# Disease patterns in Transkei and Ciskei

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#### Summary

In 1972 disease patterns in selected representative areas of Transkei and Ciskei were surveyed. Some of the findings are presented.

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In 1972 the Transkei and Ciskei Research Society undertook the ambitious task of attempting a survey of disease in Transkei and Ciskei. The results later appeared as a special publication of the University of Pretoria, *A Survey of Disease Patterns in Transkei and the Ciskei.*<sup>1</sup> A shortened and edited version reproduced to make the information more widely available to health professionals follows.

The data collected are of considerable importance in recording the disease profiles of communities living in distant (mainly rural) parts of the subcontinent and of peoples who to a greater or lesser extent still adhere to the traditional lifestyles and eating habits of their forebears. Rapid change, urbanization and westernization are the order of the day, and the advent of independence and self-government for the states of Transkei and Ciskei has, predictably, accelerated this change.

### Patients and methods

Individuals surveyed were classified into the following three social groups: (i) 'blanket' group — (42,5%) those mainly abiding by their traditional customs and who usually wore a blanket as clothing, the colour and style of which have social connotations; (ii) 'school' group (52,5%) — those who had been or were going to school, who dressed in Western-type clothes, and had assumed some of the habits associated with the Western lifestyle; (iii) 'urban' group (5%) — those who had discarded most of their traditional customs and had a predominantly Western lifestyle. The smallness of the proportion (5%) thought to be urbanized should be stressed.

Although 8 684 patients were seen at 12 widespread hospital points over a 2-week period in the summer of 1972 diseases were classified according to the 8th revision of the *International Classification of Diseases* of 1965; the most prevalent categories are listed in Table I. The most commonly occurring diseases in each age group are listed in Tables II and III.

### Results

In the 'blanket' group nutritional and communicable diseases (especially tuberculosis) and mental disorders (possibly of

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TABLE I. CATEGORIES OF DISEASE		ALLINCE
Categories	Males (%)	Females (%)
Diseases of the digestive system	22,4	18,2
Communicable diseases	21,6	17,8
Diseases of the respiratory system	20,2	22,7
Diseases of the skin and cellular tissue	7,7	7,6
Trauma	7,5	3,9
Nutritional disease	4,3	4,6
Total	83,7	74,8

nutritional origin) were the main diseases, while in the 'urban' group obesity, diabetes and allergies were the main diseases. In the 'school' group there was a high incidence of boils, impetigo, genito-urinary disease and anaemia; males often suffered from trauma and there was a higher incidence of upper respiratory and genito-urinary infections.

**Diseases of the respiratory system.** The commonest found were acute conditions of the upper respiratory tract — colds, tonsillitis, pharyngitis, sinusitis, laryngitis, and tracheitis. Pulmonary tuberculosis was not classified with respiratory diseases but with communicable diseases, and accounted for 8,8% of all diseases reported among males and 7,2% among females.

**Transkei silicosis** is a fibrotic, silicotic lesion of the lungs which affects only females and is considered to be a 'dust disease' resulting from the grinding of maize on stones inside the hut.<sup>2,3</sup> Thirty cases (0,3%) were seen.

**Digestive diseases.** Nearly 20% of all diseases were of the digestive tract, 78% occurring in children up to 9 years of age; gastro-enteritis was the most prevalent disease here in all social groups. Notable is the absence of peptic ulceration, gallstones, hiatus hernia, diverticulitis, carcinoma of the colon, polyps of the colon, haemorrhoids and appendicitis.

**Communicable diseases** were the 2nd most commonly reported category among males and the 3rd among females. Almost 50% of these patients had tuberculosis;  $\pm$  15% had measles, 9% roundworm and 4% venereal disease.

Diseases of the skin and cellular tissue. Scabies, the chief component of this category (30%), appeared to affect females more than males, and was particularly prevalent in the 'school' group. Impetigo, boils and carbuncles, cellulitis and most other diseases in this category were also markedly more frequent in females of the 'school' group. Boils and carbuncles occurred relatively often in the urban group, as did dermatitis and cellulitis.

**Ringworm** was present in 30 males and 34 females, the peak age for occurrence being between 5 and 10 years.

**Lower lip syndrome** first noted by Ingle and later described by Daynes,<sup>4</sup> is debilitating mainly from an irritative and cosmetic point of view. Eleven cases (6 in males) were seen, more occurring in the urban group, than the other two at ages between 40 and 49 years.

