Diseases	Remaining in Hospital at the end of 1934	Yearly Total.		Total cases Treated	Remaining in Hospital at the end of 1935.
		Admissions	Deaths		
Brought forward	68	1774	161	1842	50
VII. Diseases of the Genito-urinary System (non-Venereal) (Contd)					
138. Salpingitis -					
Abscess of the Pelvis	5	92	4	97	2
139. Uterine Tumours (non-malignant)	1	37	3	38	1
140. Uterine Haemorrhage (non-puerperal)		29		29	
141. A - Metritis		28		28	2
B - Other affections of the Female Genital Organs -					
Displacements of Uterus	1	31	1	32	1
Amenorrhoea		6		6	
Dysmenorrhoea		10		10	
142. Diseases of the Breast (non-puerperal) -					
Mastitis		17		17	
Abscess of Breast	1	20		21	1
VIII. Puerperal State (153)					
143. A - Normal Labour		5		5	
B - Accidents of Pregnancy -					
(a) Abortion		15		15	
(b) Ectopic Gestation	1	6		7	
(c) Other accidents of Pregnancy		41	5	41	
144. Puerperal Haemorrhage		1		1	
145. Other accidents of Parturition		26	4	26	
146. Puerperal Septicaemia		13	5	13	1
149. Sequelae of Labour		40	1	40	2
150. Puerperal affections of the Breast		6		6	
Carried forward	77	2197	184	2274	60

Diseases	Remaining in Hospital at the end of 1934	Yearly Total		Total cases Treated	Remaining in Hospital at the end of 1935
		Admissions	Deaths		
Brought forward	77	2197	184	2274	60
IX. Affections of the Skin and Cellular Tissues. (219)					
151 Gangrene	4	13	1	17	
152. Boil -		1		1	
Carbuncle		12		12	
153. Abscess -		6	1	6	
Whitlow		24		24	2
Cellulitis	3	120	4	123	2
154. B - Scabies		1		1	1
155. Other Diseases of the Skin -					
Eczema		13	1	13	1
Psoriasis		1		1	
Ulcer		20	1	20	1
Ainhum		8		8	
X. Diseases of Bones and Organs of Locomotion (other than Tuberculous) (98)					
156. Diseases of Bones -					
Osteitis		24	1	24	1
157. Disease of Joints -					
Arthritis	1	23		24	1
Synovitis		46		46	1
158. Other Diseases of Bones or Organs of Locomotion.		5		5	
XI. Malformations (4)					
159. Malformations -					
Hydrocephalus		3		3	
Spina Bifida, &c.		1	1	1	
XII. Diseases of Infancy (26)					
160. Congenital Debility		5	4	5	
161. Premature Birth		3	1	3	
162. Other Affections of Infancy		3		3	1
163. Infant neglect (infants of three months or over)	1	15	1	16	
Carried forward	86	2544	200	2630	71

Diseases	Remaining in Hospital at the end of 1934	Yearly Total		Total Cases Treated	Remaining in Hospital at the end of 1935
		Admissions	Deaths		
Brought forward	86	2544	200	2630	71
XIV. Affections Produced by External Causes (567)					
175. Food Poisoning -					
Botulism	1	4		5	1
176. Attacks of poisonous animals -					
Human Bite		4		4	
Insect Bite		3	1	3	1
177. Other Accidental Poisonings		2		2	
178. Burns (by Fire)	3	57	10	60	6
179. Burns (other than by Fire)		5		5	
183. Wounds (by Firearms, war excepted)	1	5		6	1
184. Wounds (by cutting or stabbing Instruments)	1	74	3	75	1
185. Wounds (by Fall)	2	41		43	1
187. Wounds (by Machinery)		2		2	
188. Wounds (by Crushing, e.g. railway accidents &c.)		17	1	17	
189. Injuries inflicted by Animals, Bites, Kicks &c.	3	68		71	1
193. Exposure to Cold, Frost Bite &c.		2		2	
195. Lightning Stroke		2		2	1
198. Murder by cutting or stabbing Instruments.		2	2	2	
201. A - Dislocations		20		20	
B - Sprain		10		10	
C - Fracture	13	195	8	208	11
202. Other external injuries	3	54	2	57	4
XV. Ill-defined Diseases (26)					
205. A - Diseases not already specified or ill-defined					
Ascites		3	1	3	
Asthenia		8	1	8	
Shock		5	1	5	
Hyperpyrexia		3		3	
B - Malingering		7		7	
Total	113	3137	230	3250	99

APPENDIX III.

RETURN OF OUT-PATIENTS FOR THE YEAR 1935.

DISPENSARIES

Diseases by Systems or Groups	Nos.	Principal Diseases	Nos.
I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.	10432	1. Enteric Group -	
		(a) Typhoid Fever. . .	127
		2. Typhus	192
		4. Tick-bite Fever . . .	2
		7. Measles	476
		8. Scarlet Fever	11
		9. Whooping Cough. . . .	257
		10. Diphtheria	11
		11. Influenza	1550
		13. Mumps	58
		16. Dysentery -	
		(a) Amoebic. . . .	32
		(b) Bacillary . . .	21
		20. Leprosy	85
		21. Erysipelas	19
		22. Acute Poliomyelitis . . .	5
		24. Epidemic Cerebro-spinal Fever	3
		25. Other Epidemic Diseases -	
		(a) Rubeola (German Measles)	5
		(b) Varicella (Chicken-pox)	83
		27. Anthrax.	1
		31. Tuberculosis, Pulmonary and Laryngeal. . . .	549
		32. Tuberculosis of the Meninges or Central Nervous System. .	1
		33. Tuberculosis of the Intestines or Peritoneum. . .	18
Carried forward			3506

