28	.12
Jan.	15	-.46
Feb.	8	-.46
Mar.	32	3.0
Apr.	40	.25
May	20	-.50
June	38	.90

Source: Biometrics Division, Oklahoma Department of Mental Health.

The number of resident patients on convalescent leave and the convalescent population of Central State Hospital who are still on the books, makes for a larger number of patients who are being served by Central State than would appear from the average daily population on convalescent leave. There are fewer on convalescent leave during the spring and early summer months than in other parts of the year.

In Central State Hospital the smallest number of persons on convalescent leave was in June 1954 when there were 252. It is noticed that the largest number on convalescent leave at any one time from this institution was in July of 1953. Each month thereafter the number declined. The same decline is noticeable in the number of persons on convalescent leave from all Oklahoma hospitals for white patients. In July 1953 there were a total of 1,016 persons on convalescent leave from the three hospitals. In the next month, August, there were 1,015, in September 997, in October 972, in November 939, in December 907, in January 1954, 861, in February 822, in March 791, in April 763, in May 688 and in June 648. It could be they were returned to the hospital where it was felt they would receive more benefits from direct treatment. In line with this thinking, the number of patients in all hospitals increased from 6,961 in July 1953 to 7,054 in June of 1954. Central State shows

Table 14 --- Number of Total Resident and Convalescent Population of Central State Hospital for Mental Diseases on Convalescent Leave Each Month and Percent of Population on Convalescent Leave from July 1, 1953 to June 30, 1954.

Month	Total on Leave from Central State	Percent of Population on Convalescent Leave
July	472	.15
Aug.	466	.15
Sept.	449	.14
Oct.	438	.14
Nov.	416	.13
Dec.	404	.13
Jan.	386	.12
Feb.	350	.11
Mar.	322	.10
Apr.	307	.09
May	276	.09
June	252	.08

Source: Biometrics Division, Oklahoma Department of Mental Health.

an increase in the number of resident patients. In July 1953 there were 3,048 patients and in June 1954 there were 3,106. This represented a gain of 58 over the year.

The reasons for the decline in the number of patients on convalescent leave are not apparent. The policy of the Mental Health Board which was inaugurated in 1953 may have had some influence on the gradual decline over the state.

CHAPTER V

RESOURCES FOR TREATMENT

The highest number of resident patients in Central State Hospital were suffering from chronic brain syndrome. There were 796 patients with this diagnosis and the length of stay for each of these was 7.8 years. The next largest group of patients were those suffering from central nervous system syphilis. There were 247 in this group and the average length of stay in the hospital was 11 years. There were also a number of patients suffering from senile brain disease but the average length of hospitalization was 3.8 years.

In an analysis of the group having the most admissions to Central State Hospital it was emphasized that the older group had a far higher rate of admissions than the others. Those diseases most common to the aged such as senile brain disease, cerebral arteriosclerosis and other circulatory disturbances, were found in 193 of the cases of the first group and 141 in the second group. There was a noticeable decrease in the length of stay at the hospital. In the cerebral arteriosclerosis group the length of stay in the hospital was 5.5 years and in the senile brain disease group the length of stay was 3.8 years.

In the state as a whole the same large numbers of patients with chronic brain syndromes (1703) and CNS (498) were prevalent. The

Table 15 --- Average Length of Hospital Residence According to Type of Diagnosis in Central State Hospital for Mental Diseases and All Hospitals ,on March 1, 1954.

