The geography of Lusaka city clinics

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The following account describes a study undertaken by senior geography and social work students of the University of Zambia in a fact-finding exercise for the Ministry of Health.
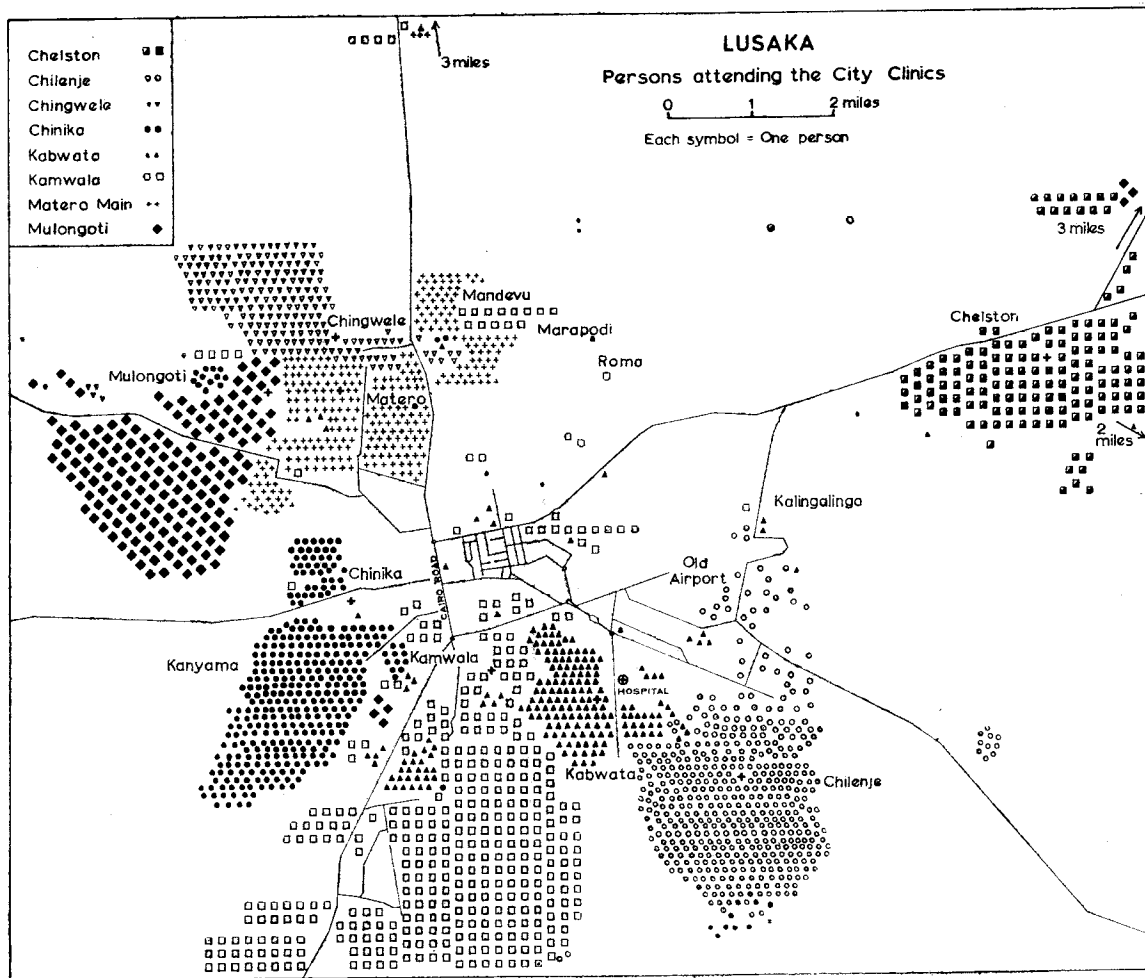
The aims were to enumerate all out-patients treated in the city in a single working day, to obtain information on the distances and the means of travel to seek medical assistance, and to assess the cost to the patient of the journey. Adminstrative, rather than medical, data was to be gathered.
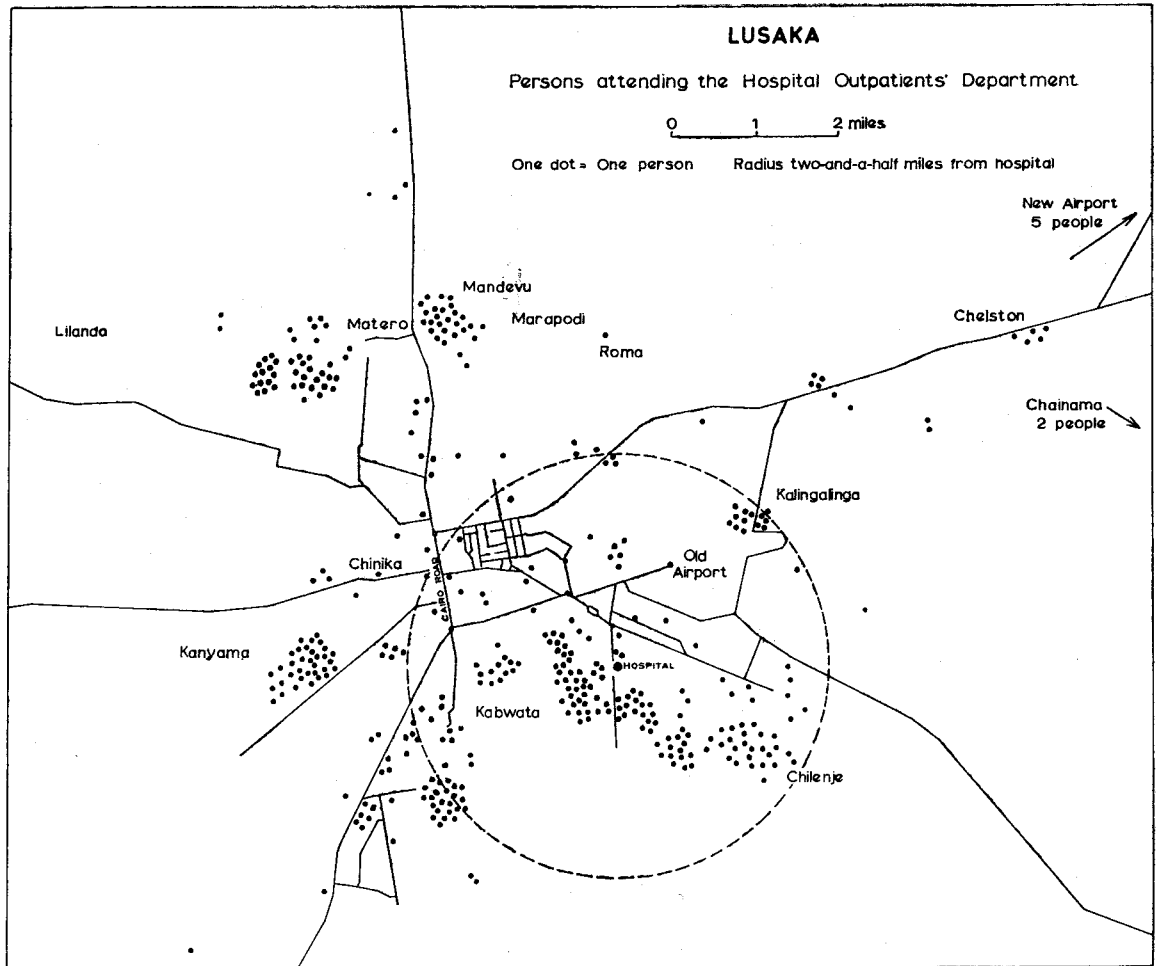
METHOD

