

# ANNUAL STATISTICAL REPORT

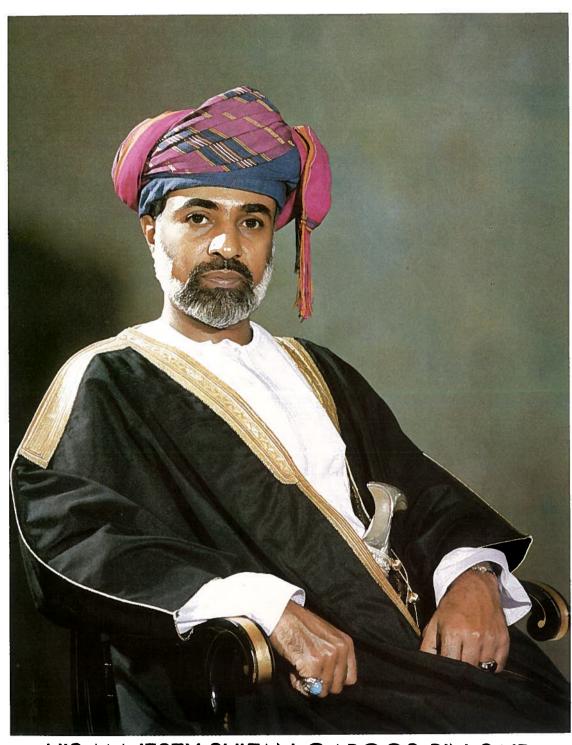
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Muscat - Oman



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## **INDEX**

Sul	bject		Page
For	reward		1
1.	Health Care Deliver	y Systems in Oman	2
2.	Curative Services		8
	2.1 Treatment Abr	oad	48
3.	Preventive Services		52
	3.1 Expanded Prog	gramme of Immunization (EPI)	59
	3.2 National Tuber	culosis Control Programme	62
	3.3 Programme for	Prevention of Blindness	63
	3.4 Malaria Contro	ol Programme	64
	3.5 The National C Diseases Project	Control of Diarrhoeal et (NCDD)	69
4.	Medical Education a	and Training	70
5.	Medical and Health	Personnel	74
6.	Health Care provide	84	
7.	Finances		91

## **ANNEXURES, TABLES AND GRAPHS**

Annexures		Page
A.	Organisation chart of the Ministry of Health	5
B.	Location of curative and preventive units by regions — 1984	94-98
Tables		
1.1	Curative and preventive units by regions — 1984	6
1.2	Implementation of health projects under second five year plan, 1981-1985	7
2.1	Curative units 1970-1984	9
2.2	Regional distribution of curative units — 1984	11
2.3	Beds distribution by speciality in hospitals — 1984	13
2.4	Beds, admissions, discharges, OPD's attendance, deliveries and births 1980-1984	14
2.5	Admissions, discharges, bed occupancy etc. in hospitals and health centres — 1984	18-20
2.6	Mortality and morbidity by groups of diseases — 1984	21-22
2.7	Main causes for hospitalization — 1984	23
2.8	Deaths in hospitals and health centres by age groups and sex — 1984	24-26
2.9	Main causes of mortality in hospitalized population — 1984	27
2.10	Patients seen in out patient departments — 1984	28-30
2.11	Main causes for contact with health facilities — 1984	31
2.12	Number of reported cases of infectious diseases — 1984	32
2.13	Number of deliveries and births — 1984	34-36
2.14	Activities of gynaecology departments in hospitals and health centres—1984	38-39

2.15	Operations performed in curative units — 1984	40-41
2.16	X-rays carried out in curative units — 1984	42-43
2.17	Type of laboratory investigations by curative units — 1984	44-46
2.18	Dental activities by health units — 1984	47
2.1.1	Patient treated abroad by countries 1980-1984	49
2.1.2	Number of patient treated abroad by diseases — 1984	50
2.1.3	Number of patient treated abroad by countries — 1984	51
3.1	Expansion of public health services 1975-1984	53
3.2	Regional distribution of public health facilities — 1984	55
3.3	MCH activities — 1984	56
3.4	Number of births, deaths & health certificates issued (Preventive medicine units) — 1984	57
3.4.1	Malaria control activities — 1982-1984	65
3.4.2	Blood slides examined for malaria in hospitals and health centres — 1984	66-67
3.4.3	Blood slides examined and malaria parasite positivity rate in Central Laboratory, Malaria Eradication Department — 1984	68
4.1	Out-put of nurses from Ar-Rahma Nursing School/ Institute of Health Sciences	71
4.2	Enrollment at Institute of Health Sciences — 1984	72
4.3	Medical/paramedical and non-medical staff trained 1980-1984	73
5.1	Medical and health personnel employed under Ministry of Health — 1970-1984	75
5.2	Medical and non-medical staff employed under Ministry of Health 1984	77

5.3	Medical and paramedical staff employed under Ministry of Health — 1984	78-80
5.4	Consultants & specialists employed under Ministry of Health — 1984	81
5.5	Total medical/health personnel — 1984	82
5.6	Doctors and bed population ratios in certain countries	83
6.1	Health facilities under other departments/ organizations — 1984	85
6.2	Medical and paramedical personnel employed under other departments/organisations — 1984	86-87
6.3	Hospital statistics for other departments/ organizations — 1984	88
6.4	Number of clinics and medical personnel in private sector by regions — 1984	89
6.5	Health activities of private clinics — 1984	90
7.1	Budget — Ministry of Health 1970-1984	92
Graphs		
1.	Curative units under Ministry of Health 1970-84	10
2.	Hospital beds by regions — 1984	12
3.	Hospital beds 1975-1984	15
4.	Hospital admissions 1980-1984	16
5.	Patients treated in OPD 1980-1984	17
6.	Measles and whooping cough cases 1980-1984	33
7.	Deliveries in curative and preventive units — 1984	37
8.	Preventive medicine units 1975-1984	54
9.	Vaccination and immunization — 1984	61
10.	Physicians and nursing personnel 1980-1984	76
11.	Budget — Ministry of Health 1971-1984	93

### PREFACE

The facts as explained in this Statistical Report are the best proof of the great achievements made in providing comprehensive health services which include Curative, Preventive & Promotive services, in this short period of the Blessed Omani Renaissance.

Fourteen years in the life of a nation is an extremely short period of time required for development and progress. However, under the guidance of His Majesty the Sultan in developing the Omani nation and His nationals in the shortest possible time, to reach the level of civilization and development of the advanced countries has conquered all the difficulties in attaining this high standard of Health Services.

We feel honoured to present this illuminating report and statistical records of the achievements of the Ministry of Health at the celebrations of the Glorious Fifteenth Anniversary.

Proper planning of Health Services depends in principal on availability of detailed statistics, their study and analysis, so we are certain that the facts as explained in these statistics will take a very active part in reaching the goals of providing Health Services to all nationals in the quickest way and with the most advanced health technology. This will also ensure for our nation and nationals a high position amongst other nations and peoples of the civilized world.

May God help us to achieve our goals.

DR. MUBARAK BIN SALEH AL-KHADURI

Minister of Health

## **FOREWORD**

This Annual Statistical Report for the year 1984, contains information on health care delivery system, physical facilities, health manpower and finances under Ministry of Health. Health facilities available under Ministry of Defence, Royal Oman Police, Petroleum Development Oman and private sector have also been added.

- 2. During the year 1984, there has been substantial increase in the number of physical facilities and improvement in health manpower and health budget. Buildings of new dispensaries at Mazara, Liwa, Wadi Shafan and Kumzar besides Malaria units at Ibra & Wadi Bani Ruwaha were completed. The number of medical and para-medical personnel which stood at 4,150 in 1983 increased to 4,856 in 1984. The health budget increased from R.O. 51.23 million in 1983 to R.O. 81.04 million in 1984 showing an increase of over 58%.
- 3. Reviewing the health situation during 1984, the Sultanate remained free from quarantinable diseases. Public Health measures were intensified to control & prevent other communicable diseases. Expanded Programme of Immunization was further expanded to cover remote areas. Other special programmes viz Tuberculosis Control, Trachoma Control, Malaria Control and Diarrhoeal Diseases Control Programme were accelerated to achieve the targets.
- 4. In the field of Primary Health Care, a reorientation process is in progress and adjustments are introduced. The role of basic health care as the core mechanism in the drive to achieve Health For All is increasingly recognised and this recognition is reflected in a number of actions viz:
  - (i) Promotion of the concept of Primary Health Care and
  - (ii) Expanding the functions of the curative units to provide more comprehensive care.
- 5. In the field of medical education and training, expansion of local training facilities for para-medicals has already been achieved with the establishment of Institute of Health Sciences in Capital Area. Medical College in Sultan Qaboos University is under construction & classes are expected to start in 1986. Education & training abroad of local people is continuing. Finally, it may be stressed that sources of data given in this Report are generally health units with staff having little orientation to importance of data. The data may, therefore lack quality and may not be taken at face value. These data, however, reflect the prevailing health conditions in the country. Any suggestions and comments for improvement of future reports are most welcome.

DR. MURTADHA JAFFAR AL-DAWOOD

Director,

Statistics, Planning & Followup

#### 1. HEALTH CARE DELIVERY SYSTEMS IN OMAN

The Sultanate of Oman occupies most of the south-eastern corner of the Arabian Peninsula and has a coast-line stretching about 1,700 kms from Straits of Hormuz in the north to the frontier with the People's Democratic Republic of Yemen in the south. The Musandam area which is the northern-most point of Oman is separated from the main country by a strip of UAE territory. The country has a total land area of 300,000 sq. kms, all of which are mountains, wadi & deserts except 9,000 sq. kms, coastal plains. The estimated population is 1.5 million with an annual population growth rate of 3.1%.

- 2. The national income is derived mainly from oil revenue. Recently some industries have also been established together with emphasis on agriculture to diversify the sources of national revenues.
- 3. The Government provides free health services to almost all residents of the Sultanate. The responsibility of providing such health care rests mainly with the Ministry of Health. The country is committed to the declaration of Alma-ata and to the concept of "Health for all by the year 2000". Increasing emphasis is placed on integration of the health services at various levels.
- 4. The Ministry of Health is headed by the Minister of Health assisted by the Under Secretary and 11 Directors (Annexure-A).

#### 5. Levels of Health Care

A The first level of the health care are:-

#### (1) Dispensaries:-

Offering a simple treatment in an out-patient clinic and headed by a physician. Staff of the dispensaries is also engaged in some preventive activities such as vaccination, school visiting and checking of water samples. The Ministry is in the process of upgrading the dispensary both structural and functional to deliver more comprehensive basic care.

#### (2) Mini-Health Centres:-

Each centre carry 9-12 beds divided equally between maternity and paediatrics and cater male and female out-patient care. The facilities are also shared with Public Health Unit to provide preventive services.

#### (3) Health Centres:-

Each Centre have 24-30 beds and offer out-patient and inpatient services. These centres provide basic health services, casualty and emergency and deliver preventive services including immunizations, MCH, environmental sanitation and school health services. In addition there is also at the periphery a system of rural health services located in Dhofar region.

#### B. District and Central Levels

These are served by a chain of hospitals, district hospitals (50-100 beds) and regional hospitals (300-400 beds). These hospitals offer extensive out-patient services, specialised services in general medicine, general surgery, paediatrics and orthopaedics. Al-Nahdha, Khoula and Qaboos hospitals also provide tertiary care.

- 6. Preventive services at central level are provided by the following units/sections:-
  - MCH centres providing pre-natal & post-natal services including immunization, health education, child growth etc.
  - (2) Expanded Programme of Immunization (EPI) Unit carrying out immunization against Measles, Polio, Diphtheria, Pertussis, Tetanus & Tuberculosis among children and Tetanus toxoid among women of child bearing age.
  - (3) National Tuberculosis Control Programme for treating active cases & BCG vaccination for prevention.
  - (4) <u>Programme for Prevention of Blindness</u> for treatment of trachoma & other eye diseases causing blindness.
  - (5) <u>Diarrhoeal Diseases Control Programme</u> for prevention & control of diarrhoeal diseases among children.
  - (6) Malaria Control Programme/Section for combating Malaria.
  - (7) <u>Bacteriological & Chemical Laboratories</u> which carry out bacteriological & chemical tests on water & food samples.
  - (8) Environmental Health Section supervising the environmental health.
  - (9) Quarantine Section examining vessels, planes, passengers & food stuffs.
  - (10) School Health Section conducting medical examination & treatment of school children.

- (11) Health Education Section carrying out health education through mass media.
- (12) Oral Hygiene Section providing preventive services in the field of oral hygiene & dental care.
- (13) <u>Vector Control Section</u> for controlling & eradication of insects, rodents etc. by using insecticides.
- (14) <u>Communicable Disease Section</u> dealing with the control of communicable diseases.
- 7. Besides Ministry of health, some other organisations also take care health needs of their employees e.g. Ministry of Defence, Royal Oman Police & Petroleum Development of Oman. Private clinics also exist in different parts of the country to augment the health services.
- 8 The major development programmes of the Ministry of Health put emphasis on primary and secondary health care. Establishment of new health units and expansion of existing ones are already underway in the current Five Years Plan (1981-85). A 565 bedded Royal Hospital, is under construction in Capital Area.