Psychosis	Central State Number	Central State Length of Stay	All Hospitals Number	All Hospitals Length of Stay
Number of Patients in Each Group Having Given Length of Stay				
Acute Brain Syndromes	4	1.4	23	8.5
Chronic Brain Syndromes	796	7.8	1703	7.0
CNS Syphilis	247	11.0	498	10.7
Other Intercranial Infections	21	13.4	59	11.1
Alcohol Intoxication	11	9.9	19	6.5
Drug or Poison Intoxication	7	10.5	10	8.7
Trauma	19	6.4	29	7.0
Cerebral Arteriosclerosis	141	5.5	436	4.4
Other Circulatory Disturbances	19	6.5	23	6.0
Convulsive Disorders	32	8.1	113	8.9
Senile Brain Disorders	193	3.8	386	3.5
Other Disturbances of Metabolism etc.	51	12.6	63	12.1
All Other Chronic Brain Syndromes	55	7.0	67	6.8
Psychotic Disorders				
Involutional Psychotic Reaction	85	4.6	129	4.7
Manic Depressive Reaction	185	14.0	368	11.9
Schizophrenic Reaction	1317	11.7	3202	13.0
Paranoid Reaction	129	10.6	198	11.4
Psychoneurotic Reaction	22	4.6	48	5.1
Personality Disorders	17	5.9	47	6.5
Mental Deficiencies	399	13.1	1056	13.2
Other and Undiagnosed	138	1.4	233	1.4
TOTALS	3092	10.2	7007	10.8

Source: Biometrics Division, Oklahoma Department of Mental Health.

length of time spent in the hospital was relatively the same as that of those in Central State. In chronic brain syndromes the length of stay in Central State Hospital was 7.8 years and in the state 7.0 years. In the CNS syphilis cases the length of time in Central State was 11.0 years and in the state the length of time was 10.7 years. In the cerebral arteriosclerosis cases the length of time in Central State was 5.5 years and in the state 4.4 years. In the senile brain disease group the length of time in Central State was 3.8 and in the state 3.5 years. The only other types of cases which stay as long or longer in the hospital are those which had not been given a definite diagnosis such as other intracranial infections. The length of stay in Central State Hospital for these cases was 13.4 years and for the state 11.1 years. Patient suffering from other disturbances of metabolism require long hospitalization. The average length of years in Central State Hospital was 12.6 and in the state 12.1.

In the psychotic disorders the largest group were those with schizophrenic action. Central State had 1,317 patients in this group and the average length of stay in the hospital was 11.7 years. The manic depressive group required an average of 14.0 years of hospitalization. The state as a whole had 3,202 patients in the schizophrenic group with an average length of hospitalization of 13.0

years. In the manic depressive group there were 368 patients in Central State with an average hospitalization of 11.9 years. In Central State there were 129 patients in the paranoid reaction group with an average length of hospitalization of 10.6 years. In the entire state there were 198 patients in the paranoid reaction group with an average length of stay in the hospital of 11.4 years.

(13)

There are logical reasons why the psychotic groups received longer treatment than psychoneurotic groups. The causes of the disease are different and more deep seated. In schizophrenia there is the theory that there is an inherited predisposition to the mental disease due to recessive genetic factors. Many research investigators believe that schizophrenia is not merely a personality deviation or disorganization but rather that there are disturbances of metabolism, endocrine balance, and body chemistry which have a causal relation. Increasing stress is now being placed on interpersonal relationships within the family that fail to meet the child's emotional needs or result in the production of attitudes and identifications that so check or distort the development of the personality that they are not prepared to meet the experiences, stresses and responsibilities of mature living and social functioning. With significant frequency it has been found that the patients with schizophrenia spent their childhood in emotionally unwholesome family settings with abnormal

(13) Modern Clinical Psychiatry, Noyes, Arthur P., M.D., p. 343-353.

interactions between parents or siblings. A parent may have been lost through death or both parents may have been unstable. The combination of an aggressively domineering, rejecting father and an oversolicitous mother is not rare in the schizophrenic patient. It occurs to a large percent in persons who have been withdrawn, shut in, unable to confide, or avoidance or restriction of social contacts. Despite a deep-seated resentment the patient has retained a great deal of dependency on the parent. They feel that no one understands them. The causes are individual and multiple.

The age of onset is another factor in the necessity for lengthy stay in the hospital. Onset occurs from late childhood to late middle age. It is most frequent in adolescence and in early adult life. Since treatment is long and involved the stay is necessarily long.

Schizophrenia is one of the most frequent forms of the major psychoses. It constitutes from 15 to 20 percent of the first admissions to public hospitals for mental diseases. Because it tends to become chronic, 60 percent of the population of state hospitals is made up of schizophrenics.