Diseases by Systems or Groups	Nos.	Principal Diseases	Nos.
Brought forward			3506
I. EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES. (Contd)		34. Tuberculosis of the Vertebral Column. . .	80
		35. Tuberculosis of Bones and Joints	26
		36. Tuberculosis of other Organs . . .	
		(a) Skin or Subcutaneous Tissue (Lupus) . .	2
		(c) Lymphatic System . .	122
		(e) Other organs. . .	1
		37. Tuberculosis disseminated -	
		(a) Acute	6
		(b) Chronic . . .	7
		38. Syphilis -	
		(a) Primary . . .	315
		(b) Secondary . . .	3126
		(c) Tertiary . . .	1091
		(d) Hereditary . . .	1052
		(e) Period not indicated .	1
		39. Soft Chancre . . .	29
		40. A - Gonorrhoea and its complications . .	918
		B - Gonorrhoeal Ophthalmia	42
		C - Gonorrhoeal Arthritis .	105
		D - Granuloma Venereum. .	3
II. GENERAL DISEASES NOT MENTIONED ABOVE.	2575	43. Cancer or other malignant Tumours of the Buccal Cavity.	1
		44. Cancer or other malignant Tumours of the Stomach or Liver	3
		46. Cancer or other malignant Tumours of the Female Genital Organs . . .	10
		47. Cancer or other malignant Tumours of the Breast . .	3
		48. Cancer or other malignant Tumours of the Skin . .	3
		49. Cancer or other malignant Tumours of Organs not specified	5
		50. Tumours non-Malignant . .	335
Carried forward			10792

Diseases by Systems or Groups	Nos.	Principal Diseases	Nos.
Brought forward			10792
II. GENERAL DISEASES NOT MENTIONED ABOVE (Contd)		51. Acute Rheumatism. . .	227
		52. Chronic Rhuematism . .	1629
		53. Scurvy (including Barlow's Disease)	29
		54. Pellagra	163
		56. Rickets	10
		57. Diabetes (not including Insipidus). . . .	2
		58. Anaemia -	
		(a) Pernicious . . .	1
		(b) Other Anaemias and Chlorosis . . .	96
		60. Diseases of the Thyroid Gland -	
		(a) Exophthalmic Goitre .	3
		(b) Other diseases of the Thyroid Gland, Myxoedema.	49
		65. Leukaemia -	
		(b) Hodgkin's Disease . .	3
		67. Chronic Poisoning by mineral substances (lead Mercury &c.) . . .	1
		69. Other General Diseases -	
		Auto-intoxication . .	2
III. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.	2667	71. Meningitis (not including Tuberculous Meningitis or Cerebrospinal Meningitis) .	1
		72. Locomotor Ataxia. . .	5
		74. Apoplexy -	
		(a) Haemorrhage . . .	7
		(c) Thrombosis . . .	2
		75. Paralysis -	
		(a) Hemiplegia . . .	15
		(b) Other Paralyses . .	64
Carried forward			13101

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward			13,101
III. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES (Contd.)		77. Other forms of Mental Alienations.	48
		78. Epilepsy	113
		79. Eclampaia, Convulsions (non-puerperal) 5 Years or over .	1
		80. Infantile Convulsions. . .	15
		81. Chorea	20
		82. A - Hysteria	95
		B - Neuritis	239
		C - Neurasthenia . . .	55
		83. Cerebral Softening . . .	4
		84. Other affections of the Nervous System, such as Paralysis Agitans.	4
		85. Affections of the Organs of Vision -	77
		(a) Diseases of the Eye . .	318
		(b) Conjunctivitis . . .	796
		(c) Trachoma	5
		(d) Tumours of the Eye . .	3
		(e) Other affections of the Eye	201
		86. Affections of the Ear or Mastoid Sinus	578
IV. AFFECTIONS OF THE CIRCULATORY SYSTEM.	905	90. Other Diseases of the Heart -	
		(a) Valvular -	
		Mitral	111
		Aortic	5
		Tricuspid	10
		(b) Myocarditis. . . .	161
		91. Diseases of the Arteries -	
		(a) Aneurism	2
		(b) Arterio-Sclerosis. . .	35
		(c) Other Diseases . . .	3
		92. Embolism or Thrombosis (non-cerebral)	5
		93. Diseases of the Veins -	
		Haemorrhoids . . .	61
		Varicose Veins . . .	25
		Phlebitis	2
Carried forward			16,093

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward			16,093
IV. AFFECTIONS OF THE CIRCULATORY SYSTEM (Contd.)		94. Diseases of the Lymphatic System -	
		Lymphangitis. . .	4
		Lymphadenitis Bubo (non-specified) . .	427
		95. Haemorrhage of Undetermined cause	6
		96. Other affections of the Circulatory System . .	48
V. AFFECTIONS OF THE RESPIRATORY SYSTEM.	5,059	97. Diseases of the Nasal Passages -	
		Adenoids . . .	8
		Polypus . . .	11
		Rhinitis . . .	234
		Coryza. . . .	988
		98. Affections of the Larynx -	
		Laryngitis . . .	114
		99. Bronchitis -	
		(a) Acute	1857
		(b) Chronic . . .	1244
		100. Broncho-Pneumonia . .	65
		101. Pneumonia	
		(a) Lobar	139
		(b) Unclassified. . .	48
		102. Pleurisy, Empyema . .	198
		105. Asthma	118
		106. Pulmonary Emphysema . .	33
		107. Other affections of the Lungs -	
		Pulmonary Spirochaetosis.	2
VI. DISEASES OF THE DIGESTIVE SYSTEM	13,028	108. A - Diseases of Teeth or Gums	
		Caries, Pyorrhoea, &c. .	1713
		B - Other affections of the Mouth -	
		Stomatitis . . .	191
		Glossitis, &c. . .	36
Carried forward			23,578