Annexure-A
ORGANISATION CHART OF THE MINISTRY OF HEALTH

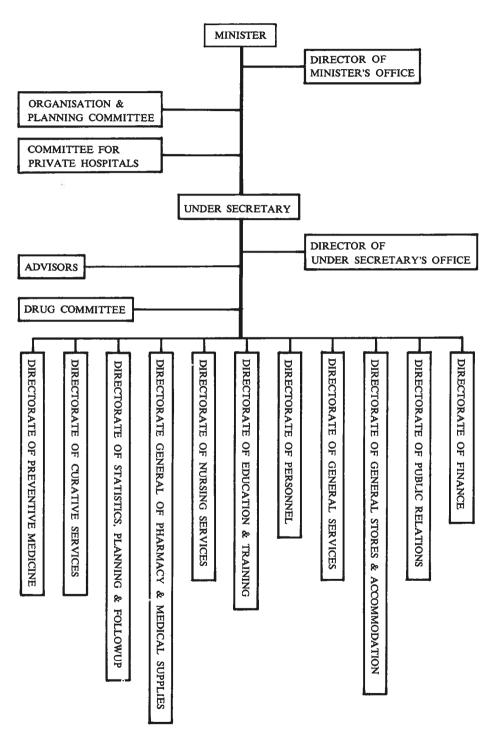


TABLE 1.1

Curative and preventive units by regions — 31.12.1984

Regions	Hospitals	Health Centres	Mini Health Centres	Mini Maternity Centres	Dispensaries	Public Health Compounds	Public Health Units	
Capital Area	6	_	_	_	3		2	
Al-Dhahira	2	_	1	2	5	1	2	
Al-Batinah	2	2	2	1	12	1	9	
Interior	2	1	2	_	10	2	4	
Eastern	2	6	3	_	19	_	16	
Southern	1		1	_	24	1	5	
Northern		3		1	1	_	2	
Total	15	12	9	4	74	5	40	

TABLE 1.2

Implementation of Health Projects under Second Five Years Plan 1981-1985

Projects included in Second Five Years Plan	Number of Units or Facilities	Present Projects Completed	Position — Projects Under Construction	Construction Delayed
Hospitals	5	1	3	1
Extension of Hospitals	6	5		1
Health Centres	5	3	1	1
Extension of Health Centres	5	_	4	1
Mini-Health Centres	25	6	14	5
Dispensaries	35	19	10	6
Renal Dialysis Unit	1	1		_
Primary Health Care Units	23		16	7
MCH Centres	8		6	2
Public Health Compounds	3	_	3	_
Central Public Health Compound (Capital Area)	1		1	_
Malaria Control Section	1	1		
Malaria Control Units	15	3	7	5
Medical Stores	2	_	2	
Extension of Medical Store	1	_	1	_
Extension of Pharmaceutical Laboratory	1		1	_
Health Institute	1	1	1—1	
Extension of Headquarter building	1	1	_	
Accommodation for Khoula Hospital	1	1	_	
Total	140	42	69	29

#### 2. CURATIVE SERVICES

The Directorate of Curative Services is responsible for administration of curative health units which include a chain of hospitals, health centres, mini-maternity centres, dispensaries, and mobile medical teams. At the end of 1984 there were 15 hospitals, 21 health and mini-health centres, 4 mini-materinity centres, 74 dispensaries and a number of mobile medical teams providing these services. Total number of beds in the Ministry of Health units at the end of 1984 were 2,587.

2. During 1984 the curative units treated 6,519,898 patients in OPD and reported 154,789 discharges including 2,135 deaths. OPD cases were distributed as under:-

	New cases		Re-atten	dance	Total	
Hospitals	1534206	(37.7%)	1570635	(64.2%)	3104841	(47.6%)
Health Centres	1070285	(26.3%)	504777	(20.6%)	1575062	(24.2%)
Dispensaries	1467120	(36.0%)	372875	(15.2%)	1839995	(28.2%)
TOTAL:	4071611 (	100.0%)	2448287	(100.0%)	6519898	(100.0%)

- 3. Out of 3,104,841 OPD cases reported from hospitals, the proportion for new cases was 49.4% where-as re-attendance cases accounted for 50.6%. Similar percentage for health centres and dispensaries was 68.0% and 79.7% respectively for new cases and 32.0% and 20.3% for re-attendance cases.
- 4. Out of 154,789 discharges reported during 1984, hospitals accounted for 117,497 (75.9%) and the remaining 37,292 (24.1%) were reported from health centres and minihealth centres. 2,135 deaths included 1,971 (92.3%) from hospitals and 164 (7.7%) from health centres and minihealth centres. Further details are available in the tables.
  - 5. During 1984, following workshops, seminars and symposiums were organised:-

Workshops/Seminars/Symposiums	Held on
2 Workshops on urology	12th Jan & 19th April
2 Orthopaedic workshops	16th Feb & 12th April
2 Workshops on general surgery	3rd and 5th May
Paediatric workshop	27th Sept.
Workshop on plastic & reconstructive surgery	1st Nov.
Workshop on resuscitation	6th Dec.
Seminar on wound care management	10th April
Symposium on emergency medicine	8th and 9th March
Gastroenterology symposium/college symposium	14th to 20th Oct.

TABLE 2.1

Curative Units 1970-1984

		Ņu	mber in	<u> </u>		
Types of Units	1970	1980	1981	1982	1983	1984
Dispensaries	10	50	56	59	68	74
Mini-Maternity Centres	_	5	4	4	4	4
Mini-Health Centres		3	5	7	8	9
Health Centres	9	11	12	12	12	12
District Hospitals	2	11	11	11	11	11
Regional Hospitals	_	3	3	3	3	3
Specialized Hospital	_	_	_		1	1
Total Beds	12	1784	1866	2041	2133	2587

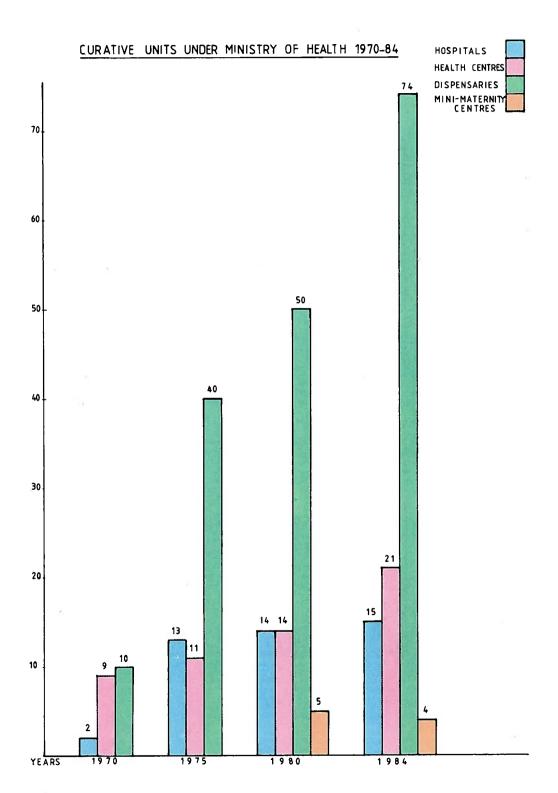
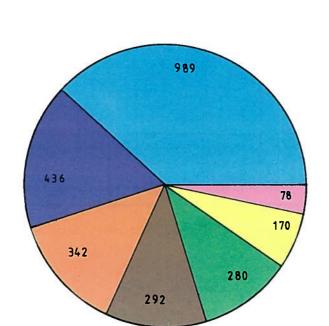


TABLE 2.2

Regoional Distribution of Curative Units — 31-12-84

Regions	Hospi	Health Centres		Mini-Health Centres		Mini-Ma Centre		Dispensaries	Total		
Ū	Number	Beds	Number	Beds	Number	Beds	Number	Beds	Number	Number	Beds
Capital Area	6	989	_	_	_	_	_		3	9	989
Al-Dhahira	2	162	_	_	1	_	2	8	5	10	170
Al Batinah	2	222	2	46	2	20	1	4	12	19	292
Interior	2	237	1	27	2	16	_	_	10	15	280
Eastern	2	196	6	209	3	31	_	_	19	30	436
Southern	1	336	_	_	1	6	_	_	24	26	342
Northern		_	3	74			1	4	1	5	78
Total	15	2142	12	356	9	73	4	16	74	114	2587



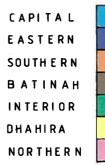


TABLE 2.3

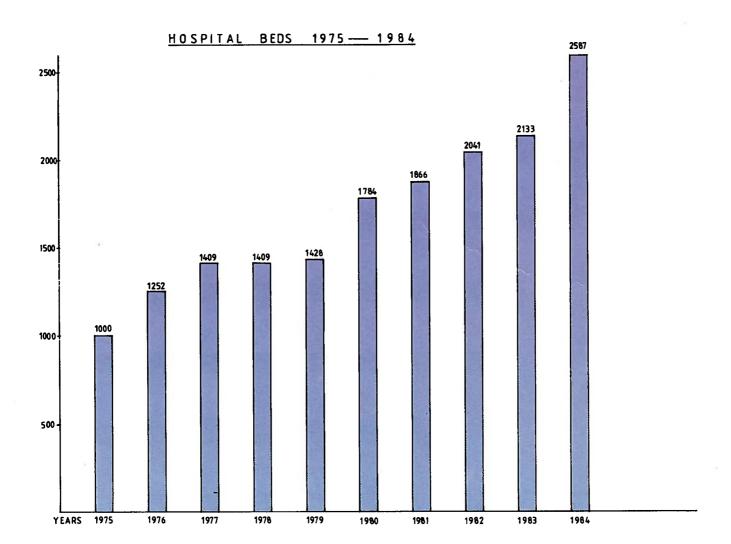
Beds Distribution by Specialities in Hospitals — 31.12.1984

	_																·		
						ī		_	Bed	s rese							Total Beds		
Hospitals		e	ty	ics			edic	ology	ry	losis		gery	lysis		c		Ŷ	Ottal Bee	
-	Surgery	Medicine	Maternity	Paediatrics	Eye	ENT	Orthopaedic	Dermatology	Psychiatry	Tuberculosis	Burns	Plastic Surgery	Reneal Dialysis	noi	Isolation	Others	Official	Extra	Grand Total
Khoula	68	1	130	-	_		79	_	_	-	8	27	_	7	_	11	330	52	382
Al-Nahdha	_	117	_	100	41	18		2	1	1	l	1	10	i	_	2	290	68	358
Ar-Rahma	_	59	_	32	_	_		_	1	30		-	-	_	3	4	128	17	145
Muscat	Out-patient only																		
Assada	_	_	16		_	_	_	_	_	_	_	_	_		_	_	16	*8	24
Ibn Sina		_	_		-	_	-	_	60	-	_	1	-	_	_	_	60	20	80
Buraimi	11	15	8	8	_	_	1	_	_	-		_		_	_	8	50	26	76
Tanam	12	15	20	18	3	_	-	_	-	-	_	_	_	1	1	4	74	12	86
Sohar	26	28	26	1	10		1	1		1	4	1	_	2	_	4	100	51	151
Sumail	14	14	7	15		1	1	_	_	_	_		_	_	_	_	50	35	85
Nizwa	22	18	28	24	6	_	_	_	_	_		_		2	_	_	100	52	152
Rustaq	8	15	25	11	4	-	_	_	_		-	_	_	2	2	4	71	_	71
Sur	12	20	21	21	8	_		_	_	_	_	_		_		18	100	25	125
Qaboos	31	85	58	49	12	12	30	9	10		1			4		_	300	36	336
Ibra	8	10	8	16	4	-		_						4	_		, 50	21	71
Total	212	396	347	294	88	30	109	11	70	30	12	27	10	22	6	55	1719	423	2142

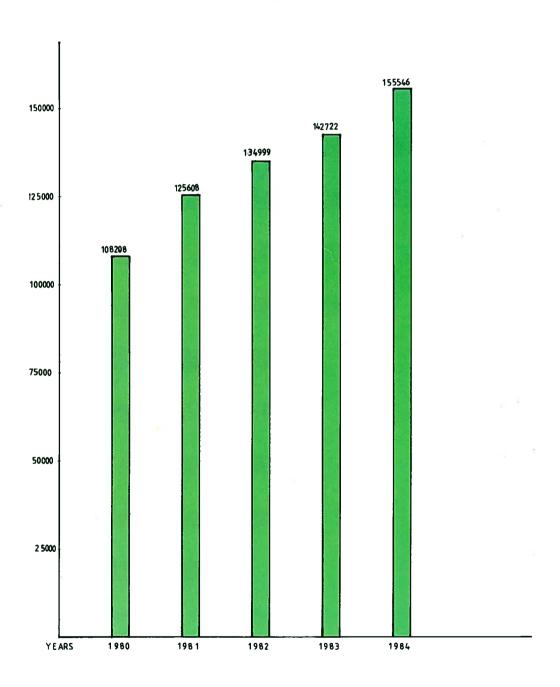
TABLE 2.4

Beds, Admissions, Discharges, OPD's Attendance
Deliveries and Births 1980-1984

				OPD	attendance			
Years	Beds	Admissions	Discharges	New	Re-visits	Total	Deliveries	Births
1980	1784	108208	104348	3123354	1626182	4749536	27328	27584
1981	1866	125608	123062	3525854	1796262	5322116	29162	29457
1982	2041	134999	134736	3328434	2119765	5448199	31781	32080
1983	2133	142722	143429	3616137	2319398	5935535	32615	32895
1984	2587	155546	154789	4071611	2448287	6519898	36350	36686