The average length of stay in the hospital for the 1716 patients with psychosis was 11.5 years for Central State. In the state as a

whole the 3897 patients had an average length of stay in the hospital of 12.5 years.

The average length of stay in Central State Hospital for those patients with psychotic disorders was 10.2 years and for the state as a whole the average length of stay in the hospital was 10.8 years.

Table 16 gives a comparison of the bed capacity of Central State Hospital and the bed space of Eastern and Western State Hospitals. It is noticed that there were generally a number of beds which were vacant at Central State Hospital. There was generally a need for more beds than were available in the other two hospitals.

The number of beds unoccupied at Central State Hospital varies from month to month. In July of 1953 for instance there were 159 unoccupied beds and in August there were 184 unoccupied beds. In September there was again a reduction to 167 unoccupied beds and in October the number increased to 190 unoccupied beds. The month when there were the most unoccupied beds was November.

In Table 17 is given the number of beds occupied at Central State Hospital from month to month during the year July 1, 1953 through June 30, 1954.

The change in the percent of beds occupied varied very little from month to month during this space of time. In July there were

Table 16 --- Bed Capacity of Central State Hospital for Mental Diseases per Month for Year July 1, 1953 to June 30,1954.

Month	Number of Unoccupied Beds at Central State Hospital per Month.
July	159
Aug.	184
Sept.	167
Oct.	190
Nov.	197
Dec.	176
Jan.	149
Feb.	115
Mar.	145
Apr.	54
May	39
June	49

Source: Biometrics Division, Oklahoma Department of Mental Health.

Table 17 --- Relationship of Bed Capacity to the Patients Under Care at Central State Hospital for Mental Diseases by Month for the Period from July 1, 1953 to June 30,1954.

Month	Percent of Total Bed Capacity Occupied at Central State Hospital by Month.
July	94.9
Aug.	93.9
Sept.	94.5
Oct.	93.8
Nov.	94.2
Dec.	95.2
Jan.	96.3
Feb.	96.2
Mar.	98.6
Apr.	98.6
May	98.8
June	98.5

Source: Other Tables Made Previously.

94.8% occupied and in August 93.9% occupied. In September there were 94.5% occupied and in October 93.8%. In November there was no change in the percentage of occupied beds but in December it was 94.2%. From January 1954 on there was a gradual rise in the number of beds occupied at Central State Hospital. In this month 95.2% were occupied and in February 96.3%. In March and in April 98.6% were occupied. In May the percent rose to 98.8. There was a decline to 98.5% in June.

The number of unoccupied beds declined from 197 in December to 49 in June of 1954. This accounts for the gradual rise in the percentage of occupied beds.

A significant key to the movement of the patient population in a mental hospital is the quality and availability of personnel. As in all phases of the care of people there has been inadequate medical staff to care properly for the mental patients.

In Table 18 the personnel of Central State Hospital is compared to the personnel of all state mental institutions. Central State does not have the number of psychiatrists needed. Of the 23 available, Central State had nine. Since they care for almost half the entire patient population in the state, the distribution seems unequal. Central State Hospital had only seven physicians, other than psychiatrists, and the state as a whole had 21. Central State had 31 registered nurses available out of the 40 used in all

Table 18 --- Number and Types of Personnel Employed in Central State Hospital for Mental Diseases and in All State Hospitals for Mental Diseases and Number of Each Type Employed per 1,000 Patients on April 1, 1954.

Type of Personnel	Number Employed		Number Employed per 1,000 Patients	
	Central State Hospital	All Hospitals	Central State Hospital	All Hospitals
Psychiatrists	9	23	3	3
Physicians (other)	7	21	2	3
Nurses (Registered)	31	40	10	5
Attendants	490	1338	16	191
Psychologists	5	9	1	1
Social Workers	4	9	1	1
Dentists	1	5	.3	1
Occupational Therapists	14	28	4	4
Laboratory and X-ray Technicians	6	9	2	1
Dietitians	5	10	1	1
Other Dietary Personnel	78	164	25	23
Other Professional Personnel	3	7	1	1
All Other	175	478	56	66

Source: Biometrics Division, Oklahoma Department of Mental Health.

state hospitals. In attendant care Central State had 490 compared to the state's 1338. For the patient population under care, this number is far below the number needed. Central State had five of the nine psychologists employed in state institutions and it had four of the nine social workers employed. Central State had only one dentist of the five employed in state institutions for mental diseases. Central State had half of the occupational therapists, 14 of the 28 available. Central State had six of the nine laboratory and x-ray technicians and five of the 10 diaticians.