Diseases by Systems or Groups	Nos.	Principal Diseases.	Nos.
Brought forward			23,578
VI. DISEASES OF THE DIGESTIVE SYSTEM (Contd.)		109. Affections of the Pharynx or Tonsils -	
		Tonsillitis. . .	1,112
		Pharyngitis. . .	213
		111. A - Ulcer of the Stomach .	9
		112. Other affections of the Stomach -	
		Gastritis . . .	191
		Dyspepsia, &c. . .	3,441
		113. Diarrhoea and Enteritis -	
		Under two years . .	1,028
		114. Diarrhoea and Enteritis -	
		Two years and over .	873
		Colitis . . .	74
		116. Diseases due to Intestinal Parasites -	
		(a) Cestoda (Taenia) . .	74
		(c) Nematoda (other than Ankylostoma) - . .	
		Ascaris . . .	6
		Oxyuris . . .	90
		(e) Other Parasites . .	6
		(f) Unclassified . .	5
		117. Appendicitis . . .	70
		118. Hernia	54
		119. A - Affections of the Anus, Fistula, &c. . .	59
		B - Other affections of the Intestines . . .	
		Constipations . .	3,554
		121. Hydatid of the Liver . .	2
		122. Cirrhosis of the Liver -	
		(a) Alcoholic . . .	2
		(b) Other forms. . .	3
		124. Other affections of the Liver -	
		Hepatitis . . .	21
		Cholecystitis . .	16
		Jaundice . .	15
Carried forward			34,496

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward			34,496
VI. DISEASES OF THE DIGESTIVE SYSTEM (Contd.)		126. Peritonitis (of unknown cause).	5
		127. Other affections of the Digestive System	165
VII. DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).	3,491	128. Acute Nephritis	22
		129. Chronic	30
		131. Other affections of the Kidneys- Pyelitis, &c.	53
		132. Urinary Calculus	1
		133. Diseases of the Bladder -	
		Cystitis	238
		134. Diseases of the Urethra -	
		(a) Stricture	113
		(b) Other	12
		135. Diseases of the Prostrate -	
		Hypertrophy	3
		Prostatitis	3
		136. Diseases (non-Venereal) of the Genital Organs of Man -	
		Epididymitis	19
		Orchitis	35
		Hydrocele	63
		Rhimosis	53
		137. Cysts or other non-malignant Tumours of the Ovaries	9
		138. Salpingitis -	
		Abscess of the Pelvis	697
		139. Uterine Tumours (non-malignant)	88
		140. Uterine Haemorrhage (non-puerperal)	208
		141. A - Metritis	421
		B - Other affections of the Female Genital Organs	11
		Displacements of Uterus	79
		Amenorrhoea	817
		Dysmenorrhoea	359
		Leucorrhoea	70
Carried forward			38,070

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward			38,070
VII. DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL) (Contd.)		142. Diseases of the Breast (non-puerperal) -	
		Mastitis. . . .	66
		Abscess of Breast . .	21
VIII. PUERPERAL STATE.	829	143. A - Normal Labour . . .	4
		B - Accidents of Pregnancy -	
		(a) Abortion . . .	182
		(b) Ectopic Gestation . .	9
		(c) Other accidents of Pregnancy . . .	434
		145. Other accidents of Parturitions.	31
		146. Puerperal Septicaemia . .	25
		147. Phlegmasia Dolens . . .	1
		149. Sequelae of Labour. . .	134
		150. Puerperal affections of the Breast	9
IX. AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.	2,938	151. Gangrene	20
		152. Boil -	11
		Carbuncle . . .	100
		153. Abscess -	132
		Whitlow	194
		Cellulitis . . .	244
		154. A - Tinea	54
		B - Scabies	399
		155. Other Diseases of the Skin -	
		Erythema. . . .	185
		Urticaria . . .	78
		Eczema	1,047
		Herpes	91
		Psoriasis . . .	52
		Elephantiasis . . .	2
		Myiasis	20
		Ulcer	295
		Ainhum	14
X. DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS)	756	156. Diseases of Bones -	
		Osteitis. . . .	84
		157. Diseases of Joints -	
		Arthritis . . .	398
		Synovitis . . .	130
Carried forward			42,536

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward			42,536
X. DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS) (Contd.)		158. Other Diseases of Bones or Organs of Locomotion.	144
XI. MALFORMATIONS.	39	159. Malformations -	
		Hydrocephalus	7
		Spina Bifida, &c.	32
XII. DISEASES OF INFANCY.	101	160. Congenital Debility	25
		161. Premature Birth	9
		162. Other affections of Infancy	49
		163. Infant neglect (infants of three months or over	18
XIII. AFFECTIONS OF OLD AGE.	128	164. Senility -	
		Senile Dementia	128
XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES.	1,980	176. Attacks of poisonous animals -	
		Human Bite	13
		Insect Bite	22
		177. Other accidental Poisonings	7
		178. Burns (by Fire)	132
		179. Burns (other than by Fire)	24
		183. Wounds (by Firearms, war excepted)	2
		184. Wounds (by cutting or stabbing Instruments)	389
		185. Wounds (by Fall).	166
		187. Wounds (by Machinery)	1
		188. Wounds (crushing, e.g. railway accidents, &c.)	67
		189. Injuries inflicted by Animals, Bites, Kicks, &c.	270
		193, Exposure to Cold, Frost bite, &c.	10
		195. Lightning Stroke.	16
Carried forward			44,067

Diseases by Systems or Groups.	Nos.	Principal Diseases.	Nos.
Brought forward			44,067
XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES (Contd.)		201. A - Dislocation. . . .	53
		B - Sprain	109
		C - Fracture	276
		202. Other external Injuries . .	423
XV. ILL-DEFINED DISEASES.	499	205. A - Diseases not already specified or ill-defined -	
		Ascites	18
		Oedema	62
		Asthenia	205
		Shock.	3
		B - Malingering. . . .	211
XVI. DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED 10 DEATHS.	161		161
TOTAL			45,588

APPENDIX IV.