## HOSPITAL ADMISSIONS 1980 - 1984



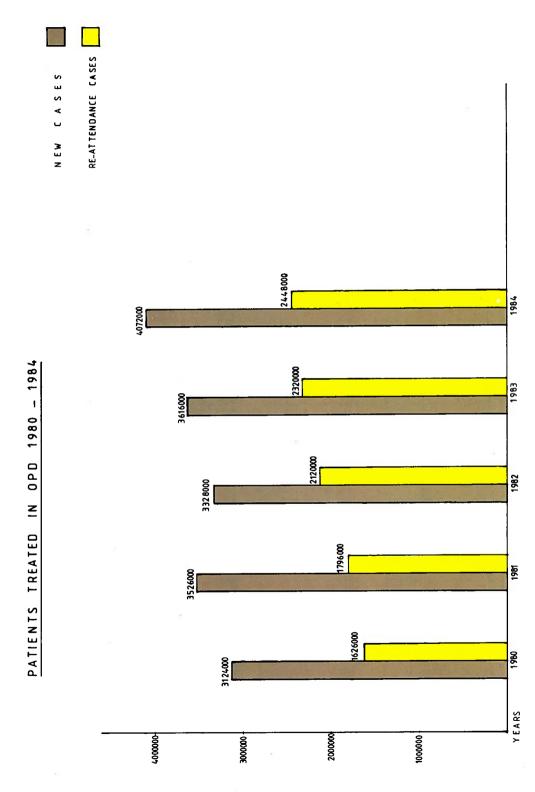


TABLE 2.5

Admissions, Discharges, Bed Occupancy etc. in Hospitals & Health Centres — 1984

Hospitals/HCs			Admissions					Average		
	Beds 31-12-84	Male	Female	Total	Male	Female	Total	Patient days	Bed occupany (percentage)	duration of hospital stay
Hospitals										
Khoula	330	7105	14153	21258	7097	14198	21295	126307	104.6	5.9
Al-Nahdha	290	7376	5120	12496	7139	4909	12048	80062	75.4	6.6
Ar-Rahma	128	1733	1339	3072	1666	1296	2962	34403	73.4	11.6
Muscat		_	_	_	_	_	_		_	
Assada	16		1967	1967	1	1963	1964	5884	100.5	3.0
Ibn Sina	60	423	228	651	366	208	574	21289	96.9	37.1
Buraimi	50	1993	2284	4277	1953	2227	4180	20234	110.6	4.8
Tanam	74	3393	5177	8570	3397	5157	8554	29299	108.2	3.4
Sohar	100	4811	8959	13770	4819	8810	13629	55078	150.5	4.0
Sumail	50	2076	3505	5581	2070	3520	5590	24195	132.2	4.3
Nizwa	100	3713	4971	8684	3726	4977	8703	48941	133.7	5.6
Rustaq	71	2443	6107	8550	2446	6099	8545	29878	115.0	3.5
Sur	100	2880	5112	7992	2897	5122	8019	33552	91.7	4.2
Qaboos	300	7145	8408	15553	7250	8421	15671	106543	97.0	6.8
Ibra	50	2281	3475	5756	2311	3452	5763	21572	117.9	3.7

			Admissions			Discharges		Patient	Bed	Average
Hospitals/HCs	Beds 31-12-84	Male	Female	Total	Male	Female	Total	days	occupancy (percentage)	duration of hospital stay
Health Centres	-									-
Masnah	_	_	_	_ '	_	_		_	_	
Bukha	16	231	269	500	229	268	497	1464	25.0	2.9
Baya	24	648	1311	1959	611	1286	1897	6792	77.3	3.6
Khasab	24	1103	1186	2289	1090	1195	2285	9314	106.0	4.1
Saham	30	2128	4857	6985	2120	4875	6995	16685	152.0	2.4
Bahla	24	743	1793	2536	740	1798	2538	8285	94.3	3.3
BBB Ali	24	1811	2625	4436	1817	2635	4452	11774	134.0	2.6
BBB Hassan	24	1343	2056	3399	1339	2069	3408	10249	116.7	3.0
Sinaw	24	1743	2786	4529	1744	2770	4514	11562	131.6	2.6
Quriyat	35	988	1796	2784	991	1783	2774	9670	75.5	3.5
Masirah	24	882	869	1751	881	857	1738	6591	75.0	3.8
Wadi Tayeen	30	817	1258	2075	827	1244	2071	8476	77.2	4.1

Hospitals/	Beds 31-12-84		Admissions			Discharges		Patient days	Bed occupancy	Average duration of hospital	
HCs .		Male	Female	Total	Male	Female	Total		(percentage)	stay	
WB Khalid	6	_	142	142	3	141	144	452	20.6	3.1	
WB Ghaffir	10	212	435	647	213	438	651	1977	54.0	3.0	
Samad alshaan	13	240	582	822	237	581	818	2318	48.7	2.8	
Wadi Sarami	10	156	197	353	154	199	353	791	21.6	2.2	
Izki	12	345	684	1029	343	685	1028	2874	65.4	2.8	
Duqum	12	379	446	825	382	442	824	2454	55.9	3.0	
Wadi Jizzi	Y	_	_	<u> </u>	_		_	_	_	_	
Haima	4	99	151	250	96	151	247	742	50.7	3.0	
Tawi Attair	6	22	36	58	23	35	58	105	4.8	1.8	
Total (Hospitals)	1719	47372	70805	118177	47138	70359	117497	637237	101.3	5.4	
Total (Health Centres)	352	13890	23479	37369	13840	23452	37292	112575	87.4	3.0	
Grand Total	2071	61262	94284	155546	60978	93811	154789	749812	98.9	4.8	

TABLE 2.6

Mortality & morbidity by group of diseases — 1984

		5		Inpatie	nte			Out-patio	ents		
(	Groups of diseases (ICD-8)	Death	18	Inpatic	,1113	Hospital	ls/HCs	Dispens	aries	Total	
	()	Number	%	Number	%	Number	%	Number	%	Number	%
1.	Infectious & parasitic Diseases	424	19.86	28,904	18.67	410,261	15.75	296,349	20.20	706,610	17.35
2.	Neoplasms	144	6.74	1,148	0.74	537	0.02	_	_	537	0.01
3.	Endocrine, nutritional & metabolic diseases	56	2.62	1,776	1.15	17,081	0.66	47,614	3.25	64695	1.59
4.	Diseases of blood & blood forming organs	16	0.75	2,533	1.64	32,448	1.25	35,948	2.45	68,396	1.68
5.	Mental disorders	2	0.09	1,225	0.79	3,774	0.14		_	3,774	0.09
6.	Diseases of nervous system & sense organs	67	3.14	4,224	2.73	267,674	10.28	146,405	9.98	414,079	10.17
7.	Diseases of circulatory system	473	22.15	6,309	4.08	19,236	0.74	_	-	19,236	0.47
8.	Diseases of respiratory system	184	8.62	20,110	12.99	690,523	26.51	481,517	32.82	1,172,040	28.79
9.	Diseases of digestive system	77	3.61	7,081	4.57	306,057	11.75	50,790	3.46	356,847	8.76
10.	Diseases of genito- urinary system	44	2.06	8,930	5.77	47,815	1.84			47,815	1.17

								Out-pat	tients		
	Groups of Diseases	Deaths		Inpatie	ents	Hospita	ls/HCs	Dispens	aries	Tota	al
	(1CD-8)	Number	%	Number	%	Number	%	Number	%	Number	%
11.	Pregnancy, childbirth & puerperium	8	0.37	46,692	30.16	16,265	0.62	_	_	16,265	0.40
12.	Diseases of skin & subcutaneous tissue	4	0.19	2,733	1.77	167,047.	6.41	133,913	9.13	300,960	7.39
13.	Diseases of musculos- keletal system & connective tissue	1	0.05	1,868	1.21	255,861	9.82		_	255,861	6.28
14.	Congenital anomalies	79	3.70	548	0.35	155	0.01	_	-	155	_
15.	Perinatal morbidity & mortality	319	14.94	963	0.62	-				_	
16.	Senility & other ill- defined conditions	40	1.87	7,239	4.68	227,258	8.73	181,547	12.37	408,805	10.04
17.	External causes-nature of injury	197	9.23	12,506	8.08	142,499	5.47	93,037	6.34	235,536	5.78
	Total	2,135	99.99	154,789	100.00	2,604,491	100.00	1,467,120	100.00	4,071,611	99.97

<sup>—</sup> Group of diseases is not included in the OPD classification.

TABLE 2.7

Main causes for hospitalization — 1984

Diseases (ICD-8)	Number hospitalized	Proportion to the total discharges (%)
1. Enteritis & other diarrhoeal diseases	10,275	6.64
2. Malaria	9,170	5.92
3. Bronchitis, emphysema & asthma	5,186	3.35
4. Measles	3,782	2.44
5. Gastritis & duodenitis	2,759	1.78
6. Acute bronchitis & bronchiolitis	2,711	1.75
7. Abdominal pain	1,609	1.04
8. Essential benign hypertension	1,602	1.03
9. Acute pharyngitis & acute tonsillitis	1,498	0.97
10. Threatened abortion	1,455	0.94

(Total discharges) = 154,789 ·

TABLE 2.8

Deaths in Hospitals and Health Centres by age groups and sex — 1984

Hospitals/Health Centres	Under 1	year	1-14 y	ears	15-44 y	ears	45 year	rs & above		Total		Neonata
Contros	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total	deaths
<u>Hospitals</u>				ją.				:	,			
Khoula	25	20	18	8	43	12	57	27	143	67	210	34
Al-Nahdha	51	39	31	23	46	30	123	68	251	160	411	13
Ar-Rahma	9	10	5	6	10	9	47	27	71	52	123	
Assada	1	1	_	_	_	_	_	_	1	1	2	2
Ibn Sina	_	_	_	_	_		2		2	_	2	_
Rustaq	42	36	6	10	1	5	23	17	72	68	140	50
Sohar	58	52	16	22	12	4	59	33	145	111	256	66
Sumail	14	9	3	2	1	3	21	22	39	36	75	13
Nizwa	55	49	9	7	10	11	37	20	111	87	198	66
Ibra	31	21	3	1	1	2	9	8	44	32	76	41
Sur	54	38	6	7	11	7	33	13	104	65	169	57
Tanam	19	19	8	8	5	3	28	11	60	41	101	28
Buraimi	4	12	3	_	5	1	22	9	34	22	56	7
Qaboos	31	26	10	10	14	7	31	23	86	66	152	35

Hospitals/Health Centres	Under 1	year	1-14 y	1-14 years		ears/	45 years &	& above		Total		Neonatal
Centres	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total	deaths
Health Centres												
Baya	_	5	_	1	_	_	3	2	3	8	11	5
Khasab	2	_	1	_	_	_	5	1	8	1	9	2
Saham	5	9	5	7	_	_	6	1	16	17	33	7
Bahla	4	1	2	_	_	_	1	4	7	5	12	3
B.B.B. Ali	8	4	2	2	_	2	4	1	14	9	23	9
B.B.B. Hassan	5	5	2	2	_	-	. 3	1	10	8	18	4
Sinaw	4	7	2	2	1	_	. 5	4	12	13	25	5
Quriyat	2	1	1	_	_	_	. 5	1	8	2	10	2
Masirah	2	_	-	_	1	_	_	1	3	1	4	2
Wadi Tayeen	2	1	<u> </u>	_	<u> </u>	<u> </u>	_	1	2	2	4	1

. . .

Hospitals/Health Centres	Under 1	year	1-14	years	15-44	years	45 year	s & above		Total		Neonatal
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total	
W.B. Ghaffir	-	1	_	_	_	_		_	_	1	1	1
W.B. Sarami	1	_	_	_		_	2	_	3	_	3	1
Haima	_	1	_	_	_	1	_		_	2	2	_
Izki	1	_	_	_	_	_		_	1	_	1	1
B.B. Khalid	3		_	_	_	_	_		3	_	3	3
Samad alshaan	1	_	_	_	_	_		_	1	_	1	1
Duqum	_	2	_	_	_		_	_	_	2	2	2
Tawi Attair		1	1	_	_	_		_	1	1	2	_
Total (Hospitals)	394	332	118	104	159	94	492	278	1163	808	1971	412
Total (Health Centres)	40	38	16	14	2	3	34	17	92	72	164	49
Grand Total	434	370	134	118	161	97	526	295	1255	880	2135	461
% of deaths	20.3	17.3	6.3	5.5	7.6	4.6	24.6	13.8	58.8	41.2	100.0	21.6

TABLE 2.9

Main causes of mortality in hospitalized population

## For adults

Diseases (ICD-8)	Number of deaths	Proportion to the total deaths (%)
1. IHD & other forms of heart diseases	281	26.04
2. Cerebrovascular diseases	146	13.53
3. Neoplasms of stomach & other digestive organs	70	6.49
4. Intracranial injuries (excluding skull fracture)	69	6.39
5. Respiratory tuberculosis	35	3.24
6. Burn	34.	3.15

(Total adult deaths = 1,079)

## For children

1. Immaturity	237	22.44
2. Enteritis & other diarrhoeal diseases	129	12.22
3. Pneumonias	109	10.32
4. Septicaemia	91	8.62
5. Congenital diseases	79	7.48
6. Measles	76	7.20

(Total children deaths = 1,056)

TABLE 2.10

Patients seen in Out-Patient Departments — 1984

Hospitals/HCs/		New Cases			Re-visits	88.1		Grand Tota	ı	Daily
Dispensaries	Male	Female	Total	Male	Female	Total	Male	Female	Total	average of patients treated
Hospitals										
Khoula	58953	28227	87180	54090	28316	82406	113043	56543	169586	463
Al-Nahdha	139400	91943	231343	80094	67310	147404	219494	159253	378747	1035
Ar-Rahma	20373	23136	43509	39262	56346	95608	59635	79482	139117	380
Muscat	53653	40959	94612	6680	4485	11165	60333	45444	105777	289
Assada	14775	27824	42599	16067	24855	40922	30842	52679	83521	228
Ibn Sina	963	695	1658	6248	4027	10275	7211	4722	11933	33
Rustaq	58829	58529	117358	22422	28879	51301	81251	87408	168659	461
Sohar	144711	136225	280936	35855	54183	90038	180566	190408	370974	1014
Sumail	17397	21523	38920	59818	91551	151369	77215	113074	190289	520
Nizwa	72824	67446	140270	27594	37807	65401	100418	105253	205671	562
Ibra	57434	59566	117000	44712	61423	106135	102146	120989	223135	610
Sur	19495	18397	37892	79549	68891	148440	99044	87288	186332	509
Tanam	78829	69614	148443	29469	44384	73853	108298	113998	222296	607