Central State needs more personnel giving direct treatment to the mentally ill. Much work needs to be done in the area of family relationships and the mentally ill person before he tries to function in society. In 1954 a full time counselor from the Vocation Rehabilitation service was placed in the hospital.

A comparison of the number and type of personnel in Oklahoma state hospitals with the standards set by the American Psychiatric Association makes clear the need in Central State Hospital for more trained personnel. As of April 1, 1954 Central State Hospital had 44.4 percent of the number of psychiatrists needed. It had 36.1 percent of the number of psychologists needed. It had nine percent of the number of social workers needed.

These data were compiled from a report published by the American Psychiatric Association.

A somewhat more detailed analysis of the types of mental illnesses which the patients in Central State Hospital are suffering and the age group into which they fall is shown in Table 19. It is noticed that a great number of patients who are residents fall in the middle age group. They will of necessity remain long in the institution before and if treatment is successful. The table gives no indication of the time the older people have already spent in the institution or how long the middle age group with this same diagnosis will have to spend there.

A comparison is made with the United States as a whole. The illnesses which seem to have the highest number of patients in the hospital both in Central State and in the United States are psychoneuroses, manic depressive psychoses, and dementia praecox. In Table 15 it was pointed out that, in the State of Oklahoma, the greater number of resident population of mental institutions fell into these categories. These illnesses respond more slowly to treatment than most of the others. There is need for prevention of these conditions since they make up such a large percent of all the mental illnesses.

In the total with psychoses Central State had 1110 resident patients while the United States as a whole had 158,025. Of the patients without psychoses Central State had 191 and the United States 14,168. The figures for comparison with surrounding states were not available.

Table 19 --- Psychoses of First Admissions of Patients to Central State Hospital for Mental Diseases and a Comparison with First Admissions to United States Hospitals for Mental Diseases for the Biennial Period Ending June 30,1948.

Psychoses	Age Groups						Totals for Area	
	15-24	25-34	35-44	45-54	55-64	65-70 over	Central State	United States
Psychoses with Syphilic Meningo-Encephlitis	1	2	11	9	7	4		
" " other forms of Syphilis	1	2	8	3	4	3		
" " Epidemic Encephlitis	-	1	1	2	-	-	62	78,951
" " other Infectious Diseases	-	-	-	-	-	1		
" due to Alcohol	-	5	16	-	1	-		
" " to drug or poison	-	1	6	2	-	1	33	2,348
" " to Trauma	3	2	2	2	1	-		
" " Cerebral Arteriosclerosis	-	-	-	2	27	-		
" " other Disturbances of Circulation	-	-	2	4	15	33	178	16,734
" " to Convulsive Disorders	3	6	11	7	1	-		
Senile Psychoses	-	-	-	-	7	154		
Involutional Psychosis	-	-	5	26	19	4	143	17,926
Psychoses due to Metabolic etc. Diseases	1	2	5	11	12	5		
" " " New Growth	-	-	-	-	-	1		
" " " Unknown or Hereditary Causes	6	5	9	12	9	10	88	1,958

Table 19 --- Psychoses of First Admissions of Patients to Central State Hospital for Mental Diseases and a Comparison with First Admissions to United States Hospitals for Mental Diseases for the Biennial Period Ending June 30, 1948. (Continued)