Nineteen students acted as enumerators at each of eight urban clinics and the Lusaka Central Hospital out-patients' department. Munali Clinic was omitted on the grounds that it falls administratively into the area of the Provincial Medical Officer at Kabwe. A normal working day, Thursday, 6th June, was chosen between the hours of 8 a.m. and 4 p.m. All patients were enumerated by brief interview whilst they were waiting to see the medical staff. Particulars were entered on a simple six-column form which recorded:—

1. and 2. Sex of Patient and Apparent Age (as judged by the student).
3. Whether Resident in or Visitor to Lusaka.
4. Home address, as accurately as possible.
5. Method of transport to clinic (e.g., foot, bicycle, bus, taxi, etc.)
6. Actual Cost of coming for medical treatment.

LUSAKA
Persons attending the City Clinics

0   1   2 miles

Each symbol = One person

LUSAKA

Persons attending the Hospital Outpatients' Department

0   1   2 miles

One dot = One person   Radius two-and-a-half miles from hospital

New Airport
5 people

Lilanda

Mandevu

Matero

Marapodi

Roma

Chelston

Chainama
2 people

Kalingalinga

Chinika

Old Airport

Kanyama

HOSPITAL

Kabwata

Chilenje

Results of the survey

The facts are recorded in the accompanying maps and tables. Some of the principle points to emerge are noted.

ATTENDANCE

The attendance of 2,601 in all the clinics and 421 at the hospital outpatients' department, totalling 3,022, is a vast figure and suggests that about 2% of the city's estimated population of 160,000 (mid-1968) reports sick in an eight-hour period. June 6 was abnormally cold and grey for the time of year and until 10 a .m. several clinics reported less than normal attendance. If the total of 3,022 is not a normal figure it probably errs on the low side. In the period of time recorded, two clinics, Chilenje and Kamwala, saw more out-patients than the hospital itself.