Hospitals/HCs/ Dispensaries	New Cases			Re-visits			Grand Total			Daily
	Male	Female	Total	Male	Female	Total	Male	Female	Total	average of patients treated
Buraimi	62190	48001	110191	19877	20021	39898	82067	68022	150089	410
Qaboos	27788	14507	42295	245869	210551	456420	273657	225058	498715	1363
Health Centres										
Bukha	9509	7555	17064	2703	3676	6379	12212	11231	23443	64
Baya	15546	16523	32069	14238	14482	28720	29784	31005	60789	166
Khasab	29942	22847	52789	7714	6387	14101	37656	29234	66890	183
Saham	61654	70673	132327	12022	16974	28996	73676	87647	161323	441
Masnah	50939	51530	102469	10792	11889	22681	61731	63419	125150	342
Bahla	60066	63941	124007	9073	13195	22268	69139	77136	146275	400
B.B.B. Ali	64766	81380	146146	13164	20856	34020	77930	102236	180166	492
B.B.B. Hassan	35807	31533	67340	11165	22327	33492	46972	53860	100832	275
Sinaw	47467	44511	91978	28971	38405	67376	76438	82916	159354	435
Quriyat	30631	32881	63512	6280	11627	17907	36911	44508	81419	222
Masirah	9917	9516	19433	24180	30104	54284	34097	39620	73717	201

Hannital-/HCs/	New (	Cases		Re-v	isits		Grand 7	Daily		
Hospitals/HCs/ Dispensaries	Male	Female	Total	Male	Female	Total	Male	Female	Total	average of patients treated
Wadi Tayeen	18645	29554	48199	9508	12832	22340	28153	42386	70539	193
W.B. Ghaffir	9105	10883	19988	17689	23275	40964	26794	34158	60952	167
Wadi Sarami	4228	4022	8250	1551	1488	3039	5779	5510	11289	31
Haima	5438	1276	6714	2780	1081	3861	8218	2357	10575	29
Izki	13866	16332	30198	21033	22946	43979	34899	39278	74177	203
W.B. Khalid	6107	5430	11537	7687	8313	16000	13794	13743	27537	75
Samad alshaan	25488	30312	55800	9591	11292	20883	35079	41604	76683	210
Duqum	4452	4160	8612	4748	5130	9878	9200	9290	18490	51
Wadi Jizzi	10411	7900	18311	4980	5486	10466	15391	13386	28777	79
Tawi Attair·*	9131	4411	13542	1913i	1230	3143	11044	5641	16685	50
Total (Hospitals)	827614	706592	1534206	767606	803029	1570635	1595220	1509621	3104841	8483
Total (Health Centres)	523115	547170	1070285	221782	282995	504777	744897	830165	1575062	4303
Total (Hospitals & HCs)	1350729	1253762	2604491	989388	1086024	2075412	2340117	2339786	4679903	12787
Dispensaries	1467120					372875		5027		
Grand Total			4071611			2448287		17,814		

Started in February 1984

TABLE 2.11

Main causes for contact with health facilities — 1984

# Hospitals/Health Centres

	Diseases (ICD -8)	Cases	Proportion to the total cases (%)
1.	Acute respiratory infection	353,989	13.59
2.	Enteritis & other diarrhoeal diseases	190,672	7.32
3.	Inflammatory diseases of eye	125,869	4.83
4.	Malaria	123,340	4.74
5.	Diseases of teeth & supporting structures	117,556	4.51
6.	Bronchitis, emphysema & asthma	96,196	3.69
7.	Hypertrophy of tonsils & adenoids	95,579	3.67
8.	Infections of skin & subcutaneous tissue	84,129	3.23
9.	Gastritis & duodenitis	77,273	2.97
10.	Laceration & open wound	46,092	1.77

[Total new OPD cases (Hospitals/HCs) = 2,604,491]

# Dispensaries

Acute gastro-enteritis & diarrhoea	138,867	9.47
2. Diseases of skin & subcutaneous tissue	133,913	9.13
3. Malaria	101,979	6.95
4. Conjunctivitis	100,092	6.82
5. Epigastric pain	89,763	6.12
6. Acute tonsillitis	81,570	5.56
7. Injuries	79,126	5.39
8. Diseases of teeth & supporting structures	50,587	3.45
9. Nutritional deficiencies	47,614	3.25
10. Discharging ear	43,689	2.98

[Total new cases (dispensaries) = 1,467.120]

TABLE 2.12

Number of reported cases of infectious diseases — 1984

Diseases	*Cases treated by curative units	Cases treated by public health units	Total cases
Typhoid fever	126	_	126
Para-typhoid & salmonella infections	4	_	4
Bacillary dysentery & amoebiasis	10394	_	10394
Enteritis and other diarrhoeal diseases	329539	5	329544
Tuberculosis of respiratory system	820	128	948
Other tuberculosis	775	_	775
Brucellosis	228	_	228
Leprosy	9	_	` 9
Diphtheria	9	_ 1	9
Whooping cough	816	14	830
Meningitis	281	_	281
Tetanus	51	_	51
Acute poliomyelitis	30	_	30
Late effects of acute poliomyelitis	50	_	50
Measles	8782	870	9652
Infectious hepatitis	2604	423	3027
Trachoma — active	10067	5	10072
— late effects	6867	_	6867
Chicken-pox	12310	3009	15319
Mumps	15376	1413	16789
Viral encephalitis	72	_	72
Malaria	225319	_	225319
Venereal diseases	3106	_	3106
Helminthiasis and other infective and parasitic diseases	18270	11	18281
Avitaminoses & other nutritional deficiency	58971	_	58971
Anaemias	67225	_	67225
Influenza	50369	_	50369
Viral pneumonia	1248	_	1248
Other pneumonia	6430	_	6430

<sup>\*</sup> The number of cases as registered in OPD's except for typhoid, paratyphoid, brucellosis, diphtheria, tetanus, acute poliomyelitis, late effects of poliomyelitis, meningitis, viral encephalitis, and leprosy, the cases of which are hospitalized cases.

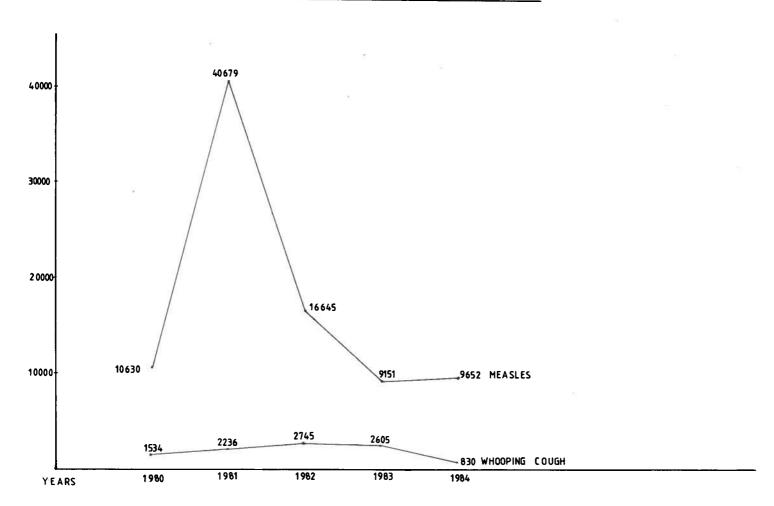


TABLE 2.13

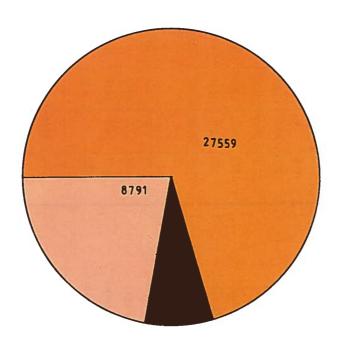
Number of Deliveries & Births — 1984

			Deliver						Birt			· · · · ·			
Hospitals/ HCs	Normal	In 1 Caesarian	Forceps	Others	Total	Born before arrival	Grand Total	Normal	Live Premature	Others	Total	Still born	Grand Total	% of Still born	% of Premature
Hospitals			==												
Khoula	6902	550	48	185	7685	632	8317	7816	389	30	8235	151	8386	1.8	4.7
Assada	1071	–	13	112	1196	144	1340	1314	20	1	1335	15	1350	1.1	1.5
Buraimi 💉	468	15	–	23	506	31	537	523	12	1	536	5 3	541	0.9	2.2
Tanam	1530	43	–	70	1643	221	1864	1781	54	7	1842	40	1882	2.1	2.9
Sohar	2819	41	47	209	3116	659	3775	3599	144	5	3748	66	3814	1.7	3.8
Sumail	1024	16	9	121	1170	94	1264	1089	25	148	1262	13	1275	1.0	2.0
Nizwa	1218	159	6	54	1437	66	1503	1311	76	104	1491	29	1520	1.9	5.1
Rustaq	2766	19	9	77	-2871	425	3296	3190	73	6	3269	61-	3330	1.8	2.2
Sur	1708	49	22	150	1929	203	2132	2068	48	2	2118	32	2150	1.5	2.3
Qaboos	1997	126	30	159	2312	39	2351	2229	91	21	2341	36	2377	1.5	3.9
Ibra	928	22	1	38	989	191	1180	1041	134	3	1178	17	1195	1.4	11.4

			Deli	veries							Birt	hs			
Hospitals/		In h	ealth ur	it		Born			Live b	irths			<u>s</u>		
HCs	Normal	Caesarian	Forceps	Others	Total	before arrival	Grand Total	Normal	Premature	Others	Total	Still born	Grand Total	% of Still born	% of Premature
Health Centres				-											
Bukha 🗷	61	-	<del>;</del>	<del></del>	61	3	64	60	_	5	65	-	65	-	-
Baya 🥟	296	1	2	21	320	13	333	321	7	2	330	4	334	1.2	2.1
Khasab 🗸	257	2	2	36	297	9	306	291	10	5	306	3	309	1.0	3.3
Saham 🗸	2179	1	3	196	2379	346	2725	2669	41	10	ر2720	22	2742	0.8	1.5
Bahla	865	_	1	17	883	65	948	888	49	5	942	10	952	1.1	5.2
B.B.B. Ali	491	_	_	37	528	103	631	616	14	_	630	9	639	1.4	2.2
B.B.B. Hassan	537	_	_	7	544	94	638	622	12	5	639	4	643	0.6	1.9
Sinaw	653	-	_	43	696	172	868	857	11	3	871	9	880	1.0	1.3
Quriyat	507	-	2	11	520	218	738	716	18	5	739	7	746	0.9	2.4
Masirah	106	_	1	9	116	14	130	125	4	_	129	2	131	1.5	3.1
Wadi Tayeen	191	-	_	5	196	67	263	225	32	4	261	5	266	1.9	12.3
W.B. Khalid	98	_	_	1	99	32	131	128	3	1	132	1	133	0.8	2.3

			Deliveri						Birtl						
Hospitals/ HCs	Normal	In h Caesarian	Forceps	Others	Total	Born before arrival	Grand Total	Normal	Live b		Total	Still born	Grand Total	% of Still born	% of Premature
W.B. Ghaffir	178		_	_	178	36	214	192	21	_	213	3	216	1.4	9.9
Samad Alshaan	210	_	-	2	212	76	288	277	14	1	292	_	292	_	4.8
Wadi Sarami	43	_	_	1	44	1	45	43	1	1	45		45		2.2
Haima	20	_	_	_	20	_	20	19	1	_	20	_	20	–	5.0
Izki 💆	338	<del></del> .		_	338	23	361	325	4	32	361	2	363	0.6	1.1
Duqum	46		_	_	46	26	72	70	2	_	72	2	74	2.7	2.8
Tawi Attair	16		-		16	_	16	15	_	_	15	1	16	6.3	-
Total (Hospitals)	22431	1040	185	1198	24854	2705	27559	25961	1066	328	27355	465	27820	1.7	3.9
Total (Health Centres)	7092	4	11	386	7493	1298	8791	8459	244	79	8782	84	8866	0.9	2.8
Grand Total	29523	1044	196	1584	32347	4003	36350	34420	1310	407	36137	549	36686	1.5	3.6

HOSPITALS
HEALTH CENTRES
PUBLIC HEALTH UNITS



13/1

TABLE 2.14

Activities of Gynaecology Departments in Hospitals and Health Centres — 1984

	Ante	-natal vi	sits	Pos	t-natal v	risits	Numb compli pregna	er and ty ications ancy	pe of of
Hospitals/HCs	New Re-visits		Total	New Re-visits		Total	Toxaemia Eclampsia		Abortion
Hospitals									-
Khoula	5643	29605	35248	5103	14036	19139	226	7	1376
Assada	3971	3860	7831	2937		2937	75	_	203
Rustaq	3406	9580	12986	56	_	56	77	6	316
Sohar	4238	_	4238	_		_	62	4	361
Sumail	1441	6264	7705	199	176	375	28	2	141
Nizwa	1699	_	1699	3023	27644	30667	29	2	318
Ibra	1716	3339	5055	758	1532	2290	9		142
Sur	2230	6369	8599	_		_	7	1	216
Tanam	1570	4450	6020	502	_	502	8	_	222
Buraimi	339	1279	1618	_:	_	_	8	_	128
Qaboos	2765	22020	24785	1458	5427	6885	270	2	306
Health Centres				İ					
Bukha	96	272	368	20	11	31	_		7
Baya	626	1226	1852	_	_	**	3	_	33
Khasab	443	1433	1876	123	45	168	1		10
Saham	258	—	258	265	_	265	2	_	154
Bahla	_	_	_	_	_	_	3	_	110
B.B.B. Ali	_	3716	3716	_	_	_	4	_	132
B.B.B. Hassan	(# <u></u>	_	_	_	_	-	_	3	57
Sinaw	1195	3142	4337	-	_	_	15	_	92
Quriyat	869	2387	3256	_[	_ ;	_	7	2	125
Masirah	155	703	858	50	141	191	2	_	10
Wadi Tayeen	321	1493	1814	_	_	_		_	17
W.B. Ghaffir	207	702	909	26	23	49	_		25
Wadi Sarami	· _	_	_	_[		_	_	_	7
Izki	59	19	78	58	23	81			3