No. 5/67

Botsabelo Leper Asylum,

Maseru, Basutoland.

13th March, 1936.

ANNUAL REPORT ON BOTSABELO LEPER ASYLUM, BASUTOLAND, FOR THE YEAR ENDED 31st DECEMBER, 1935.

Population. I began my report for the year 1934 with the statement "In November, 1933, the population passed through a maximum of 756, which, it is hoped, will never be exceeded". The population is still slowly decreasing, and the indications are that the decrease will continue at an accelerated rate in the future.

The following table indicates the movements of the population during the year.

	ADMITTED	RE-ADMITTED	DIED	DESERTED	DISCHARGED
Men	59	10	52	9	24
Women	69	8	39	9	34
	128	18	91	18	58

Of these 12 were discharged patients sent back to the Asylum on account of either recurrence of active leprosy or troublesome trophic ulcers.

From the above it appears that

Additions to the population amounted to	146
Diminutions " " "	167
Total diminutions	21

During the year 1934, the population underwent a diminution of 7. The actual population on 31st December, 1935 was 707, consisting of 330 males and 377 females. In the above table "readmitted" patients, as in previous years, means "returned deserters".

It is disappointing that the number of admissions in 1935 exceeds that in 1934, viz 115, by 13. An encouraging feature, however, shown in the Medical Officer's report, is the large proportion of newly admitted patients in a very early stage of the disease. There seems to be no doubt that nearly all of the grossly infective cutaneous cases have already been sent to the Asylum. The period of incubation of leprosy has always been uncertain. In recent years the leading leprologists seem to have come to the conclusion that it depends upon the resistance of the individual infected, and may vary from as short a period as under two years to as much as twenty or thirty years. If that is

the case there is no wonder that patients in an early stage, for the most part adults, still continue to be found in considerable numbers. Other factors which may tend to keep up the number of admissions are increasing willingness on the part of the patients to declare themselves and come to the Asylum, and increasing efficiency of the Inspectors. The patients in most cases present such slight evidences of the disease that chiefs and headmen would be unable to diagnose it. During the year several patients presenting slight signs presented themselves at the Asylum for detention and treatment, and discharged patients in whom recurrence takes place are generally quite willing to return for further treatment. It is satisfactory that the number of desertions is not high, and that the number of readmitted deserters is the same as the number of deserters. Indeed, it is very rarely that a deserter goes into hiding and cannot be traced. As I have stated in former reports, patients invariably desert only on account of serious trouble at their homes requiring their personal presence, such as illness in the family or litigations in which the chiefs delay either to effect a settlement or to enforce their own judgments.

The death rate is very high and still continues to rise. I can attribute the high death rate only to the fact that the discharge rate approaches half the admission rate and a large part of the population which remains in the Asylum is an ageing and incurable one. About a hundred of the permanent inhabitants are so-called burnt out non-infective cripples, who would not be adequately supported at their homes, and have no desire to return home. Another section of the population which makes a large contribution to the death rate consists of advanced cutaneous cases admitted before the clearing out of such cases by the Inspectors became completed. These are not cripples, but it is well known that they are more subject to degenerative changes in their vital organs, and fall victims to intercurrent affections more readily than the nerve cases. The average age at death of patients who died in 1935 was 47 years.

The following table gives the distribution of the population, at the end of 1935, according to the periods of residence of the patients.

ADMITTED IN	PATIENTS	PER CENT	
1914	22	3.112	
1915	3	0.424	
1916	2	0.283	
1917	-	-	
1918	5	0.707	
1919	3	0.424	9.476
1920	6	0.848	
1921	4	0.566	
1922	14	1.98	
1923	8	1.132	
1924	13	1.839	
1925	15	2.123	
1926	16	2.264	14.716
1927	21	2.97	
1928	39	5.52	
1929	55	7.77	24.192
1930	59	8.34	26.16
1931	71	10.05	50.352
1932	62	8.77	
1933	67	9.47	
1934	98	13.87	
1935	124	17.55	49.66
	707	100.0	approx.

The figures to the right of the third column indicate that about 50% of the present population have been in the Asylum for only four years. 75% for seven years; and 90% for twelve years. The remaining 10% were admitted in 1914-1923 inclusive. Thus, it appears that so far as period of residence is concerned the population is a surprisingly recent one. Nevertheless, the high average age at death shown above indicates that many elderly patients admitted before 1929 are still here. The average age of the patients admitted in 1935 was 36.2 years, while the percentage of children under 16 was 16.5. These facts indicate that quite a large percentage of elderly patients in an early stage of the disease are still being found; for the majority of the patients now being admitted are in an early stage of the disease.

Dr.Germond has made an analysis which shows that from 1924 to 1935 the percentage of patients admitted less than one year after the first appearance of signs underwent a continuous increase from 31% to 59.8%, while the percentage of those presenting signs for more than two years diminished from 32% to 17.8%. He states, "A more continuous record of progress it would be difficult to find"

Dr.A.Spindler of Reval, Estonia, (International Journal of Leprosy Vo.3.No.3, p.265) has, from his own observations, brought forward cogent arguments tending to prove that children are no more susceptible to leprosy than adults. If one is susceptible at all one remains susceptible throughout life; and it depends upon the highness or lowness of the endemicity of leprosy in a Country whether susceptible persons contract the disease at an early or at a late age. In Basutoland the endemicity of leprosy is low, and we may, therefore, expect to find elderly patients predominating. The Medical Officer's report shows that the average age of the patients on admission is increasing slightly, while the percentage of children admitted under the age of sixteen has diminished from 25% in 1925 to 16.5% in 1935. A fact which, according to Spindler's theory, indicates that the incidence of leprosy in Basutoland is diminishing.