THE DISTRIBUTION MAP

The distribution map of patients shows a very high degree of nucleation around the various clinics and very little apparent "leap-frogging" by patients to reach a favoured clinic further away. The three clinics in the

Matero area, Matero Main, Chingwele and Mulongoit saw far fewer patients than the three clinics in the suburbs south of the Ridgeway, Chilenje, Kabwata and Kamwala; 800 against 1,227.

ARRIVALS ON FOOT

Of all persons attending clinics 88½% came there on foot. At Chilenje and Chingwele the percentage was as high as 95 and 96%. Two clinics in the south-west, Chinika and Kamwala, have slightly lower proportions on foot, 84% and 78%.

ARRIVALS BY BICYCLE

A large proportion (80%) of those who cycled to clinics were adult men. Cyclists made up 8% of total clinic attendance, but the proportion of cyclists was considerably higher at two clinics, Chinika and Kamwala (15% and 14% of their patients). Indeed 118 out of 201 patients who cycled to clinics came to those two centres. This appears to be partly because they serve rural areas outside the city, and partly because patients from New Kanyama could only use an irregular bus-service which runs to a city terminal inconvenient for

clinics. In the case of patients travelling to Kamwala from the shanty compounds south of the city no bus service at all exists. Eighteen per cent of hospital out-patients came on bicycles.

ARRIVALS BY VEHICLES

This category includes buses, trains, taxis, government or company vehicles and private cars and scooters. Although the number coming to clinics in various vehicles is only half the number of those who cycle to clinics, the overall number of cyclists, 277 or 9% is similar to the overall number of those who come in vehicles, 296 or 10%. This is because of the large proportion (47%) of patients who come to hospital in vehicles. These patients, of course, travel demonstrably greater distances. Of the clinics Kamwala had far the highest number of patients arriving by vehicle and the lack of buses to the south is again the probable reason.

COST OF ATTENDING CLINICS

The total amount paid in fares to reach all the eight clinics was K21.61 by a total of 98 persons, an average of 22n each. In fact two travelled from the southern province by bus at a cost of K5.0 and K5.19 which were the highest fares recorded in the clinics.

COST OF ATTENDING HOSPITAL OUT-PATIENTS' DEPARTMENT

One hundred and three patients paid a total of K23.28 in fares to reach hospital. This is made up to 73 paying a total of K4.71 by bus; 25 K8.95 by taxi and 5 K9.62 by train. Several of the latter were coming to Lusaka for reasons other than only to seek medical treatment.

The total paid in fares, K44.89, on 6th June, enabled 3,022 persons to obtain treatment, an overall average of under 1½n per person.

VISITORS TO LUSAKA

Visitors were defined as persons who had come to Lusaka specifically to seek medical treatment. Those visiting relatives socially or seeking employment were therefore classed as residents in the sense of being a normal part of the city clinics' load.

Seventy-seven persons admitted to being visitors and so make up an extremely low proportion (a mere 2½%) of all the patients seen that day.

SEX OF PATIENTS

Although the clinics as a whole were expected to show a service provided mainly to women and children, this was not so. In the clinics adult men, defined as those over school age, outnumbered adult women by almost two to one and in the hospital by more than two to one. Amongst children, the numbers of boys and girls are everywhere closely similar.

COMPLAINTS

The enumerators' task did not make for or encourage conversation with the patients since the sheer numbers concerned precluded opportunity for gossip. One observation should however be made. Certain of the clinics have grossly inadequate waiting facilities for patients—who indeed earn their name. The sick usually expect and accept long queues, but surely need not be exposed to the elements whilst they wait.

CONCLUSION

It would be most unjust to end this report with complaint. The huge numbers, increasing each year, who take advantage of the city's outpatient and clinic facilities are advocate enough for those services.

TABLE II—METHOD AND COST OF TRAVEL TO EACH CLINIC

						NUMBERS ON FOOT						NUMBERS IN VEHICLES						Cost
						M	F	m	f	T	%	M	F	m	f	T	%	Kn.
(a) Chelston	..	..	..	..	..	34	19	51	59	163	90	3	1	3	2	9	5	—
(b) Chilenje	..	..	..	..	..	43	35	201	182	461	95	1	2	7	2	12	2	1.79
(c) Chingwele	..	..	..	..	..	34	39	75	78	226	96	1	—	—	—	1	4	.06
(d) Chinika	..	..	..	..	..	71	51	93	115	330	84	4	2	—	—	6	3	.10
(e) Kabwata	..	..	..	..	..	61	37	86	80	264	88	5	2	3	3	13	4	.44
(f) Kamwala	..	..	..	..	..	113	56	89	87	345	78	11	6	9	8	34	8	17.20
(g) Matero	..	..	..	..	..	84	49	93	92	318	89	11	—	4	1	16	4	.80
(h) Mulongoti	..	..	..	..	..	27	29	73	66	195	94	2	1	3	1	7	3	1.22
(a-h) All Clinics	..	..	..	..	..	467	315	761	759	2302	88½	38	14	29	17	98	4	21.61
(j) Hospital	..	..	..	..	..	68	27	20	32	147	35	95	66	24	13	198	47	23.28
(a-j) All Clinics and Hospital	..	..	..		535	342	781	791	2449	81	133	70	53	30	296	10	44.89