Hospitals/HCs	Ant	e-natal	visits	Pos	t-natal v	isits	Number and type of complications of pregnancy			
	New	Re-visits	Total	New	Re-visits	Total	Toxaemia	Eclampsia	Abortion	
Duqum	87	45	132	3	-	3	_	_	8	
Haima	18	3	21	6	_	6	<u> </u>	_	3	
W.B. Khalid	159	503	662	42	23	65	4	_	4	
Samad Alshaan	478	1404	1882		_		5	_	17	
Tawi Attair	11	17	28	1		1			_	
Total (Hospitals)	29018	86766	115784	14036	48815	62851	799	24	3729	
Total (Health Centres)	4982	17065	22047	594	266	860	46	5	814	
Grand Total	34000	103831	137831	14630	49081	63711	845	29	4543_	

TABLE 2.15

Operations performed in Curative Units — 1984

	Minor ope	erations done	in		
Hospitals/HCs/ Dispensaries	Out-Patient Departments	Operation Theatres	Total	Major Operations done	Grand Total
Hospitals					
Khoula	5393	7429	12822	3854	16676
Al-Nahdha	3456	1807	5263	1657	6920
Ar-Rahma	218	İ –	218	_	218
Muscat	942	_	942		942
Assada	145		145	_	145
Buraimi	410	1238	1648	278	1926
Tanam	3709	571	4280	245	4525
Sohar	1966	3314	5280	473	5753
Sumail		7946	7946	137	8083
Nizwa	1449	4154	5603	784	6387
Ibra	6	2196	2202	122	2324
Sur	2287	1364	3651	308	3959
Qaboos	2021	4661	6682	3831	10513
Rustaq	578	1931	2509	105	2614
Health Centres					
Bukha	106		106	2	108
Baya	303	582	885	18	903
Khasab	5	640	645	127	772
Saham	1247	107	1354	_	1354
Masnah	590	-	590	_	590
Bahla	1250	7	1257	1-1	1257
B.B.B. Ali	842	-	842	_	842
B.B.B. Hassan	408	9	417	_	417
Sinaw	712	2	714	<u> </u>	714
Quriyat	418	-	418	_	418
Masirah	314	226	540	7	547

	Minor	operations do	one in	Major	
Hospitals/HCs/ Dispensaries	Out-Patient Operation Total Theatres		Total	Operations done	Grand Total
Wadi Tayeen	365	_	365	_	365
W.B. Ghaffir	97	_	97		97
Wadi Sarami	98	_	98	_	98
Haima	46	_	46	-	46
Izki	438	_	438	_	438
W.B. Khalid	74	_ '	74	_	74
Samad Alshaan	228	-	228	-	228
Duqum	145		145	_	145
Wadi Jizzi	141	_	141	_	141
Tawi Attair	47		47		47
Total (Hospitals)	22580	36611	59191	11794	70985
Total (Health Centres)	7874	1573	9447	154	9601
Dispensaries	5029	_	5029		5029
Grand Total	35483	38184	73667	11948	85615

TABLE 2.16

X-rays carried out in Curative Units — 1984

	Nui	nber of patients	x-rayed			X-rayed sites		
Hospitals/HCs	New	Old cases	Total	Chest	Abdomen	Extremities	Others	Total
Hospitals								
Khoula	30066	15824	45890	9892	6427	29576	14162	60057
Al Nahdha	23403	5650	29053	18900	3201	2293	8665	33059
Ar-Rahma	7837	4608	12445	10684	660	708	1417	13469
Muscat	359	10	369	139	46	160	47	392
Ibn Sina	1267	119	1386	666	29	89	823	1607
Rustaq	8229	1233	9462	6522	1223	1449	950	10144
Sohar	11762	3457	15219	8351	2222	3864	2557	16994
Sumail	3849	1585	5434	3198	669	1147	948	5962
Nizwa	7735	2672	10407	6118	1298	1961	2341	11718
Ibra	4596	699	5295	2781	1097	1021	1007	5906
Sur	4235	1855	6090	3344	1088	1331	1047	6810
Tanam	7561	2583	10144	5851	1185	1785	1344	10165
Buraimi	5522	934	6456	3894	823	1277	1427	7421
Qaboos	15573	8543	24116	10553	4021	6014	10624	31212

Hospitals/HCs	Num	ber of patients	k-rayed			X-rayed sites		
Hospitals/HCs	New	Old cases	Total	Chest	Abdomen	Extremities	Others	Total
Health Centres						· · · · · · · · · · · · · · · · · · ·		
Bukha	1618	108	1726	959	245	469	365	2038
Baya	627	111	738	479	78	166	69	792
Saham	5248	547	5795	3804	681	1316	1214	7015
Bahla	3090	763	3853	2726	497	628	422	4273
B.B.B. Ali	2478	751	3229	2090	402	544	347	3383
B.B.B. Hassan	2167	378	2545	1652	315	903	437	330
Sinaw	2980	926	3906	2478	528	732	412	4150
Quriyat	2965	425	3390	1826	435	891	1209	4361
Masirah	1546	497	2043	1157	232	465	289	2143
Wadi Tayeen	745	69	814	598	86	97	73	854
Total (Hospitals)	131994	49772	181766	90893	23989	52675	47359	214916
Total (Health Centres)	23464	4575	28039	17769	3499	6211	4837	32316
Grand Total	155458	54347	209805	108662	27488	58886	52196	24723

TABLE 2.17

Types of Laboratory Investigations by Curative Units — 1984

Hospitals/HCs	Haematology	Bio- Chemistry	Semen analysis	Bacteriology & Serology	Urine	Stool	Body fluids	Blood- groupings	Others	Grand Total
Hospitals										
Khoula	128348	47421	<b>7</b> 97	27879	49333	2348	61	19999	8107	284293
Al-Nahdha	164122	125142	159	38392	20876	11803	_	6794	12378	379666
Ar-Rahma	65562	31858	57	7411	15375	6282	252	11626	1224	139647
Muscat	5569	272	18	375	2363	846	2	79	7	9531
Assada	25300	597	_	4583	16101	301	150	3333	_	50365
Ibn Sina	4007	320	2	285	1211	190	_	161	185	6361
Rustaq	37264	2829	65	3053	13199	4031	53	6835	252	67581
Sohar	57313	6661	134	9094	21976	8112	109	12745	511	116655
Sumail	27744	3357	39	2367	7781	3985	52	3848	456	49629
Nizwa	48911	7814	154	3394	16108	5858	162	10148	161	92710
Ibra	50646	2599	49	2312	7906	2490	41	6752	114	72909
Sur	45835	4511	95	3451	13593	3629	32	5311	220	76677
Tanam	60564	4657	65	3349	14626	6959	98	8733	215	99266
Buraimi	27572	2623	71	3528	12293	5081	1	6012	8	57189
Qaboos	82374	28286	249	17863	34142	12938	81	10641	1598	188172

Hospitals/HCs	Haematology	Bio- Chemistry	Semen analysis	Bacteriology & Serology	Urine	Stool	Body fluids	Blood- groupings	Others	Grand Total
Health Centres					· i					
Bukha	2654	101	1	168	1148	527	_	378	1	4978
Baya	6182	582	12	694	3093	431	_	604	8	11606
Khasab	8631	624	18	842	3902	1465	3	1366	23	16874
Saham	20769	687	18	2985	7433	2602	6	2868		37368
Bahla	19547	1104	14	1943	6953	3039	_	3738	298	36636
B.B.B. Ali	23951	489	16	1151	6999	3257	_	3902	48	39813
B.B.B. Hassan	24451	1433	14	1658	5838	3186	3	3182	31	39796
Sinaw	21566	2343	12	1752	11958	2335		1750	393	42109
Quriyat	17665	485	7	995	4776	2424		1432	127	27911
Masirah	6641	264	11	636	2940	1393	1	610	18	12514
Wadi Tayeen	16421	116	1	460	2221	1575		390	16	21200
W.B Ghaffir	6255	80	_	279	791	274	_	566		8245
Wadi Sarami	2690	37	_	108	484	86	_	152	2	3559
Haima	20		.—		15		_		<u> </u>	35

Hospitals/HCs	Haematology	Bio- Chemistry	Semen analysis	Bacteriology & Serology	Urine	Stool	Body fluids	Blood- groupings	Others	Grand Total
Izki	8776	_	_	84	2993	1553	_	1146	_	14552
W.B. Khalid	3885	4	_	32	518	177	_	283	<u> </u>	4899
Samad Alshaan	4523	_	_	227	1741	460	_	640	_	7591
Duqum	2931	29	<u> </u>	125	685	348	_	68	5	4191
Wadi Jizzi	3358	13	4	93	505	182	_	60	10	4225
Total (Hospitals)	831131	268947	1954	127336	246883	74853	1094	113017	25436	1690651
Total (Health Centres)	200916	8391	128	14232	64993	25314	13	23135	980	338102
Grand Total	1032047	277338	2082	141568	311876	100167	1107	136152	26416	2028753

TABLE 2.18

Dental Activities by Health Units — 1984

		Type of treatm	ent	
Health Units	Extractions	Fillings	Other treatments	Grand Total
Hospitals				
Al-Nahdha	15151	2546	19270	36967
Muscat	413	_	_	413
Rustaq	3469	107	753	4329
Sohar	8110	199	1665	9974
Sumail	2428	_	_	2428
Nizwa	8515	1283	2387	12185
Ibra	6366	_	_	6366
Sur	3544	302	9	3855
Tanam	3679	178	565	4422
Buraimi	3153	972	1600	5725
Qaboos	4811	4129	6139	15079
Health Centres				
Bukha	96	_	_	96
Baya	179	_	_	179
Khasab	1197	_	_	1197
Saham	3904	19	243	4166
B.B.B. Ali	133	_	_	133
B.B.B. Hassan	133	_	_	133
Sinaw	2521	5	31	2557
Quriyat	2629	1072	587	4288
Wadi Tayeen	22	_	_	22
W.B. Khalid	67	_	_	67
Samad Alshaan	137	_	_	137
Total (Hospitals)	59639	9716	32388	101743
Total (Health Centres)	11018	1096	861	12975
Public Health Compounds	1681	1470	819	3970
Oral Hygiene Section (Darseit)	1927	1056	1204	4187
Grand Total	74265	13338	35272	122875

# 2.1 TREATMENT ABROAD

The Ministry of Health send abroad every year a number of patients for treatment. The patients who can not be treated locally are sent abroad on Government expenses. Treatment Abroad Committee composed of specialists determines the merit of each case to be treated abroad.

(ii) 660 patients were sent abroad during 1984 for treatment of various diseases in 9 countries. Details are available in the tables.

TABLE 2.1.1

Patient Treated Abroad by Countries 1980 - 1984

			Countries				
Years	India	U.K.	Kuwait	Jordan	Egypt	Other countries	Total
1980	128	100	31	23		_	282
1981	186	123	44	22	_	3	378
1982	215	171	48	22	17	2	475
1983	234	202	78	47	27	7	595
1984	224	262	96	42	29	7	660

TABLE 2.1.2

Number of Patients Treated Abroad by Diseases — 1984

	Cou	intries whe	ere treated			19
Diseases	U.K.	India	Kuwait	Jordan	Egypt	Total
Neoplasms	10	47	52		_	109
Heart diseases	78	1	4	34	_ '	117
Eye diseases	37	25	_	_	3	65
Neurology	19	71	13	6	8	. 117
Orthopaedics	16	28	_	_	3	47
Diseases of urinary system	30	7	7	_	_	44
Diseases of the blood	12	5	8	–	1	26
Intestinal diseases & surgery	35	23	5	_	3	66
ENT cases	4	_	_	_	1	5
Diseases of the liver	2	2	_	_	_	4
Chest infections	5	2	1	_	_	8
Skin diseases	2	_ 1	1	_	_	4
Thyroidectomies	2	2	4	_	1	9
Oral surgery	1	3	<b> </b>	_	1	5
Endocrine diseases	3	_	1	_	_	4
Plastic surgery	1	_	_	_	-	1
Psychiatric diseases	§ _	1	_	-	3	4
Investigations & checkups	5	6	_	2	5	18
Other diseases — not known	_		_			7*
Total	262	224	96	42	29	660

<sup>\* 3</sup> were sent to USA, 2 to West Germany and 1 each to Pakistan and Singapore

TABLE 2.1.3

Number of Patients Treated Abroad by Countries — 1984

Countries	Number of patients treated	Patients died	Percent died
India	224	22	9.8
U.K.	262	7	2.7
Kuwait	96	2	2.1
Jordan	42	3	7.1
Egypt	29	_	_
USA	3	_	_
Germany	2	_	-
Pakistan	· 1 1	_	_
Singapore	1	_	_
'a`otal	660	34	5.2

## 3. PREVENTIVE SERVICES

The Directorate of Preventive Medicine administers the delivery of public health services. These services include ante-natal and post-natal care, school health services, environmental health, public health laboratories, health education, quarantine measures etc. Vertical programmes e.g. Expanded Programme of Immunization, Tuberculosis Control Programme, Programme for Prevention of Blindness, Diarrhoeal Diseases Control Programme, and Malaria Control Programme are also under the control of Directorate of Preventive Medicine.

(ii) At the end of 1984 there were 5 public health compounds, 40 public health units, 36 malaria units, 33 vector control units, 7 quarantine units, 2 MCH centres, 2 environmental health units plus Bacteriological Laboratory, Chemical Laboratory, units of Communicable Diseases Control, Health Edcuation, School Health and Oral Hygiene. No public health facility existed in 1970.