Psychoses	Age Groups						Totals for Area	
	15-24	25-34	35-44	45-54	55-64	65-70 over	Central State	United States
Psychoneurosis	8	12	14	6	9	2		
Manic Depressive Psychoses	6	9	22	10	14	2		
Dementia Praecox	56	72	63	17	2	1	324	33,591
Paranoia and Paranoid Conditions	-	4	15	4	10	2		
Psychoses with Psychopathic Personality	3	1	4	1	-	-		
Psychoses with Mental Deficiency	19	12	13	8	5	-	101	4,693
Undiagnosed Psychoses	11	7	5	6	7	3	39	2,224
Epilepsy	1	-	3	1	-	-		
Mental Deficiency	7	13	10	6	2	2		
Alcoholism	2	20	17	17	6	-	107	9,612
Drug Addiction	1	7	3	4	-	-		
Personality Disorder due to Epidemic Encephlitis	-	-	-	1	-	-		
Psychotic Personality	15	16	15	2	-	1	65	2,344
Primary Behavior Disorders	-	-	-	1	-	2		
Other Unclassified and Unknown without Psychoses	2	5	1	4	1	2	19	2,212

Source: United States Department of Health, Education, and Welfare. Patients in Mental Institutions.

The study is for the year ending June 30, 1948 and most of the figures used in other parts of this study have been for the year ending in June 1951 or 1954.

It is evident that Central State needs trained personnel in the treatment of its patients. If more professional help were available the return of the patient to his home community or to foster homes would be facilitated. This would lead to a different feeling toward the patients by communities as they would not be released until the professional help felt they were ready to be received by the community. A good out-patient department would be very helpful. The convalescent person could continue to get supportive treatment from familiar figures and thus be able to build up enough security within themselves to function in society.

Data on the condition of patients who are released from Oklahoma hospitals for mental diseases was studied in Table XX.(14) This was compared to releases from all United States hospitals for mental diseases and with Kansas, Arkansas and Texas. Statistics for the year 1951 were used.

The number of patients who were released from mental hospitals was about the same in Oklahoma and in Arkansas. The condition of the patients at the time of release did not correspond. Out of 984

(14) Patients in Mental Institutions - 1950-51, U. S. Department of Health, Education and Welfare, Public Health Service, Pages 169-170.

Table 20 --- A Comparison of Persons Released from State Hospitals for Mental Diseases in Oklahoma, Kansas, Arkansas, Texas, and the United States for Year 1951.

Area	Number by Type of Release				Percent by Type of Release			
	Number Recovered	Number Improved	Number Unimproved	Number Unclassified	Number Recovered	Number Improved	Number Unimproved	Number Unclassified
Oklahoma	122	654	82	126	12	66	8	13
Kansas	168	157	14	79	40	37	8	19
Arkansas	3	893	2	7	.03	98	.02	.07
Texas	233	925	114	27	19	71	8	2
United States	15,137	34,404	4,807	1,728	27	61	8	3

Source: United States Department of Health, Education, and Welfare. Patients in Mental Institutions.

patients released from Oklahoma hospitals in 1951, there were 122 who were recovered. In the same period of time Arkansas released 905 patients and only three were recovered. In Oklahoma 654 patients were improved at time of release in 1951. Arkansas had 893 who were improved for the same years.

Oklahoma had 82 patients released who showed no improvement. Arkansas had two patients who were not improved upon release. There were 126 patients released from Oklahoma hospitals who were unclassified at time of release. Arkansas had 27 who were unclassified. The great number of Arkansas releases were in the improved classification. This is also true in Texas. From a total of 1299 patients released, 233 were recovered and 925 were improved in 1951.

Twelve percent of the patients released in Oklahoma were recovered, Arkansas had .03 percent recovered, and Texas had 19 percent recovered. Kansas, however, had 40 percent recovered. The national percent of recoveries was 27.

Oklahoma had 66 percent of the patients who were improved. This is slightly above the United States percent of improved patients released. The United States percent was 61. Kansas had 37 percent improved and Texas had 71 percent improved. Arkansas, with 98 percent improved, was above the national percent of improved patients.

The percent of patients who showed no improvement upon release

was the same in Oklahoma, Kansas, Texas, and the United States as a whole. In all these, eight percent showed no improvement. In the United States as a whole three percent of the patients released were listed as unclassified. Oklahoma had 13 percent released as unclassified, Kansas had 19 percent, and Arkansas had seven percent. Texas with two percent unclassified was the only state studied that was below the United States percentage.

