THE CARE OF THE CHRONIC SICK

IV. A COMPARISON OF DATA FROM HOSPITALS IN THE STOKE-ON-TRENT AREA WITH DATA FROM WESTERN ROAD INFIRMARY, BIRMINGHAM*

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We have previously described the results of an investigation of the chronic sick in one large hospital in the City of Birmingham (Lowe and McKeown, 1949, 1950). Before accepting conclusions based on this inquiry as representative of other parts of the country, it seemed desirable to record data from other hospitals for comparison.

SUBJECT OF INQUIRY

We selected four hospitals which draw their patients from urban and rural districts in the Stoke-on-Trent area, and which differ in size and character from the Birmingham hospital. Brief particulars of these institutions are as follows:

- (i) *City General Hospital, Newcastle-under-Lyme* (formerly the London Road Institution). A general hospital with 915 beds distributed thus:

Beds for the acute sick	411
Psychiatric beds	179
Other special beds	112
Chronic sick beds	213

The chronic sick wards are arranged as part of the general hospital.

- (ii) *Turnhurst Road Institution, Stoke-on-Trent*.—An old Public Assistance institution, with 212 beds for the chronic sick, and an annexe now offering accommodation under the provisions of Part III of the National Assistance Act (1948). No general hospital facilities are available, and patients in need of attention are transferred to the City General Hospital.
- (iii) *Moorlands Infirmary, Leek*.—An institution of the same type as (ii), with 81 beds for the chronic sick.
- (iv) *Cheadle Infirmary*.—A third institution of the same type as (ii), with 67 beds for the chronic sick.

RESULTS OF INQUIRY

The inquiry was identical with the earlier one at Western Road Infirmary, and was conducted by two doctors and one social worker, who spent a preliminary period on the Birmingham survey to ensure uniform records. The analysis was completed as before, and the results of most interest are here compared with those already communicated.

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THE HOSPITAL POPULATION.—Unfortunately we cannot, as in Birmingham, relate the hospital patients to the general population from which they are drawn, and cannot therefore give age specific rates. The results for Stoke, compared with those for Western Road Infirmary, are these:

- (a) the patients are a little younger (Table I);
- (b) more patients have been in hospital less than one year (Table II);
- (c) the proportion of unmarried patients is higher (Table III).

TABLE I*
PERCENTAGE AGE AND SEX DISTRIBUTION OF PATIENTS

Age Groups (years)		0-29	30-39	40-49	50-59	60-69	70-79	80+	Unknown	Totals
Stoke	Males	0.9 (1)	2.2 (6)	4.0 (9)	8.8 (20)	18.6 (42)	40.3 (91)	22.6 (51)	2.6 (6)	100 (226)
	Females	1.4 (4)	2.6 (10)	7.2 (25)	8.1 (28)	17.3 (60)	31.7 (110)	30.8 (107)	0.9 (3)	100 (347)
	All patients	1.2 (7)	2.4 (14)	5.9 (34)	8.4 (48)	17.8 (102)	35.1 (201)	27.6 (158)	1.6 (9)	100 (573)
Western Road Infirmary	All patients	0.3 (3)	0.6 (6)	2.9 (29)	4.6 (46)	18.8 (189)	41.5 (417)	31.3 (315)	—	100 (1,005)

* In all tables percentages are shown first and actual numbers in brackets below.

TABLE II
DURATION OF STAY IN HOSPITAL

Duration of Stay (months)		0-2	3-11	12-35	36+	Totals
Stoke		25.0 (143)	25.1 (144)	21.5 (123)	28.4 (163)	100 (573)
Western Road Infirmary		18.0 (181)	20.8 (209)	27.6 (277)	33.6 (338)	100 (1,005)

TABLE III
MARITAL STATUS OF PATIENTS

Sex		Male				Female			
Status		Single	Married	Widow- ers and divorced	Totals	Single	Married	Widows and divorced	Totals
Stoke		31.4 (71)	24.8 (56)	43.8 (99)	100 (226)	31.7 (110)	16.1 (56)	52.2 (181)	100 (347)
Western Road Infirmary		21.1 (96)	29.2 (133)	49.7 (226)	100 (455)	19.6 (108)	12.6 (69)	67.8 (373)	100 (550)

MEDICAL AND NURSING REQUIREMENTS, AND DISPOSAL.—As previously, patients' requirements were assessed in respect of medical attention, skilled nursing, and simple nursing. The proportion needing frequent medical attention or skilled nursing is slightly higher at Stoke (Table IV); this observation, which is true for each of the four hospitals (Table V), is not explained by the inclusion of the general hospital (City General at Newcastle-under-Lyme). The proportion of patients needing simple nursing is 93 per cent., the same as at the Birmingham hospital.