						NUMBERS ON BICYCLES						TOTAL ATTENDANCE						Cost
						M	F	m	f	T	%	M	F	m	f	T	%*	Kn.
(a) Chelston	..	..	..	..	..	7	—	2	—	9	5	44	20	56	61	181	6	—
(b) Chilenje	..	..	..	..	..	9	—	2	3	14	3	53	37	210	187	487	16	1.79
(c) Chingwele	..	..	..	..	..	4	1	2	—	7	3	39	40	77	78	234	7½	.06
(d) Chinika	..	..	..	..	..	51	—	3	3	57	15	126	53	96	118	393	13	.10
(e) Kabwata	..	..	..	..	..	16	4	2	1	23	8	82	43	91	84	300	10	.44
(f) Kamwala	..	..	..	..	..	55	1	2	3	61	14	179	63	100	98	440	14	17.20
(g) Matero	..	..	..	..	..	20	1	2	1	24	7	115	50	99	94	358	11½	.80
(h) Mulongoti	..	..	..	..	..	6	—	—	—	6	3	35	30	76	67	208	6½	1.22
(a-h) All Clinics	..	..	..	..	..	168	7	15	11	201	8	673	336	805	787	2601	86½	21.61
(j) Hospital	..	..	..	..	..	61	8	3	4	76	18	224	101	47	49	421	13½	23.28
(a-j) All Clinics and hospital	..	..	..		229	15	18	15	277	9	897	437	852	836	3022	100	K44.89

% of total attending that clinic   %* of total city attendance

TABLE I—TOTAL ATTENDANCE AND METHOD OF TRAVEL

(a) CHELSTON

	M	F	m	f	T	V
Foot	34	19	51	59	163	
Bicycle	7	—	2	—	9	
Vehicle	3	1	3	2	9	
TOTAL	44	20	56	61	181	(21)

(b) CHILENJE

	M	F	m	f	T	V
Foot	43	35	201	182	461	
Bicycle	9	—	2	3	14	
Vehicle	1	2	7	2	12	
TOTAL	53	37	210	187	487	(5)

(c) CHINGWELE

	M	F	m	f	T	V
Foot	34	39	75	78	226	
Bicycle	4	1	2	—	7	
Vehicle	1	—	—	—	1	
TOTAL	39	40	77	78	234	(4)

(d) CHINKA

	M	F	m	f	T	V
Foot	71	51	93	115	330	
Bicycle	51	—	3	3	57	
Vehicle	4	2	—	—	6	
TOTAL	126	53	96	118	393	(2)

(e) KABWATA

	M	F	m	f	T	V
Foot	61	37	86	80	264	
Bicycle	16	4	2	1	23	
Vehicle	5	2	3	3	13	
TOTAL	82	43	91	84	300	(N/R)

(f) KAMWALA

	M	F	m	f	T	V
Foot	113	56	89	87	345	
Bicycle	55	1	2	3	61	
Vehicle	11	6	9	8	34	
TOTAL	179	63	100	98	440	(9)

(g) MATERO

	M	F	m	f	T	V
Foot	84	49	93	92	318	
Bicycle	20	1	2	1	24	
Vehicle	11	—	4	1	16	
TOTAL	115	50	99	94	358	(2)

(h) MULONGOTI

	M	F	m	f	T	V
Foot	27	29	73	66	195	
Bicycle	6	—	—	—	6	
Vehicle	2	1	3	1	7	
TOTAL	35	30	76	67	208	(10)

(i) HOSPITAL

	M	F	m	f	T	V
Foot	68	27	20	32	147	
Bicycle	61	8	3	4	76	
Vehicle	95	66	24	13	198	
TOTAL	224	101	47	49	421	(24)

(a-h) ALL CLINICS

	M	F	m	f	T	V
Foot	467	315	761	759	2302	
Bicycle	168	7	15	11	201	
Vehicle	38	14	29	17	98	
TOTAL	673	336	805	787	2601	(53)

(a-j) GRAND TOTAL

	M	F	m	f	T	V
Foot	535	342	781	791	2449	
Bicycle	229	15	18	15	277	
Vehicle	133	80	53	30	296	
TOTAL	897	437	852	836	3022	(77)

M—Adult Male
F—Adult Female
m—Male child
f—Female Child
T—Total

V—Visitors to Lusaka included in total
N/R—Not recorded