TABLE 3.1

Expansion of Public Health Services 1975 - 1984

			Number	in		
Public Health Facilities	1975	1980	1981	1982	1983	1984
Public Health Compounds	4	5	5	5	5	5
Public Health Units	6	13	24	32	28	40
Malaria Units	_	16	16	28	35	36
MCH Centres		2	2	2	2	2
Quarantine Units	6	7	7	7	7	7
Vector Control Units	6	13	13	30	30	* 33

Note: No public health facility existed in 1970

# PREVENTIVE MEDICINE UNITS 1975-1984



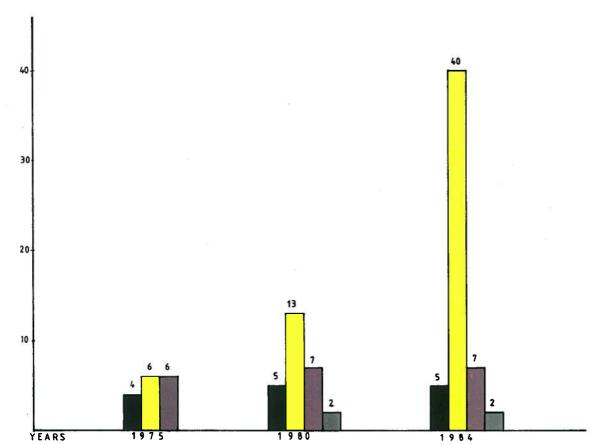


TABLE 3.2

Regional Distribution of Public Health Facilities — 31.12.1984

	Public	Public	Quara	ntine units		Vector	Malaria	Environmental	
Regions	Health Compounds	Health Health	Air-Ports	Ports	Borders	Control Units	Control Units	Health Units	MCH Units
Capital Area	_	2	1	2		3		1	2
Northern	_	2				1	1	_	
Al-Dhahira	1	<sup>20</sup> 2	_	_	_	3	4	_	_
Al-Batinah	1	9	. —		2	8	9	1	_
Interior	2	4		_		6	6	_	_
Eastern	_	16		_		11	15	_	
Southern	1	5	1	1		1	1		
Total	5	40	2	3	2	33	36	2	2

TABLE 3.3 MCH Activities — 1984

Public Health Facilities	Pregnancies supervised at health facilities	Pregnancies supervised by home-visits	Home deliveries attended
Public Health Compounds	35158	540	1235
Public Health Units	28897	830	1618
MCH Centres	6127	79	86
Total	70182	1449	2939

TABLE 3.4

Number of Births, Deaths and Health Certificates issued (Preventive Medicine Units) — 1984

Public Health Facilities	Birth Certificates	Age-estimation Certificates	Death Certificates	Health Certificates for food handlers	International Vaccination Certificates	Other Health Certificates	Grand Total
Communicable Diseases Section	_	3211	201	7294	20853	2703	34262
MCH Centres	700	_	_	_		_	700
Public Health Compounds	12596	10004	38	5300	16406	_	44344
Public Health Units	20952	15576	21	4763	11851	157	53320
Total	34248	28791	260	17357	49110	2860	132626

#### (iii) Other public health activities

#### (1) School Health Services

These services being provided by Public Health Compounds/Units include medical examination of students, treatment of common diseases and vaccination against communicable diseases. During 1984, 6,763 schools were visited and 53,705 students were treated for various diseases. 115,802 vaccinations were carried out against communicable diseases. 93,952 blood slides were examined for Malaria out of which 8,301 or 8.8% were found positive.

#### (2) Environmental Health Activities

These activities cover provision of safe water supply & improving sanitary conditions. Restaurants, food stores/markets, slaughter houses etc are inspected periodically. Environmental Health Section in the Capital Area made 2,161 such visits during 1984.

### (3) Bacteriological & Chemical Laboratories

The main functions of the laboratories are analysis of water & food samples, samples of other liquids besides food handlers examination. During 1984 Bacteriological Laboratory analysed 1,314 water samples, 483 samples of other liquids and 914 food samples. 11,884 food handlers were examined. Chemical Laboratory analysed 3,503 water samples and 2,366 food samples. 519 water tankers were disinfected.

### (4) Health Edcuation Activities

This service is rendered by Public Health Units through lectures, visual aids and mass media (Radio, T.V. & Press). It covers hygiene and sanitation and education concerning prevailing health problems & methods of preventing & controlling such health hazards.

#### (5) Quarantine Activities

These activities are carried out at ports, airports and border checkposts. The activities include examination of planes & ships with staff, passengers & imported food cargo. During 1984, 6,135 planes and 1,850 ships with 118,366 crew members and 412,190 passengers were checked. 20,717 release certificates for imported food stuffs were issued. 986 cholera inoculations & 55 yellow fever vaccinations were carried out and 34 passengers were quarantined.

#### 3.1 Expanded Programme of Immunization (EPI)

The objective of EPI Programme is to reduce the morbidity & mortality due to six childhood diseases preventable by vaccination i.e. Measles, Polio, Diphtheria, Pertussis, Tetanus & Tuberculosis. To control Neonatal Tetanus, all women of child bearing age (12-49 years) are administered two doses of Tetanus Toxoid. The target of EPI is to achieve a 50% coverage for fully immunized children under one year of age by end of 1984, 70% by 1985 and over 90% by 1989.

- 2. The strategies adapted are fixed immunization centres i.e. curative & preventive units; out-reach teams operated from Public Health Units, Rural Health Services, Salalah & EPI Central Office and Mobile teams operating from EPI Central Office for nomadic population. 100 fixed units and 34 out-reach EPI units were functioning during 1984. Besides Ministry of Health, other health services offer immunization to the staff and their families. These include Department of Medical Services of the Diwan of Royal Court Affairs, Royal Oman Police, Sultan of Oman's Armed Forces & Oman Research Department.
- 3. Immunization figures for children under 6 years for the years from 1981 to 1984 are detailed below:-

	1981	1982	1983	1984
DPT				
1st dose	40315	73498	63622	64112
2nd dose	22958	32429	56622	56092
3rd dose	19023	22935	39308	53244
Polio				
1st dose	43315	77849	63599	64260
2nd dose	24781	35175	56754	56220
3rd dose	19923	24523	39857	53298
BCG	35400	67266	62385	52627
Measles	12518	70473	53338	65406

4. Drop-out rate for DPT/Polio (relationship between 3rd dose & 1st dose) for children under 6 years has considerably dropped over the years as detailed below:-

<u>Yea</u> r	1st dose	3rd dose	Dropout-rate %
1981	40315	19023	53
1982	73498	22935	69
1983	63622	39308	38
1984	64112	53244	17

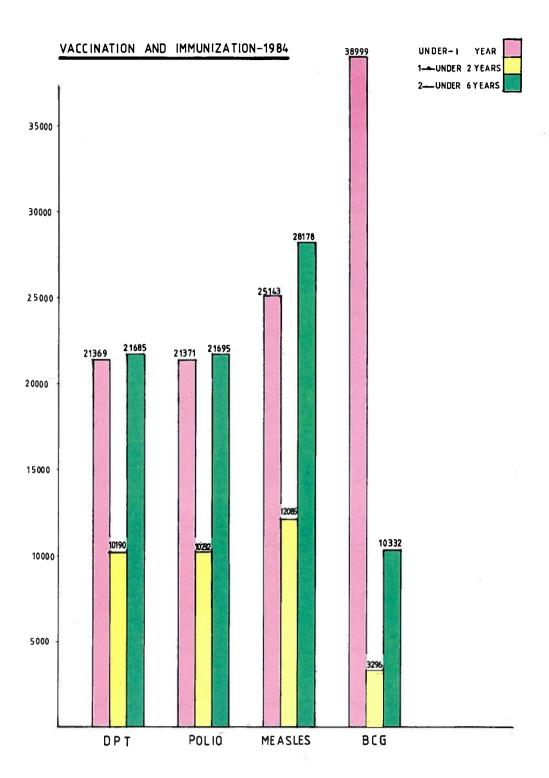
5. Immunization by age-groups carried out during 1984 are given below:-

	Age-groups	Estimated population	target	DPT	Polio	BCG	Measles
	Under 1 year	53000	1st dose	38718	38779	38999	25143
			2nd dose	27946	28021		
			3rd dose	21369	21371		
	1-5 years	212000	1st dose	25394	25481	13628	40263
			2nd dose	28146	28199		
			3rd dose	31875	31927		
			Booster	29002	29047		
	Total		1st dose	64112	64260	52627	65406
(	Under 6 years	265000	2nd dose	56092	56220		
			3rd dose	53244	53298		
			Booster	29002	29047		

6. Two doses of Tetanus Toxoid are given to all child-bearing age women. The statistics for 1983 & 1984 are as under:-

Year	Dose	Pregnant women	Other women	Total
1983	I	10255	21278	31533
	II	5423	10549	15972
1984	I	25732	78703	104435
	II	15114	15716	30830

7. A training course in EPI for the peripheral health workers and supervisors was organised in August 1984 in collaboration with UNICEF. During October 1984 a training course for interviewers of EPI/Control of Diarrhoeal Diseases survey was conducted in collaboration with WHO/UNICEF.



### 3.2 National Tuberculosis Control Programme

The two main activities of the Programme are chemotherapy for treating active cases and BCG vaccination for prevention. Following are the diagnostic activities for the year 1984:-

Number of sputum examined 13	,978
Number of new sputum positive cases	241
Number of X'rays taken 85	,422
Cases radiologically suggestive of Pulmonary Tuberculosis	767
Number of extra-pulmonary cases (mainly Lymphadenitis)	- 82
New cases put on treatment	843

(ii) Region-wise distribution of 843 new cases registered during 1984 is as under:-

Regions	Cases	Proportion
Capital Area	229	27.2
Batinah, Western Hajar & Buraimi	271	32.1
Sharqia, Jallaan & Sur	105	12.5
Interior & Dhahira	93	11.0
Musandam & Masirah	27	3.2
Southern Region	118	14.0
Total	843	100.0

(iii) Tuberculin tests were carried out by Chest Clinics at Ar-Rahma, Qaboos & Sohar hospitals besides by other institutions. A total of 3,521 tests were done during 1984 as detailed below:

Age-groups (years)	Tests done	Tests read	<u>Positi</u> Number	ve Proportion
0 - 5	1,215	991	79	8.0
6- 15	755	626	101	16.1
16 - 25	370	309	132	42.7
26 - 40	570	480	250	52.1
41 & over	611	500	181	36.2
Total	3,521	2,906	743	25.6

(iv) BCG vaccination as a part of Expanded Programme of Immunization was continued during 1984. Moreover 22,411 vaccination were carried out in various schools.

#### 3.3. PROGRAMME FOR PREVENTION OF BLINDNESS

The Programme for Prevention of Blindness was mooted in Oman in 1976 when assistance of World Health Organisation was requested to control the incidence of trachoma — the main cause of blindness. As per WHO recommendations, the Programme was started with the treatment of trachoma in the schools. During 1980-81 the total school population was treated but since 1982 the treatment is limited to new entrants in primary class-I. This trachoma treatment programme resulted in the decline in the incidence of the disease in schools from 80% in 1976 to 7% in 1983. Glaucoma, Cataract, Corneal ulcers & Trauma are other causes of blindness.

- 2. During 1984 in addition to treatment programme, other activities of the Prevention of Blindness Programme were introduced in the schools. The schools will be covered under community programme for which training of school health visitors started during the latter part of 1984. Six school health visitors trained so-far have started implementation of the programme in schools in Nizwa, Sohar, Saham, Sumail, Bahla, Sur & Samad. In the second stage of the programme, the activities are focussed on the community which is the reservoir of infection. Five training courses are already over since 1982 and the trainees are deployed in the community programme. The Programme has been planned to screen the total population of the country. To start with a pilot project has been established in four areas Nizwa, Hamrah, Rustaq & Masnah and each area has a Prevention of Blindness Unit.
- 3. Under the treatment programme of new entrants in primary class-I, 33,847 students were treated in 430 schools during 1984. Screening and Case Finding Programme in schools introduced in November 1984 which covered 14,579 children in 46 schools revealed 6,738 trachoma cases 4,692 mild, 1,497 moderate & severe & 549 thick lid. Under Community Programme 33,173 persons were screened in 175 villages with a population of 46,315. The screening revealed the following cases:-

Trachoma mild	-	-	-	-	-	-	-	-	-	-	-	-	-	-		12,474
Trachoma moderate & severe	-	-	=	-	-	-	-	-	-	-	-	-	-	-	-	3,165
Thick lid																
Trichiasis/Entropion																
Conjunctivitis																
Cataract	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	891
Glaucoma																
Corneal ulcers & scars	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,358

4. Besides treatment of cases following operations were carried out:-

Entropion																							
Electrolysis																							
Pterygium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
<b>Epilations</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6

5. The programme of Health Education was introduced in schools during last quarter of 1984. The Programme was carried out by UN Volunteer & Senior Sanitary Inspector in 17 schools.

### 3.4 MALARIA CONTROL PROGRAMME

The Malaria Control Programme was initiated in Sultanate of Oman in 1975 as a priority programme. It has since been applied progressively to cover the whole of Sultanate by establishing Malaria Control and Vector Control units. The incidence of the disease has been reduced as a result of Expanded Malaria Control operations. A Malaria Control Training Centre has also been established to train the health workers needed for the Programme.

(ii) During 1984, 198,585 blood slides were examined by hospitals/health centres yielding 19,511 malaria positive cases. The positivity rate was 9.8%. The Malaria Central Laboratory examined 29,794 slides yielding 2,221 positive cases with 7.5% positivity rate.