On the other hand the actual number of children in the Asylum has increased from 66 in 1929 to 92 in 1935. This increase in the juvenile population is due to three causes, viz, "A lower mortality among the children than among the adults, an almost complete absence of discharge of arrested cases among children, and an increase in the whole population."

The number of illegitimate children born at the Asylum, 15-20 per annum; has always been a serious problem. Both parents being leprous, the chances that the child is susceptible are very high, and if the child is left with its month for 15 months, which is the rule, its chance of becoming infected ought to be still higher, unless, indeed, infants are comparatively immune.

A further evil is that pregnancy has a disastrous effect on the health of the mother So few children born at the Asylum have returned suffering from leprosy, that one must conclude that the majority of those discharged have either died or remained well or, if suffering from leprosy, escaped detection. This year I intend to send the Assistant Commissioners lists of children born at the Asylum for some years back, so that the inspectors may pay special attention to them, and report on their condition. The practice is for the inspectors to visit all relatives of patients who are or have been in the Asylum, but hitherto they have not been asked to pay special attention to the children born in the Asylum, and sent home in a healthy condition. Health and Welfare inspector Eliel in his last report mentioned two girls born at the Asylum, discharged at age 15 months, and now 15 years old, who have not yet shown any signs of leprosy. He says that when visiting the relatives of

patients he is shown the children that were born at the Asylum, and only one has been found to be a leper since 1929.

The following table shows the total movements of the population during the twenty-one year period 1915-1935 inclusive. 1914 has been omitted on account of the disorganisation of registration caused by the wholesale desertions which occurred in that year.

In Asylum at 1st January 1915	437 patients
Admitted since "	2160
Excess of returned deserters over deserters	7
Total dealt with	2604

Deserters and returned deserters numbered 715 and 722 respectively. The apparently paradoxical excess of returned deserters is due to the fact that some of the returned deserters had deserted in 1914.

Died	1285
Discharged	602
In Asylum at 31st December 1935	707
Total	2594

The difference of ten between this total and the above is due to errors of omission in the registers, probably unrecorded desertions. The error is so small as to be of no statistical importance,

thus, 49.3% of the total died
23.1% of the total were discharged

Owing to the more favourable character of the cases now coming to the Asylum it is expected that the discharge rate will become greatly increased. For three years it has averaged 38.7% of the admission rate.

Dr.Germond's policy in putting up for discharge early neural cases in which all macules have disappeared for some months is a commendable one, although it leads to a larger number of patients being returned to the Asylum for further treatment on account of recurrence of signs. The discharged patients are a good object lesson to the people outside, they are not a danger to the public health, and when signs recur they are not only willing but anxious to return for more treatment.

The annual number discharged, which was 55 as early as 1928, has undergone very little increase since that date. This may seem paradoxical in view of the facts that since 1931 the proportion of early stage patients admitted has undergone a great increase up to the end of 1932 the acceptance of injection treatment was approaching vanishing point, and since that date the intradermal injections have become increasingly popular.

With regard to the undoubted efficacy of iodised ester intradermal treatment in obliterating external signs of active disease, at least in neural cases, Dr.Germond and I are in substantial agreement. Whether the systemic infection is brought to an end time along will tell. After all it is only during the past eighteen months that the treatment has been accepted on a large scale. Dr.Germond's achievement in inducing so many to accept the treatment with regularity is a remarkable one, for which he deserves great credit, as the following figures show.

Number of patients now accepting injection treatment	409 or 58.2% of the population at time of writing this report
Number of attendances for injections last week	281 or 68.7% of those accepting the treatment

The chief reason why all the patients do not attend every week is that those in whom the local reaction has been severe often await its subsidence before returning for more injection. The multiple injections are tedious and painful and entail an enormous amount of patient work. The total number of injection days for 1935 was 104 (in 1934-84). Total attendances 6949 (in 1934-3357). In other words the number of attendances was more than doubled in 1935.

Dr.Germond states that intravenous injections of various aniline dyes were tried with discouraging results.

Of the patients admitted to the Asylum during 1935, fifty nine i.e. more than half the total, came from the districts of Qachas Nek (37 and Leribe (22). The lowland strip along the West and South of the Territory, although the most populous part, is now the freest from leprosy. Qacha's Nek district, which sent us 37 patients during 1935, shows an improvement in one respect: the number of patients discovered there who have not yet come to the Asylum is less than it has been since the institution of the inspectorate system.

No new building constructions were undertaken during the year.

Changes in Personel of the Staff.

The office of resident Chaplain was abolished at the end of November, 1935, and the Anglican ministrations are now supplied by the rector of Maseru and his native Catechist. The Rev.Father Bradbrook, after many years of excellent religous and social work here, was removed by his Church to another sphere, and, on grounds of economy, the grant to the Anglican Church was reduced to the same level as that bestowed on other denominations.

The patients remained peaceful and contented, and no friction of any kind occurred between them and the Staff. For the preservation of peace and contentment the influences of the Compound Manager and the Matron are the most important. For their firmness and tact I have to thank these Officers as well as Mr. Spalding, who acted as Compound Manager for seven months during the absence of Mr.Squire on leave.

P. D. STRACHAN,

Superintendent.

APPENDIX V.

BASUTOLAND METEOROLOGICAL REPORT, 1935.

Temperature. The mean temperature of the air over the surface of the territory during the year 1935 was 55.3 degrees. The warmest month was January with a mean of 66.3 degrees and the coldest in June with 42.8 degrees, thus giving a range in mean temperature for the year of 23.5 degrees. The highest screen temperature - 96 degrees - was recorded at Butha Buthe in January and the lowest - 8 degrees - at Sehlabathele, Qachas Nek District in August. The month with the greatest variation of temperature was August with 63 degrees and the month with least range was June with 34 degrees. The greatest difference in the daily range of temperature was noticed in January with a mean of 36.1 degrees. The month with the smallest mean diurnal range was March with 11.1 degrees Frost was recorded for the first time in the year at Sehlabathele in May. The last date of observation was in August.