TABLE IV
MEDICAL ATTENTION AND SKILLED NURSING REQUIRED

Frequency of Attention ..		Daily	More than once a week	Weekly	Fort-nightly	Monthly or less	None	Totals
Medical attention	Stoke	2.8 (16)	5.4 (31)	16.7 (96)	9.3 (53)	65.8 (377)	—	100 (573)
	Western Road Infirmary	1.6 (16)	5.8 (58)	10.2 (103)	8.5 (85)	70.9 (713)	3.0 (30)	100 (1,005)
Skilled nursing	Stoke	21.5 (123)	1.9 (11)	1.0 (6)	—	—	75.6 (433)	100 (573)
	Western Road Infirmary	11.9 (120)	3.8 (38)	0.3 (3)	0.3 (3)	—	83.7 (841)	100 (1,005)

TABLE V
SKILLED NURSING REQUIRED

Institution	Required	Not Required	Total
City General Hospital ..	27.2 (58)	72.8 (155)	100 (213)
Turnhurst Road Institution	21.6 (45)	78.4 (167)	100 (212)
Moorlands Infirmary ..	25.9 (21)	74.1 (60)	100 (81)
Cheadle Infirmary	23.9 (16)	76.1 (51)	100 (67)
Total in Stoke area ..	24.4 (140)	75.5 (433)	100 (573)
Western Road Infirmary ..	16.3 (164)	83.7 (841)	100 (1,005)

Table VI gives the suggested disposal of the Stoke hospital patients, the criteria used being the same as previously described. About one-third are considered to require the facilities of a general hospital; about one-half might be accommodated in their own homes or in an institution other than a hospital; the remaining one-sixth need supervision because of their mental state. These proportions are not much different from those obtained at Western Road.

TABLE VI
SUGGESTED DISPOSAL OF PATIENTS

Mental State	Patients without Gross Mental Change			Patients with Gross Mental Change	Total
Suggested Disposal ..	Hospital	Institution or own home		Hospital only	
		With simple nursing	Without simple nursing		
Stoke	31·2 (179)	46·3 (265)	6·6 (38)	15·9 (91)	100 (573)
Western Road Infirmary ..	18·8 (189)	54·6 (549)	7·0 (70)	19·6 (197)	100 (1,005)

TABLE VII
DOMESTIC RESOURCES AVAILABLE TO PATIENTS

Type of Care Available ..	No Home Available	Home Available			Unknown	Total
		Without facilities	With domestic service only	With domestic service and simple nursing		
Stoke	57.4 (329)	23.1 (132)	14.1 (81)	5.4 (31)	—	100 (573)
Western Road Infirmary ..	55.1 (554)	22.8 (229)	17.7 (178)	1.8 (18)	2.6 (26)	100 (1,005)

TABLE VIII
SOURCE OF PATIENTS (I.E. WHENCE ADMITTED)

Whence Admitted ..	General Hospital		Other Hospitals or Nursing Homes	Direct from Home	Unknown	Total
	In-patient	Out-patient				
Stoke	6.5 (37)	0.5 (3)	5.6 (32)	86.9 (498)	0.5 (3)	100 (573)
Western Road Infirmary ..	14.0 (141)	5.1 (51)	3.0 (30)	75.7 (761)	2.2 (22)	100 (1,005)

Table VII shows the domestic resources of patients in hospital, and once again gives no grounds for optimism about disposal to their own homes of patients now in hospital.

ADEQUACY OF MEDICAL SERVICES RECEIVED.—We attempted to assess the adequacy of services received by patients at Western Road Infirmary, and used this information as a crude index of the reduction of the dimensions of the problem which might be expected to result from fuller services (McKeown and Lowe, 1950). The features examined were these:

- (a) Source of patients (Table VIII). The proportion admitted through a general hospital is lower at Stoke; 87 per cent. entered directly from their homes. As

TABLE IX
INCIDENCE OF INCONTINENCE

Continence.. .. .	Continent	Incontinent			Total
		Urine only	Faeces only	Urine and faeces	
Stoke	64.9 (368)	5.8 (33)	1.6 (9)	27.7 (157)	100 (567)*
Western Road Infirmary ..	65.2 (648)	7.6 (75)	1.2 (12)	26.0 (258)	100 (993)†

* Six patients excluded: two, colostomy for carcinoma; four, suprapubic cystotomy.

† Twelve patients excluded: five, colostomy for carcinoma; seven, suprapubic cystotomy.

TABLE X
MOBILITY OF PATIENTS

Mobility	Bedfast		Sitting out of Bed		Ambulant			Total
	Lying	Sitting	With help	Without help	No. stairs	Stairs	Out of doors	
Stoke	25.0 (143)	29.2 (167)	12.0 (69)	7.3 (42)	10.5 (60)	3.3 (19)	12.7 (73)	100 (573)
Western Road Infirmary ..	28.8 (289)	29.7 (299)	12.2 (123)	4.8 (48)	15.4 (155)	2.1 (21)	7.0 (70)	100 (1,005)

TABLE XI
MENTAL STATE OF PATIENTS

Mental State	Normal	Abnormal		Unknown	Total
		Need supervision	Need no supervision		
Stoke	49.2 (282)	15.9 (91)	34.2 (196)	0.7 (4)	100 (573)
Western Road Infirmary ..	64.0 (643)	19.6 (197)	14.0 (141)	2.4 (24)	100 (1,005)

at Western Road Infirmary, only about one-quarter of all patients are known to have had laboratory or out-patient investigation before their admission.

- (b) Continence, mobility, and mental state. The relevant comparisons are recorded in Tables IX, X, and XI respectively. The proportion of incontinents and of bedfast patients is almost identical in the two surveys; the proportion needing supervision because of their abnormal mental state is a little lower at Stoke.

SUMMARY

An investigation of chronic sick in four hospitals drawing their patients from the Stoke-on-Trent area gave results which differ very little from those recorded for Western Road Infirmary, Birmingham. In particular, conclusions about disposal based on the Birmingham hospital are not disturbed by the additional data now available.

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