CHAPTER VI

S U M M A R Y

There were 2174 persons admitted to state hospitals for mental diseases in Oklahoma in 1953-54. Central State Hospital had almost half of these admissions. The rate of admissions to Central State Hospital was 121.6. This is higher than the national rate of 102.5. The state rate was not as high. One reason why Central State admissions rate was high might be due to the industrialized centers in the area and the tendency of the aged population to congregate in some of the rural counties.

During the year studied Central State accepted 38 transfers from other state hospitals. This could have been an influence in the high rate of admissions to this hospital. The month of March 1954 was the month with highest admissions. This is a general pattern followed for the past five years in state hospitals for mental diseases in Oklahoma. The greatest number of persons coming into Central State Hospital per 100,000 of the general population were admitted in March of 1954.

Counties having few industrial centers had a high rate of people 65 years of age and over in residence. From these counties the admissions to Central State Hospital tend to be higher than for the state as a whole.

Some reasons for an increasing number of mentally ill persons may be due to factors such as the speed and complexity of modern life, ability of people to accept the diagnosis, better diagnosticians and an increase in longevity. The rate of admissions of people 70 years of age and over per 100,000 of the population to Oklahoma hospitals was 22.2 percent and the national rate was 18.3 percent for the year 1948. The 65 years of age and over group was becoming increasingly larger in proportion to the total population over the entire country.

Central State Hospital cares for almost half the mental patients who are hospitalized in Oklahoma. Central State has need for additional facilities for the care and treatment of children.

The age group having the most resident patients was the 45-59 year old group. Some reasons for this were the types of mental illnesses common to this group and the fact that these particular types of mental illnesses take a longer period of treatment than some of the others.

The number of patients on convalescent leave from Central State Hospital seem to conform to a seasonal trend. It also seems to have some relationship to the number of admissions. Central State had about the same number as other hospitals of the state in the number of patients on convalescent leave and the time of year they are on leave. It is believed the availability of some types of farm labor

has an influence on these leaves.

The rate of resident population per 100,000 of the general population is higher in the rural areas in the Central State district than in the more urban counties. Considering the number of resident patients in Central State Hospital, the number of releases are in accord with those from the other two hospitals. The state hospitals are under staffed according to standards set by the American Psychiatric Association. Lack of trained personnel has caused a slow development of plans for foster home care of patients and outpatient clinics at Central State Hospital. Releases from Central State Hospital are not as high per 100,000 of the general population as the admissions. There are fewer releases in the winter months than in the summer. There were 42 more admissions to Central State Hospital than there were releases during the year studied. In the state as a whole there were 23 more admissions than releases.

The number of persons on convalescent leave from Central State Hospital was larger in the spring and early summer than any other time of the year. This is a state wide trend.

The middle age group of patients have a longer record of hospitalization than others. Some reasons for this are that they are usually stronger physically and the nature of their illness is of a more chronic nature. The psychoses they usually have does not

respond quickly to treatment, thus necessitating longer residence in the hospitals.

Central State Hospital had a bed capacity of 3207 in 1955. There were usually some unoccupied beds available. In the other two state hospitals there were no extra beds and patients usually outnumbered bed capacity. All hospitals, including Central State, were in need of more trained personnel. All were greatly understaffed. Central State had only 44.4 percent of the psychiatric help needed, 36.1 percent of the psychologists needed, and 9.1 percent of the social workers needed. There was also a shortage in the other personnel of the hospital.

The mental illnesses most frequently found in Central State Hospital and in the United States in general are psychoneuroses, manic depressive psychoses and dementia praecox.

The number of patients released as recovered from Oklahoma hospitals for mental diseases was 12 per cent, as compared to 5.0 percent in Arkansas and 19 percent in Texas. Kansas had 40 percent of patients released who were recovered, compared to the national percent of 27. The favorable situation in Kansas may be the direct result of concentrated effort at treatment by professionally trained personnel which has been made in Kansas.

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