The Sun Recorder has been out of order during the year but has since been rectified.

Precipitation. The total rainfall for the year for all recording stations was 314.07 inches, the mean average throughout the territory being 27.48 inches. The highest monthly average was in March - 4.66 inches - and the lowest in July - .15 inches. In attached 'Table A' will be seen the monthly distribution of rainfall in each district and the following table shows the stations at which the highest and lowest rainfall occurred for each month of the year.

MONTH	STATION	GREATEST AMOUNT	STATION	LEAST AMOUNT
December	Botsabelo	9.31	Sehlabathele	2.33
March	Maseru	6.17	Mokhotlong	2.74
January	Leribe	6.10	Mohales Hoek	2.04
November	Teyateyaneng	3.68	Quthing	1.90
February	Qachas Nek	5.01	Butha Buthe	1.46
April	Botsabelo	4.04	Mokhotlong	0.98
October	Sehlabathele	3.66	Leribe	1.20
May	Quthing	3.81	Sehlabathele	0.96
August	Quthing	2.77	Teyateyaneng	0.34
June	Sehlabathele	2.18	Leribe	0.01
September	Qachas Nek	0.81	Mohales Hoek	0.11
July	Quthing	0.35	Mokhotlong	0.01

The average number of days for all stations in the territory on which rain fell during the year was 73.9.

Tables are attached showing :-

Distribution of Rainfall throughout the Territory in 1935

Yearly summary of Meteorological Observations for 1935.

(Sgd) R. HEERING

Meteorological Officer.

TABLE - A. DISTRIBUTION OF RAINFALL IN BASUTOLAND FOR YEAR 1935.

MONTH	BUTHA BUTHE	LERIBE	TEYATEYANENG	MASERU	BOTSABELO	MOKHALINYANE	MAFETENG	MOHALESHOEK	QUTHING	MOKHOTLONG	QACHAS NEK	SEHLABATHELE	ROMA	TOTAL RAINFALL IN EACH DISTRICT PER MONTH	MEANS
January	3.84	6.10	2.53	2.46	2.96		3.27	2.04	2.42	2.15	4.72	3.90	3.14	39.53	3.29
February	1.46	2.11	3.91	3.72	-	-	3.34	3.02	4.45	3.88	5.01	3.57	-	34.47	3.44
March	3.70	4.78	6.02	6.17	-	-	-	4.74	4.84	2.74	5.03	3.99	-	42.01	4.66
April	1.28	1.51	2.36	3.15	4.04	2.19	-	3.30	2.40	0.98	3.14	2.38	3.85	30.58	2.54
May	1.41	1.91	1.27	1.23	-	-	-	3.25	3.81	1.38	1.46	0.96	-	16.68	1.85
June	0.11	0.00	0.40	0.64	0.68	0.55	0.63	0.16	0.08	0.15	0.84	2.18	0.24	6.66	0.55
July	0.00	0.00	0.04	0.01	-	0.08	0.23	0.23	0.35	0.00	0.00	0.00	0.00	0.94	0.15
August	0.55	0.70	0.34	0.93	1.17	1.78	2.22	2.21	2.77	0.75	1.32	0.59	0.94	16.27	1.25
September	0.46	0.48	0.43	0.34	0.43	0.37	0.25	0.11	0.33	0.61	0.81	0.72	0.42	5.76	0.44
October	2.21	1.20	2.37	1.75	2.31	1.99	2.36	2.08	1.76	2.46	1.55	3.66	2.54	28.24	2.17
November	2.16	2.38	3.68	3.56	3.79	2.79	2.90	2.53	1.90	1.94	2.82	2.53	3.55	36.53	2.81
December	4.28	4.24	4.88	6.02	9.31	5.52	2.39	3.33	2.95	2.39	2.83	2.33	5.93	56.40	4.33
TOTAL RAINFALL IN EACH DISTRICT FOR YEAR 1935	21.46	25.41	28.23	29.98	24.69	15.57	17.59	27.00	28.06	29.53	19.43	26.81	20.61	314.07	27.48

TABLE - B.

B A S U T O L A N D.

YEARLY SUMMARY OF METEOROLOGICAL OBSERVATIONS

YEAR 1935.

Month.	Pressure Corrected Barometric Means	Dry Bulb	Wet Bulb	Self Registering Thermometers.							Cloud Amount (0-10)	Dew Point	Relative Humidity Sat.100	Rain Fall.	
				Maximum	Minimum	Monthly Temperature	Daily Range	Absolute Maximum	Absolute Minimum	Monthly Range				Amount Inches.	Days.
	Inches	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.		°F.	%		
January		66.4	58.4	80.8	51.7	66.3	29.1	89.1	42.3	46.7	-	51.3	60.2	3.29	9.5
February		63.2	57.2	77.2	50.7	64.0	26.5	85.5	40.9	44.6	-	53.7	71.0	3.44	11.3
March		55.7	52.8	71.0	46.6	58.8	23.2	82.1	34.3	47.7	-	50.0	77.7	4.66	13.6
April		52.7	48.0	66.3	41.5	54.5	23.5	77.5	31.5	46.0	-	42.2	67.7	2.54	7.7
May		45.7	41.5	59.0	35.4	47.2	23.6	70.8	21.2	49.5	-	37.5	73.1	1.85	6.6
June		39.3	31.9	57.4	28.2	42.8	29.1	63.5	22.3	41.2	-	27.6	63.4	0.55	1.6
July		42.4	33.5	59.2	30.7	44.9	28.5	66.3	22.7	43.6	-	28.4	59.9	0.15	0.6
August		41.8	32.3	55.3	29.0	43.9	29.3	72.0	15.9	55.5	-	26.9	55.6	1.25	3.3
September		52.4	40.3	66.9	38.3	52.9	28.1	79.6	29.3	50.3	-	37.7	58.0	0.44	2.5
October		63.6	53.8	78.0	49.0	63.5	28.9	85.9	37.6	48.3	-	47.0	55.7	2.17	5.5
November		61.8	52.5	74.4	45.9	60.2	28.5	84.6	30.5	54.1	-	46.0	56.9	2.81	6.1
December		65.9	56.6	79.6	49.8	64.8	29.8	87.3	41.6	45.7	-	51.0	58.9	4.33	9.2
Year		650.9	558.8	825.1	497.3	663.8	328.1	944.2	370.1	573.2	-	499.3	758.1	27.48	77.5