**Diseases of the genito-urinary system** (3,1% of all diseases among males and 10,7% among females). This category was 8th in importance among males and 4th among females. Salpingooophoritis and disorders of menstruation were prominent, while the rarity of kidney and bladder stones is notable.

### TABLE II. TOTAL NUMBER OF DISEASES IN EACH CATEGORY IN ORDER OF FREQUENCY, SHOWING PERCENTAGE OF TOTAL DISEASES IN EACH AGE GROUP — MALES

	Age (yrs)											
	0 - 9		10 - 19		20 - 49		50 - 69		70+		Total	
Disease	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Digestive	819	29,3	37	8,8	50	8,3	27	9,0	6	5,8	939	22,2
Communicable	629	22,5	77	18,3	122	20,2	68	22,7	19	18,3	915	21,7
Respiratory	622	22,2	65	15,5	109	18,1	45	15,0	14	13,5	855	20,2
Skin and cellular	227	8,1	47	11,2	35	5,8	12	4,0	3	2,9	324	7,7
Trauma	66	2,4	101	24,0	116	19,2	23	7,7	10	9,6	316	7,5
Nutritional	144	5,1	9	2,1	18	3,0	11	3,7	3	2,9	185	4,4
Ear	119	4,3	19	4,5	9	1,5	7	2,3	1	1,0	155	3,7
Genito-urinary	27	1,0	26	6,2	50	8,3	22	7,3	5	4,8	130	3,1
Eye	32	1,1	8	1,9	11	1,8	13	4,3	5	4,8	69	1,6
Circulatory	8	0,3	6	1,4	13	2,2	24	8,0	15	14,4	66	1,6
Bones and joints	6	0,2	6	1,4	19	3,2	19	6,3	5	4,8	55	1,3
Nervous system	14	0,5	6	1,4	19	3,2	6	2,0	3	2,9	48	1,1
Mental disorders	3	0,1	2	0,5	10	1,7	6	2,0	9	8,7	30	0,7
Allergies	13	0,5	2	0,5	10	1,7	2	0,7	_	-	27	0,6
Neoplasms	1	0,0	_ ·	_	7	1,2	10	3,3	6	5,8	24	0,6
Blood diseases	7	0,3	3	0,7	1	0,2	2	0,7	_		13	0,3
Endocrine	1	0,0	2	0,5	3	0,5	3	1,0		-	9	0,2
Congenital malformation	10	0,4	4	1,0	1	0,2	-	_	_	-	15	0,4
Diseases of early infancy	50	1,8	—	_		_	_	-	—		50	1,2
Subtotal	2 798		420		603		300		104		4 225	
Undiagnosed	84		_14		39		27		1	× .	165	
Total	2 882		434		642		327		105		4 390	

## TABLE III. TOTAL NUMBER OF DISEASES IN EACH CATEGORY IN ORDER OF FREQUENCY, SHOWING PERCENTAGE OF TOTAL DISEASES IN EACH AGE GROUP — FEMALES

	Age (yrs)											
	0 - 9		10 - 19		20 - 49		50 - 69		70+		Total	
Disease	No.	%	No.	%	No.	%	No.	%	No.	⁰⁄₀	No.	%
Respiratory	600	22,2	207	29,3	365	20,0	160	29,0	15	11,6	1 347	22,8
Digestive	761	28,1	67	9,5	185	10,2	54	9,8	11	8,5	1 078	18,2
Communicable	663	24,5	95	13,5	205	11,3	77	13,9	14	10,9	1 054	17,8
Genito-urinary	11	0,4	94	13,3	491	27,0	29	5,2	5	3,9	630	10,7
Skin and cellular	237	8,8	89	12,6	103	5,7	21	3,8	3	2,3	453	7,7
Nutritional	110	4,1	17	2,4	109	6,0	25	4,5	5	3,9	266	4,5
Trauma	41	1,5	51	7,2	110	6,1	22	4,0	5	3,9	229	3,9
Ear	121	4,5	22	3,1	26	1,4	5	0,9	—	_	174	2,9
Circulatory	14	0,5	12	1,7	42	2,3	59	10,7	25	19,4	152	2,6
Bones and joints	8	0,3	12	1,7	68	3,7	38	6,9	12	9,3	138	2,3
Eye	41	1,5	24	3,4	31	1,7	17	3,1	1	0,8	114	1,9
Nervous system	10	0,4	8	1,1	14	0,8	13	2,4	13	10,1	58	1,0
Neoplasms	4	0,1	1	0,1	24	1,3	14	2,5	6	4,7	49	0,8
Mental disorders	5	0,2	1	0,1	11	0,6	5	0,9	12	9,3	34	0,6
Blood diseases	10	0,4	3	0,4	17	0,9	2	0,4	1	0,8	33	0,6
Allergies	6	0,2	_	_	14	0,8	8	1,4	1	0,8	29	0,5
Endocrine	-	-	2	0,3	2	0,1	4	0,7		_	8	0,1
Congenital malformation	8	0,3	1	0,1	1	0,1	-		_	-	10	0,2
Diseases of early infancy	54	2,0	-	-	-	_		_	-	_	54	0,9
Subtotal	2 704		706		1 818		553		129		5 910	
Undiagnosed	104		58		215		37		6		420	
Total	2 808		764		2 033		590		135		6 330	