TABLE 3.4.1

Malaria Control Activities 1982 - 1984

Activities	1982	1983	1984
Villages covered	257	245	503
Total population of villages	78,799	132,218	204,545
Population covered	55,747	106,753	170,797
Percentage of population covered	70.7	80.7	83.5
Total number of houses	20,304	29,216	43,770
Houses sprayed	14,322	22,660	36,150
Percentage of houses sprayed	70.5	77.6	82.6
Area sprayed (sq.m)	4,132,521	7,789,963	12,267,260
DDT used (kgs)	9,847	20,088	32,755

TABLE 3.4.2

Blood Slides Examined for Malaria in Hospitals and Health Centres — 1984

Hospitals/	Blood-slides	Blood-slides	Positivity	Тур	e of malaria	parasite	found
Health Centres		found positive		Falciparium	Vivax	Malariae	More than one
Hospitals							
Khoula	3349	145	4.3	125	20	<u> </u>	_
Al-Nahdha	27,367	1685	6.2	1315	370	_	_
Ar-Rahma	13,745	490	3.6	375	115	_	_
Muscat	1796	79	4.4	60	19	_	_
Assada	3060	53	1.7	52	1	_	_
Ibn Sina	691	3	0.4	1	2	_	_
Ibra	12,893	3064	23.8	2762	302	-	<u> </u>
Sur	7941	451	5.7.	348	103	-	_
Sohar	6684	311	4.7	233	76	_	2
Rustaq	9721	718	7.4	675	43	_	_
Buraimi	6741	502	7.4	425	48	29	_
Tanam	12,294	1320	10.7	1278	42	-	-
Nizwa	10,537	824	7.8	705	119	–	_
Sumail	8310	1188	14.3	1167	21	–	_
Qaboos	4309	15	0.3	_	15	_	-
Health Centres						.85	
B.B.B. Ali	6784	560	8.3	316	243	_	1
B.B.B. Hassan	9662	1277	13.2	1067	206	-	4
Sinaw	6959	1178	16.9	676	502	-	_
Masirah	1205	69	5.7	4	65	-	_
Wadi Tayeen	6422	1175	18.3	1173	2	-	_
Quriyat	4887	343	7.0	328	15	-	_
Saham	7031	196	2.8	158	38	-	-
Bahla	5975	944	15.8	938	5	1	

Hospitals/	Blood-slides	Blood-slides	Positivity	Туре	of malaria	parasite f	ound
Health Centres	examined	found positive	rate (%)	Falciparium	Vivax	Malariae	More than one
Bukha	589	14	2.4	3	11	_	_
Baya	2571	212	8.2	55	157	_	_
Khasab	2185	176	8.1	137	36	_	3
W.B. Khalid	2217	58	2.6	58	_	_	_
W.B. Ghaffir	2792	615	22.0	606	9	_	_
Samad Alshaan	2455	567	23.1	547	20	_	
Wadi Sarami	872	209	24.0	209	_	_	-
Izki	4518	623	13.8	581	42	_	_
Duqum	981	129	13.1	18	111	_	<u> </u>
Haima	23	12	52.2	6	6	_	-
Wadi Jizzi	1019	306	30.0	300	6		
Grand Total	198,585	19,511	9.8	16,701	2,770	30	10

TABLE 3.4.3

Blood Slides Examined and Malaria Parasite Positivity Rate in Central Laboratory,
Malaria Eradication Department — 1984

3	<b>5</b> 1 1 11 1	D		Type of n	nalaria para	site found
Regions	Blood-slides examined	Blood-slides found positive	Positivity rate (%)	Falciparium	Vivax	Malariae
Capital Area	3540	193	5.5	193	_	
Al-Batinah	3324	135	4.1	133	2	_
Interior	5265	570	10.8	565	5	_
Eastern	6055	496	8.2	482	14	
Al-Dhahira	3176	320	10.1	317	3	-
Jalaan and Sur	3144	244	7.8	236	8	
Southern	1319	_	_	_	_	_
Al-Jau & Buraimi	1026	59	5.8	43	16	_
Western Hajar	1637	130	7.9	126	4	_
Eastern Hajar	1308	74	5.7	74	_	
Total	29,794	2221	7.5	2169	52	_

#### 3.5 THE NATIONAL CONTROL OF DIARRHOEAL DISEASES PROJECT (NCDD)

Diarrhoeal diseases is one of the major problems confronting the health administration in Oman. In a population of 1.5 million around 300,000 diarrhoea cases are reported annually in OPD clinics most of which are children. 10,000 of these children are admitted in hospitals. During the diarrhoea season in summer 20 to 40% admitted children suffer with diarrhoea. Diarrhoea accounts for 3,000 deaths annually among children under 5 years which are 25% of total deaths in children.

- 2. The committee on NCDD formulated objectives for NCDD programme in September 1984 resulting in the appointment of a Manager for the project. The targets of the project are:-
  - (i) Use of anti-diarrhoeal drugs would be totally eliminated by the end of 1985.
  - (ii) I.V. management will be reduced to 5% (for severe dehydration cases only) by the end of 1986.
  - (iii) Atleast 25% of health facilities will manage mild to moderate dehydration in OPD by the end of 1986. Thereafter the annual increase will be 25%.
  - (iv) To reduce diarrhoeal mortality by 50% by the end of 1989.
- 3. To start with a national survey to determine diarrhoeal morbidity & mortality was conducted in October 1984 with the assistance of WHO and UNICEF. The survey also included information regarding breast feeding, weaning foods, infant & child-hood mortality. The survey data is being analysed.
- 4. During November 1984, a supervisory skill course was held to train doctors & nurses from curative & preventive departments in diarrhoeal disease control. These trainees in turn train their staff in the regions. Moreover medical orderlies living in the villages and some drivers of Ministry of Health have also been trained. School teachers in some areas are being trained to teach children about Oral Rehydration Therapy (ORT). In due course all schools will be covered. Health workers under Ministry of Social Affairs working in rural areas have also been trained.

#### 4. MEDICAL EDUCATION AND TRAINING

The Medical Education and Training is the responsibility of Directorate of Education and Training. The functions of this Directorate include:-

- (i) Local training of para-medicals at Institute of Health Science.
- (ii) Local training of non-medical staff.
- (iii) Post-graduate training of doctors and nurses abroad.
- (iv) Foreign training of para-medicals and non-medical staff.
- 2. During 1984, 52 nurses qualified from Insitute of Health Sciences. The total enrollment at the Institute was 69 in General Nursing, 71 in Assistant Nursing and 28 in Medical Lab. Technician Course.
- 3. 45 medical and para-medical personnel and 8 non-medical personnel were sent abroad for studies/training during 1984. 33 para-medical and 102 non-medical personnel were trained locally during the same period.

TABLE 4.1

Output of Nurses from Arrhama Nursing School/Institute of Health Sciences

		students qualifie	
Years	Male	Female	Total
1972	5	_	5
1973	5	2	7
1975	7	8	15
1976	4	2	6
1977	2	7	9
1979	6	11	17
1980	1	8	9
1981	2	13	15
1982	3	14	17
1983	5	21	26
1984	13	39	52
Total	53	125	178

TABLE 4.2

Enrollment at Institute of Health Sciences — 1984

	Number of students enrolled										
Courses	Male	Female	Total								
General Nursing			-								
1st year	6	7	13								
2nd year	10	10	20								
Final year	12	24	36								
Assistant Nursing											
1st year	13	25	38								
Final year	12	21	33								
Medical Lab Technician											
1st year	7	6	13								
2nd year	2	5	7								
Final year	3	5	8								
Total	65	103	168								

TABLE 4.3

Medical/Para-medical and Non-medical Staff Trained 1980 - 1984

	Locally Train		Sent Abro	
Years	Medical and Paramedical	Non-medical	Medical and Paramedical	Non-medical
1980	24	15	23	2
1981	64	43	30	2
1982	_	52	40	4
1983	60	54	34	9
1984	33	102	45	8

#### 5. MEDICAL AND HEALTH PERSONNEL

At the end of 1984, Ministry of Health employed 7,788 persons — 4,856 medical and paramedicals and 2,932 non-medicals. The number of Omani workers was 4,252 which was 54.6% of the total staff. Though at present the percentage of Omani medical and para-medical workers available in health services is 41.2 but this proportion is progressing gradually. The opening of medical school in Sultan Qaboos University next year and expansion of training facilities in Institute of Health Sciences would result in replacing many expatriates.

TABLE 5.1

Medical and Health Personnel Employed Under Ministry of Health 1970 - 1984

								Number in										
	1970		1980			1981			1982		1983			1984				
Categories		Omanis	Expa- triates	Total	Omanis	Expa- triates	Total	Omanis	Expa- triates	Total	Omanis	Expa- triates	Total	Omanis	Expa- triates	Total		
Health Administrators/ Advisors	_	5	1	6	5	1	6	5	1	6	5	1	6	5	2	7		
Consultants	_	1	4	5	1	9	10	1	9	10	2	9	11	2	14	16		
Specialists	_	2	52	54	5	57	62	9	67	76	9	78	87	10	80	90		
Junior Specialists	_	4	38	42	5	44	49	4	46	50	4	50	54	1	56	57		
Medical Officers	1,3	23	164	187	24	197	221	26	217	243	30	277	307	30	372	402		
Dentists	_	4	9	13	4	9	13	5	9	14	6	16	22	7	16	23		
Pharmacists	_	3	6	9	4	9	13	2	13	15	2	14	16	2	16	18		
Nurses	2	86	771	857	117	908	1025	134	1030	1164	158	1228	1386	206	1547	1753		
Other para-medical staff	35	1083	401	1484	Not avai	lable	1773	1459	520	1979	1592	669	2261	1736	754	2490		
Total	50	1211	1446	2657	Not avai	lable	3172	1645	1912	3557	1808	2342	4150	1999	2857	4856		

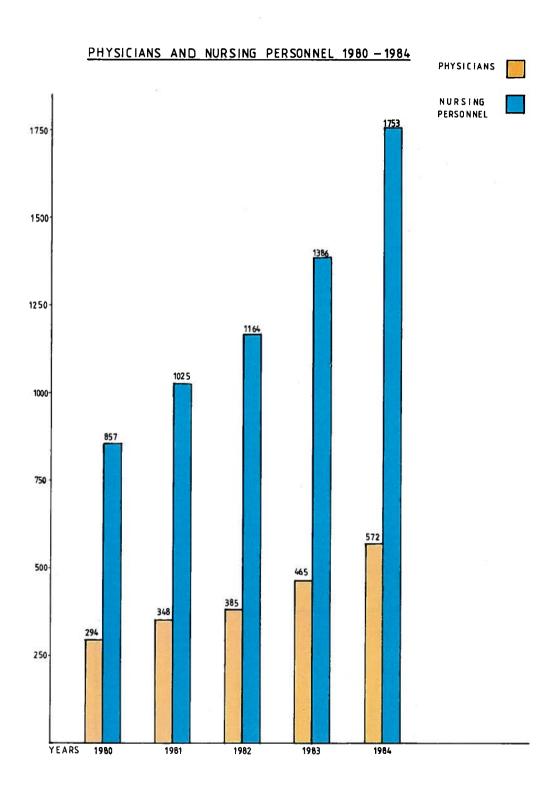


TABLE 5.2

Medical and Non-medical Staff Employed Under Ministry of Health — 31.12.1984

Categories		Omanis		Non-0	Omanis			Total		Percentage
Categories	Male	Female Total		Male Female		Total	·Male	Female	Total	of Omanis
Medical and para-medicals	1303	696	1999	1031	1826	2857	2334	2522	4856	41.2
Administrative staff	378	54	432	239	70	309	617	124	741	58.3
Professional/Technical Staff (non-medical)	763	47	810	296	9	305	1059	56	1115	72.6
Farrashs & others	820	191	1011	65		65	885	191	1076	94.0
Total	3264	988	4252	1631	1905	3536	4895	2893	7788	54.6
Percentage of total staff	41.9	12.7	54.6	20.9	24.5	45.4	62.9	37.1	100.0	_

TABLE 5.3

Medical and Para-medical Staff Employed Under Ministry of Health — 31.12.1984

Catagories		Omanis		Non-C	Omanis			Total		Percentage
Categories	Male	Female	Total	Male	Female	Total	Male	Female	Total	of Omanis
A—Doctors	37	11	48	371	153	524	408	164	572	8.4
(i) Administrative Doctors	5	_	5	_	_	_	5	_	5	100.0
(ii) Advisors (H. Affairs & Planning)	=	_		2	_	2	2	. —	2	_
(iii) Consultants	2	_	2	12	2	14	14	2	16	12.5
(iv) Sr. Specialists & Specialists	6	4	10	56	24	80	62	28	90	11.1
(v) Jr. Specialists	1	_	1	42	14	56	43	14	57	1.8
(vi) Physicians	23	7	30	259	113	372	282	120	402	7.5
B—Dentists	2	5	7	12 ,	4	16	14	9	23	30.4
C—Pharmacists	2	-	2	10	6	16	12	6	18	11.1
D—Nursing staff	87	119	206	102	1445	1547	189	1564	1753	11.8

	Categories		Omanis		Non-C	Omanis			Total		Percentage
	Categories	Male	Female	Total	Male	Female	Total	Male	Female	Total	of Omanis
	E—Other Para-medical Staff	1175	561	1736	536	218	754	1711	779	2490	69.7
	(i) Chemists & Asstt. Chemists	1	1	2	2	1	3	3	2	5	40.0
	(ii) Asstt. Pharmacists	5		5	30	7	37	35	7	42	11.9
1	(iii) Dispensers	9	_	9	47	6	53	56	6	62	14.5
- 79-	(iv) School Health Visitors	_	_	_	_	42	42		42	42	Nil
1	(v) Midwives	<u> </u>	1	1	_	53	53		54	54	1.9
	(vi) Health Assistants	15	_	15	91	2	93	106	2	108	13.9
	(vii) Medical Assistants	1	_	1	25	1	26	26	1	27	3.7
11.0	(viii) Sanitary Inspectors/ Supervisors	44		44	85	2	87	129	2	131	33.6
	(ix) Sanitary Assistants	224	12	236	4		4	228	12	240	98.3
	(x) Microbiologists/ Laboratory Technicians	18	3	21	111	55	166	129	58	187	11.2

	0.4		Omanis		0	Non-Omani	S		Total	· · · · · · · · · · · · · · · · · · ·	Percentage
	Categories	Male	Female	Total	Male	Female	Total	Male	Female	Total	of Omanis
(xi)	X-rays Technicians	_	_	_	27	1	28	27	1	28	_
(xii)	Radiographers	9		9	32	_	32	41	_	41	22.0
(xiii)	Dental Technicians	2		2	6	1	7	8	1	9	22.2
(xiv)	Physiotherapists/ Occupational Therapists	_	1	1	9	7	16	9	8	17	5.9
(xv)	Medical Orderlies	825	540	1365	36	25	61	861	565	1426	95.7
(xvi)	Others	22	3	25	31	15	46	53	18	71	35.2
Total		1303	696	1999	1031	1826	2857	2334	2522	4856	41.2
Percer	ntage of total staff	26.8	14.3	41.2	21.2	37.6	58.8	48.1	51.9	100.0	_