APPENDIX VI.

PELLAGRA IN THE MAFETENG DISTRICT.

In 1907 Dr. N.M. Macfarlane C.B.E. the late Principal Medical Officer of Basutoland when stationed at Leribe, first reported the occurrence of Pellagra among the Basutos of this territory. Sporadic cases have since then been reported from time to time in the North of Basutoland but till 1934 no cases had been seen in the South though a careful watch had been kept.

In 1933 there was a severe drought accompanied by failure of crops throughout the territory. In the greater part of the Mafeteng district the sole diet of the larger proportion of the population was bought maize. A great deal of this was of a very inferior quality. Careful vigilance was therefore maintained for the occurrence of the disease but nothing resembling it was seen.

It was in the middle of December 1934 that the first case of Pellagra was diagnosed at the Mafeteng dispensary. Since then Sporadic cases have presented themselves, mostly in the summer months. In the year 1935 a total of 45 cases were seen distributed thus:-

January 15, February 9, March 4. September 1, October 4, November 4, December 8, no cases were observed during the winter months April to August. Professor Stockman of Glasgow states:- "Usually in about a generation after the introduction of maize into a district and after it has become largely grown and consumed, sporadic cases of Pellagra begin to appear and in a few years more the disease has assumed much larger proportions, especially among the poor agricultural and labouring classes". This does not agree however with experience among South African natives where 90% of them belong to the "poorer agricultural and labouring classes" who have lived on maize as their staple diet for several generations. It is most improbable that the disease has existed for long without being recognised, as the characteristics of a well-developed case of Pellagra are too well marked to be repeatedly missed.

The symptons noted in all cases I have seen present very much the same picture (a) Dryness and thickening of the lower lip (always the first sign) (b) Stomatitis varying from dryness of the mouth and pharynx to ulceration with dysphagia (often a salty taste is complained of) (c) Diarrhoea in the majority of cases, often of the dysenteric type, though constipation may occur in some. (d) Cutaneous manifestions are the classical hyperpigmentation, always very black, often as black as soot (resembling the skin of native herd boys whose bodies have not been washed from the beginning to the end of winter). The hyperpigmentation usually occurs on the extensor aspects of the arms, varying from a patch on the dorsum of the hands to a triangular patch with the apex below the elbow and the base over the dorsum of the hand. Patches may be seen on one or both sides of the neck not much larger than a five shilling piece. On the face the pigmentation is seen along the forehead, just above the eyebrows, usually $\frac{3}{4}$ of an inch broad, at times it occurs over the malar region and across the nose. In a few cases the pigmented area is in the form of a horse-shoe extending from one cheek to the other across the forehead. In one case (a child of eight years old) all the above described pigmented areas were present and in addition the legs were affected, the pigmentation passing from the extensor to the flexor aspects of both arms and legs, almost encircling the limps. Erythema with a burning

sensation, which is said to be present in European pellagrins before pigmentation, does not appear to occur in natives.

The sequence in which the symptons occurred varied; in most cases dryness and thickening of the lip with diarrhoea were the first symptons to show themselves followed by the cutaneous lesions. In a few cases the diarrhoea followed the skin manifestations.

Dryness and thickening of the lower lip with Stomatitis and diarrhoea is so characteristic that I make a diagnosis of pellagra from these symptoms alone and treat the case as such. Nervous symptoms and depression have been absent among my cases except in the case of one man who had been attending dispensary for pellagra and was found, in his village, to have committed suicide by hanging (a very rare occurrence among Basutos)

I find the ideal treatment is to admit pellagra cases to hospital where they can be given a liberal and varied diet. This, however, is seldom possible owing to a shortage of beds. The larger majority I have treated "outdoor". They are told to substitute Kaffircorn meal for maize meal if possible and to eat Theepe - Cape Pig Weed (Amarantus parriculatus) (Mabille and Dieterlen Dictionary) - a form of wild spinach which grows everywhere in Basutoland during the summer months, of which they should eat a large tea-cup full three times a day mixed with other food. When there is no "theepe" they are told to take daily a pint of "leting" (beer made from coarsely ground sprouted Kaffircorn and not boiled after fermentation). Yeast tablets were prescribed, 15 grains three times a day, but the supply of these gave out and a tonic of epsom salts, Tincture of Iron and Infusion of Quassia was given instead. It was found that the cases treated with tonic improved more rapidly than those taking yeast. The tonic has now become the routine medicinal treatment instead of yeast for the outdoor cases.

At the hospital, where a few of the severer cases have been admitted, the routine treatment is the iron tonic, half a tablet of bakers yeast with a liberal and varied diet of coarse wheat bread, vegetables, and meat.

All my cases so far have made good recoveries without any mortality (excepting the suicide) and no relapses have been seen up till now. It will be interesting to note if these reappear in the future.