**Trauma** comprised mainly physical injuries, with a relatively small incidence of poisoning. Trauma was the most common diagnosis in males in the 10-19-year age group.

**Nutritional diseases** (4,4% of all diseases among males and 4,5% among females). The actual prevalence is considered to be higher than recorded because it is dealt with by nurses in some

cases and may be obscured by the severity of the presenting illness.

*Kwashiorkor* (44,1% in males and 17,7% in females). Many patients with this diagnosis were under 2 years old. It was the most common disease in this category recorded for the males of the urban group, and was twice as common in the 'blanket' group as in the 'school' group.

*Pellagra* (15,9% in males and 43,8% in females) is a disease of maize-eaters, particularly of females (71% of cases), since they are handicapped by customs which debar them from eating eggs and from drinking milk at certain times.

*Malnutrition:* 131 cases were recorded, 63 in males and 68 in females.

Marasmus (14 cases) was included under diseases of early infancy.

*Obesity* was present in 31 patients, all but 2 being female; 6 were urban and 21 in the 'school' group.

*Diabetes* was found in only 1 'blanket' male, 6 'school' and 4 urban patients.

**Diseases of the ear** (3,7% of all diseases among males and 2,9% among females). Otitis media accounted for the largest number of cases here. Four deaf mutes were seen.

**Diseases of the eye** (1,6% of diseases among males and 1,9% among females). Conjunctivitis and ophthalmia were the most common seen.

Diseases of the circulatory system (1,6% of all diseases among males and 2,6% among females). Cardiomyopathies were responsible for 46% of the cases in males and 32% of those in females. The incidence was higher in the 'blanket' and 'school' groups. The total number of males with hypertension and hypertension-induced heart disease was 5 (7,6% of the total number of males with diseases of the circulatory system), 2 of these belonging to the 'blanket' group and 3 to the 'school' group. The corresponding figures in females are: total 40 (26,1%), 10 'blanket', 26 'school' and 4 urban. Most remarkable by their absence were angina pectoris and coronary thrombosis. Varicose veins were rarely seen and no cases of pulmonary embolization or piles were seen. Rheumatic heart disease constituted only  $\pm$  5% of the cases seen in this category.

**Diseases of early infancy.** Immaturity was responsible for most cases, followed by difficulties in feeding, marasmus and umbilical sepsis.

**Blood diseases.** All cases were of hypochromic anaemia, this thought to be due to iron deficiency, and all were responsive to treatment.

Allergies. Asthma was the most frequent diagnosis here.

**Neoplasms.** Cancer of the oesophagus was the commonest tumour seen (57,1% in males and 14,3% in females). No malignant neoplasms of the buccal cavity and pharynx, colon, rectum, liver, thyroid, ovary, fallopian tubes or bone, and no cases of Hodgkin's disease or leukaemia were recorded.

Diseases of the bones and joints. The most common findings here were rheumatism and arthritis (48,7% in males and 45,4% in females).

Diseases of the nervous system. Epilepsy (50% in males and 31,1% in females), cerebral stroke and other vascular lesions of the central nervous system (12,5% in males and 22,4% in females) and meningitis (4,2% in males and 13,8% in females) were the most common diagnoses.

Mental disorders. More than half of the patients ( $\pm$  70%) seen in this category were in the 'blanket' group. The main diseases were senility (30% in males and 38% in females), anxiety states (13% in males and 8% in females), and alcoholism and alcoholic psychosis (7% in males and 11% in females). The most common diseases associated with mental disorders were the cardiomyopathies.

### Conclusion

The commonest diseases were gastro-enteritis (1 600 cases) and tuberculosis (900 cases). Tuberculosis is still a major fatal disease among adults, although there is evidence that it is being brought under control. Gastro-enteritis (often fatal) was the most prominent complaint among children. There was an unusually high incidence of cancer of the oesophagus.

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