TABLE 5.4

Consultants and Specialists Employed Under Ministry of Health — 31.12.1984

Fields of speciality	Consultants	Senior Specialists	Specialists	Junior Specialists	Total
General Surgery	3	4	6	9	22
Orthopaedics	1	4	2	2	9
Plastic Surgery	1	_	_	_	1
Medicine	3	7	6	6	22
Paediatrics	2	4	7	8	21
Gynaecology/Obstetrics	1	3	10	4	18
Dermatology	_	2	1	1	4
ENT	1	1	1	2	5
Ophthalmology	_	2	6	5	13
Urology	_	1	_	1	2
Nephrology	1	_	_	1	2
Psychiatry	1	_	2	2	5
Neorology	1	_	_	_	1
Radiology	_	4	_	3	7
Anaesthesia	1	4	4	8	17
Pathology	_	1	- 4	_	5
Public Health		2	2	5	9
Total	16	39	51	57	163

TABLE 5.5

Total Medical/Health Personnel — 31.12.1984

	]	Number employed u	nder		Percentage
Categories	Ministry of Health	· 1 · 1		Total	of employees under Ministry of Health
·Doctors	572	84	293	949	60.3
Dentists	23	12	28	63	36.5
Pharmacists	18	15	115	148	12.2
Nursing Personnel	1753	91	260	2104	a 83.3

TABLE 5.6

Doctors & bed population ratios in certain countries

Countries	Year	Number of doctors	Doctors per 10,000 population	Number of beds	Population per bed
Oman	1984	949	6.33	2960	507
Bahrain	1980	363	9.97	1107	329
UAE	1981	1491	19.57	3260	234
Qatar	1981	186	7.50	733	338
Kuwait	1980	2335	17.17	5699	238
Saudi Arabia	1981	3576	3.84	14,451	645
Egypt	1981	53,342	12.27	86,898	500
Tunesia	1980	1728	2.72	13,571	469
Iraq	1981	7634	5.64	25,443	532
Iran	1981	15,182	3.86	61,443	640
Jordan	1981	1966	5.84	2735	1230
South Yemen	1980	258	1.31	2900	679
North Yemen	1981	896	1.51	3232	1838
Morocco	1981	1153	0.56	24,342	848
Syria	1981	4165	4.47	10,308	904
Libya	1981	4690	15.15	15,375	201
Bangladesh	1981	10,065	1.12	19,727	4545
India	1981	268,712	3.93	540,768	1265
Pakistan	1981	26,668	3.15	48,441	1746
Turkey	1981	28,411	6.13	97,765	474
USA	1980	414,916	18.23	1,333,360	171
Austria	1981	17,028	22.67	84,310	89
Greece	1981	24,724	25.47	59,914	162
Sweden	1980	18,300	22.02	123,074	68

Source: Annual World Statistics - 1983

### 6. HEALTH CARE PROVIDED BY OTHER DEPARTMENTS/ORGANISATIONS

Besides Ministry of Health, Ministry of Defence, Royal Oman Police and Petroleum Development Oman maintain many hospitals and clinics where curative and preventive care is provided to their employees and dependents. 366 private clinics and 90 pharmacies are also available throughout the country contributing significantly towards better health for the people of Oman.

TABLE 6.1

Health facilities under other Departments/Organisations — 31.12.1984

Facilities	Forces Medical Services	Royal Oman Police	Petroleum Development Oman	Total
Hospitals				
Number	2	1	1	4
Beds	110	50	22	182
Dispensaries				
Number	27	2	7	36
Beds	167	10	14	191
Beds reserved for		<b>]</b>		
Surgery	59	10	_	69
Medicine	51	12	17	80
Gyn. & Obs.	_	10	5	15
Paediatrics	_	10	_	10
Isolation	16	_		16
Unspecified	151	18	14	183
Total beds	277	60	36	373

TABLE 6.2

Medical and Para-medical Personnel Employed Under Other Departments/Organisations-31.12.1984

Categories		Forces Medical Services			Royal Oman Police		l .	oleum elopment in			Total	
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Specialists	3	_	3	4		4	_	_		7	_	7
Medical Officers	69	3	72	4	1	5	8	_	8	81	4	85
Dentists	11	_	11	1	_	1			_	12	_	12
Staff Nurses/Asstt. Nurses/ Public Health Nurses	14	53	67	10	14	24	21		21	45	67	112
Midwives			_	_	20	20	_	8	8	_	28	28
Health Assistants	_		_	_	_	_	7	_	7	7	_	7
Sanitary Inspectors	7		7	_	_		3	<u> </u>	3	10	_	10
Sanitary Assistants	7		7	_	_	_	3		3	10	_	10
Laboratory Technicians/ Asstt. Lab. Technicians	21	1	22	3	1	4	2	1	3	26	3	29
Radiographers	4	1	5	_	2	2	_	<u> </u>		4	3	7
X-rays Technicians/ Asstt. X-rays Technicians	9	_	9	2	_	2	_	1	1	11	1	12
Dental Technicians/ Asstt. Dental Technicians	23	1	24	2		2				25	1	26

Categories	Forces Medical Services		Royal Oman Police		Petroleum Development Oman			Total				
,	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Physiotherapists	2	1	3	_	1	1	_	1	1	2	3	5
Pharmacists	11	_	11	4	_	4	1	_	1	16		16
Assistant Pharmacists	1		1			_	2		2	3	_	3
Medical Orderlies	579	3	582	30	7	37	10		10	619	10	629
Others*	22	_	22	_		_		******	_	22	_	22
Grand Total	783	63	846	60	46	106	57	11	68	900	120	1020

<sup>\*</sup> ECG Technician —1, Refractionist —1, Dental Hygienists—9, Operation Theatre Technicians—6, and Operation Theatre Assistants—5.

TABLE 6.3

Hospital Statistics for Other Departments/Organisations — 1984

Activities	Forces Medical Services		Petroleum Development Oman	Total
Admissions	6613	2371	342	9326
Discharges	6531	2360	316	9207
Deaths	70	9	3	82
Patients treated in OPD	302602	55781	48031	406414
Major Operations done	98	183	-	281
Minor Operations	1318	480	31	1829

TABLE 6.4

Number of Clinics and Medical Personnel in Private Sector by Regions — 31.12.1984

				Number	of medical	personnel :	available
Regions	Number of clinics	Number of Pharmacies	Doctors	Dentists	Nursing personnel	Pharmacists	Other para- medicals
Capital Area	85	41	85	15	52	64	50
Al-Batinah	107	17	84	6	55	17	4
Interior	28	7	23	3	17	7	2
Eastern	42	5	28	1 ,	18	5	_
Al-Dhahira	22	8	21	1	12	9	2
Northern	_	1	_ ,	_	_	1	<u> </u>
Southern	17	11	16	2	13	11	10
Total	301	90	257	28	167	114	68
Employed with private companies	65	_	28		72	<u> </u>	
Grand Total	366	90	285	28	239	114	68

Note:- Other para-medical personnel consist of 26 Assistant Pharmacists, 3 Dispensers, 30 Laboratory Technicians, 2 Radiology Technicians, 6 Dental Technicians and 1 Bacteriologist.

TABLE 6.5 Health Activities of Private Clinics — 1984

Types of activity	Capital Area	Batinah & Western Hajar	Interior	Eastern & Eastern Hajar	Al-Dhahira	Southern	Total
Patients seen	183,378	256,019	51,989	105,402	37,006	30,106	663,900
Laboratory tests done	14,759	4,631	6	222	1,591	1,765	22,974
Minor operations carried out	590	623	177	208	161	224	1,983
Immunisation done	16	185	_	62	205	427	895
Patients referred to Hospitals and Health Centres	1,741	2,287	442	967	854	281	6,572
Health certificates issued	2,767	2,694	721	1,194	196	1,067	8,639

#### 7. FINANCES

For 1984, the Government budget for civil purpose was R.O. 1,018 million. The allocation for Ministry of Health was R.O. 81 million which accounts for 7.96% of the total Government budget. The details of Ministry of Health budget are:-

(a) Recurring expenditure (R.O. Million)

(i)	Salaries	26.52
(ii)	Other expenditure	19.11
	Total Recurring	45.63

(b) Development Expenditure 35.41
Grand Total 81.04

2. Recurring expenditure accounted for 56.3% of the Ministry's allocation while the share of development expenditure was 43.7%. Salaries accounted for 58.1% of the total recurring expenditure.

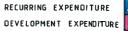
TABLE 7.1

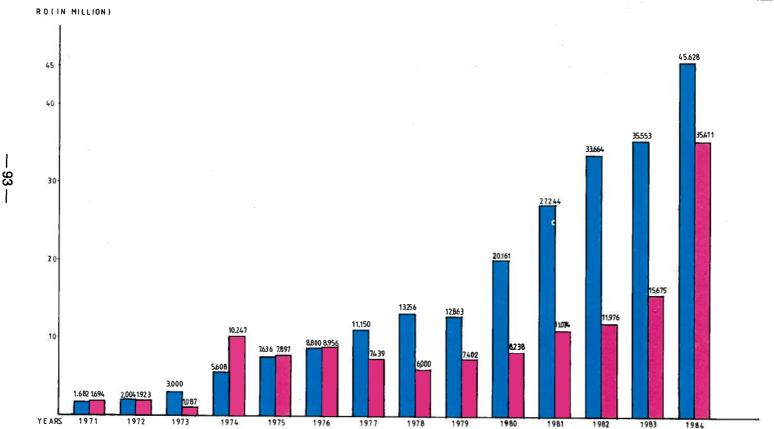
Budget — Ministry of Health 1971 - 1984

(in Million O.R.)

		Ministry of Health Budget	
Years	Recurring Expenditure	Development Expenditure	Total
1971	1.682	1.694	3.376
1972	2.004	1.923	3.927
1973	3.000	1.087	4.087
1974	5.608	10.247	15.855
1975	7.636	7.897	15.533
1976	8.800	8.956	17.756
1977	11.150	7.439	18.589
1978	13.256	6.000	19.256
1979	12.863	7.402	20.265
1980	20.161	8.238	28.399
1981	27.244	11.074	38.318
1982	33.664	11.976	45.640
1983	35.553	15.675	51.228
1984	45.628	35.411	81.039

# BUDGET-MINISTRY OF HEALTH 1971 - 1984





Regions	Hospitals	Health Centres	Mini-Health Centres	Mini-Maternity Centres	Dispensaries	Public Health Compounds	Public Health Units
Capital Area	Khoula Al-Nahdha Ar-Rahma Muscat Assada Ibn Sina	<u></u>		_	Seeb Al-Khodh Seh Dhabi		Seeb Seh Dhabi
Eastern	Ibra Sur	B.B.B. Ali B.B.B. Hassan Sinaw Masirah Wadi Tayeen Quriyat	Wadi Bani Khalid Samad Alshaan Duqum		Kamil Wafi Aiga Al-Dareez Mintrib Tiwi Mudhaibi		Wadi Tayeen Duqum Qumaila B.B.B. Hassan B.B.B. Ali Mudhayrib Tiwi Wadi Bani Khalid Masirah

1941

Regions	Hospitals	Health Centres	Mini-Health Centres	Mini-Maternity Centres	Dispensaries	Public Health Compounds	Public Health Units
					Mudhayrib Ruwais Al-Hajj Al-Dhahir Qumaila Ras al-Had Al-Suwaih Al-Ashkara Dagmar Mazara Siya Hailghaf		Samad Alshaan Kamil Sur Quriyat Siya Al-Ashkara Mazara
Batinah	Sohar Rustaq	Saham Masnah	Wadi Bani Ghaffir Wadi Sarami	Haibi	Suwaiq Birka Abu Baqra Shinas Khabura	Saham	Sohar Rustaq Al-Hoqein Wadi Sarami Wadi Bani Ghaffir Wadi Sahtan

**- 95 -**

#### Annexure-B

Regions	Hospitals	Health Centres	Mini-Health Centres	Mini-Maternity Centres	Dispensaries	Public Health Compounds	Public Health Units
					Afi Al-Hoqein Wadi Sahtan Awabi Nakhal Liwa Wadi Shafan		Wadi Shafan Birka Liwa
Al-Dhahira	Buraimi Tanam	_	Wadi Jizzi	Yankul Mahdha	Dhank Ibri Hajeermat Al-Mamoora Muqinat	Buraimi	Dhank Tanam (Head office)
Interior	Nizwa Sumail	Bahla	Izki Haima	_	Saiq Fanja Al-Hamra Manah Adam	Nizwa Sumail	Bahla Al-Hamra Izki Wadi Mehram

**- 96 -**

Regions	Hospitals	Health Centres	Mini-Health Centres	Mini-Maternity Centres	Dispensaries	Public Health Compounds	Public Health Units
					Al-Ghafat Barkat Al Mouz Wadi Mehram Wadi Bani Ruwaha Mamur		
Southern (Dhofar)	Qaboos		Tawi Attair	_	Sheleem Taqah Mirbat Sudh Thumrait Mudhai Dhalqut Hasik Rakhyut Kuria-Muria Al-Kahal Sharbitat	Salalah	Sudh Qeiron Heiriti Tawi Attair Jib Jat Madinat al Haq

-97 -

## ANNEXURE - B

Regions	Hospitals	Health Centres	Mini-Health Centres	Mini-Maternity Centres	Dispensaries	Public Health Compounds	Public Health Units
					Umbushaq Liqbi Makinat-Shaham Port Raysut Khadrafi Haighaf Qeiron Heiriti Jib Jat Ghadow Soghara Shahab Assaib		
Northern	_	Bukha Baya Khasab		Madha	Lima		Khasab Lima
Total	15	12	9	4	74	5	40

Note: There are two MCH Centres in Muttrah & Darseit, both in Capital Area