As regards the etiology of Pellagra among the Basuto there is a diversity of opinion. Some ascribe it to an inferior quality of maize which at times has to be imported into the territory from overseas to augment the indigenous supplies - some of this imported maize appears to be kiln dried. Others are of the opinion that many Basutos no longer grind or pound the maize as they all were in the habit of doing but in recent years many of them either have it ground in some up to date European mill or buy maize meal from local stores. In both cases most of the husk has been removed by sifting, whereas when they grind or pound it themselves the husk is retained.

Experiments have proved that, if animals are fed for a prolonged period on maize meal from which the husk has been removed, they develop a condition resembling human pellagra.

May the explanation of this recent occurrence of pellagra among Basuto be found in their acquiring the habit of using "milled" maize meal to save themselves the trouble of grinding in

their native fashion or because they cannot grow enough maize for their requirements and so have to supplement it by milled meal from the stores?

In connection with the occurrence of pellagra in Basutoland, I regard the incidence of the disease during the months September to March with the peak in January as significant. The maize on the cobs in normal years is ready to be eaten in its green stage from January - till May and the whole grains thus used have their husks. The early frosts which occur in May harden the maize grains, harvesting is done in June and July and the maize is ready for grinding. It is therefore from June till January that ground maize is mostly used, so if the theory is correct that the Anti-pellagra substance is contained in the husk, pellagra will occur progressively during the months July to January when the body increasingly loses the protection substance if milled and sifted maize is used.

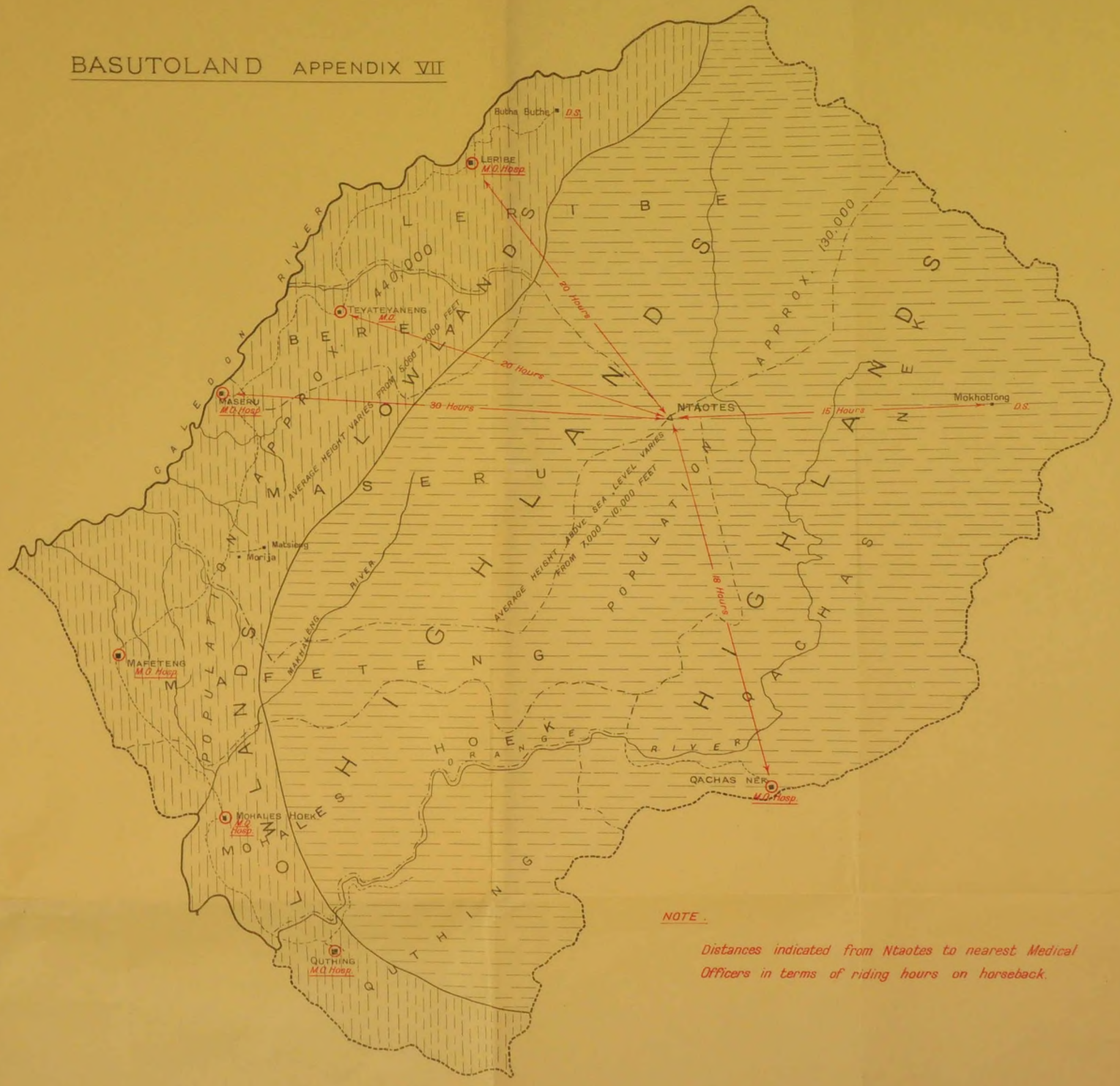
The above observations on Pellagra are based on my experience of less than two years and therefore cannot be considered as exhaustive but they are submitted because of the marked increase in the incidence of the disease, which until recently does not appear to have been prevalent in Basutoland and possibly it may in time have a deleterious effect on the native population of the territory.

(Sgd) K. H. DYKE,

Medical Officer

Mafeteng.

BASUTOLAND APPENDIX VII



NOTE.

Distances indicated from Ntaotes to nearest Medical Officers in terms of riding hours on horseback.