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HISTORY OF MEDICINE

Central Hospital of Abu Dhabi: Forty Years of Service to the Community (1968-2008)

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Abstract

In 2008, the "Central Hospital" of Abu Dhabi closed, bringing to an end a long period of service to that community. The site was completely demolished, allowing room for further developments of Sheikh Khalifa Medical City. For 40 years, Abu Dhabi "Central Hospital" had been the main health center for the multi-ethnic community of Abu Dhabi. It was the seed for the local health care system, and its staff made significant health care and academic contributions, particularly in the field of nephrology, infectious disease, and emergency medicine. Its academic contributions were remarkable, relative to its modest facilities. This history note aims to commemorate the life and contributions of this small, yet pioneering, institution to the health services, medical education, and research in the capital of this new nation. It gives an opportunity to pay tribute to all those who served in it at any stage of their career.

Key words: History of Medicine, Abu Dhabi, United Arab Emirates, Central Hospital, Nephrology.

Introduction

On Thursday, 7th of February, 2008, the emergency department of what was known as "The Central Hospital of Abu Dhabi" was closed. Prior to this, the remaining activity of the renal unit was transferred to the nearby Medical Pavilion (formerly known as Al Jazeera Hospital) of Sheikh Khalifa Medical City (SKMC). With the closure of its last remaining two departments, emergency and dialysis, Central Hospital of Abu Dhabi ceased to exist (1). Soon after its closure, the building was demolished, bringing to end an era in the history of the health care in Abu Dhabi (2). This article aims to commemorate this institution and its contribution to the welfare and health of the multiethnic community of Abu Dhabi over four decades. It is based on personal observations, personal communications, and local and international literature. It is an opportunity to pay

tribute to all those who served in this hospital at any stage of their career.

A Short History of Abu Dhabi

Abu Dhabi is the largest of the constituents of the United Arab Emirates. Its population suffered severe hardships with the decline of the pearling industry in the 1930's. As

the twentieth century unfolded, Abu Dhabi was one of the poorest emirates (Figure 1a). Indeed, until 1959, no schools or hospitals were built in Abu Dhabi under the British influence. When its economy was revived by the discovery of oil, the country was transformed from a land of desert inhabited by nomadic bedouin tribes, fishing villages, and date farms, into a wealthy state that is embracing every

Table 1. The early government and private hospitals in the Emirate of Abu Dhabi in chronological order in each category.			
Institution	Opening date	Comments	
Government:			
Central Hospital	1968	General hospital	
Al Jimmy Hospital (Al-Ain)	1970	General Hospital	
Al-Corniche Hospital.	1973	Maternity hospital	
Al Jazeera Hospital	1978	General Hospital ^a	
Mafraq Hospital	1978	General Hospital	
Twam Hospital	1979	Tertiary Referral Center ^b	
Private:			
New Medical Center	1973	General Hospital	
Al-Salama Hospital ^c	1979	General Hospital	
Dar Ashifaa Hospital.	1982	General Hospital	
Alahlia Hospital.	1984	General Hospital	
Al-Noor Hospital.	1985	General Hospital	
Special:			
Oasis Hospital ^d	1960	Maternity hospital	

a. Central and Al-Jazeera was working as a composite unit, though their activities were reported separately as two integral units in the ministry of health statistical reports. b. Tawam is the seat for clinical staff of the only medical school in the Emirate of Abu Dhabi. C. Opened initially under a different name (Mafraq Medical Center) in the Baniyas Area and moved later and changed its name to the current. d. See text for details of the special status of this hospital.

Table 2. The chronology of early developments of military health care services' centres and hospitals in the United Arab Emirates.				
Opening	Institution and Comments			
1966	Health Centre (clinic) in Abu Dhabi for outpatients services only			
1969	Small Hospital 10 beds, 1 doctor and 10 nurses			
1971	Field Hospital 1, Al-Ain			
1975	The Military Hospital, Abu Dhabi, at the Al- Nahyan Barracks			
1978	Field Hospital 2, Sharjah			
1979	Zayed Military Hospital, Abu Dhabi; fully-equipped modern hospital			
1984	Falah Modern Hospital, Sharjah, fully-equipped modern hospital.			

development in all aspects of modern life (Figure 1b). These included the development of schools, the establishment of colleges and universities, and the building of modern health care facilities. The developments in the early days were modest, but have improved exponentially (3).

The Early Days of Abu Dhabi Central Hospital

Oil exports from Abu Dhabi began in 1962. The ruler at that time, Sheikh Shakhbut Bin Sultan Al Nahyan (Figure 2a) (1905-1989) reigned over Abu Dhabi between 1928 and 1966. Being uncertain whether new oil royalties would last, he took a cautious approach, preferring to save revenue

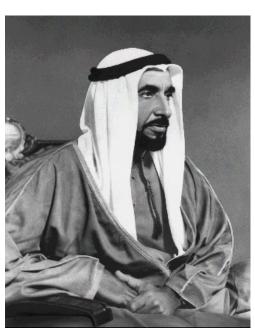




1b

Figure 1. A view of Abu Dhabi just over 40 years ago showing Alhoson Palace of the ruler with some of the main buildings such as British High Commissioner's residence surrounded by vast desert compared with the view now (1b) with the sky line crowded with high towers. (Public domain photos).





2b

Figure 2. The two Abu Dhabi Sheikhs who were involved in the establishment of the central hospital. Sheikh Shakhbut (2a) agreed to the idea in principle, and Sheikh Zayed (Figure 2b) undertook its implementation. (Public domain photos).

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rather than investing it in new development (4,5). Despite this, he agreed in 1964 to build a hospital, two schools, a few housing complexes, a police station, and a few other buildings. Unfortunately, due to a dispute between Sheikh Shakhbut and the company's representative, the ready-made hospital material stayed in its containers, two kilometers away from the city centre (6). The Sheikh reportedly thought the contract entailed that the company

was supposed to import the pre-fabricated hospital and build it. Conversely, the company interpreted its role in the contract as limited only to the provision of the hospital building material. Therefore, it was not until 1968 that the work was completed.

The new ruler, Sheikh Zayed Bin Sultan Al Nahyan (Figure 2b) (1918-2004) took over from his brother peacefully in





Figure 3. The famous main entrance of the emergency department (3a) and the location on Google Earth showing the old hospital huts (accessed on 13.2011).





Figure 4. Two old photos representing the daily life at the central hospital. The upper shows the old 'Ward Huts' with patients being moved by wheel chair with a nurse; another nurse making some notes, and visitors or relatives. The old name of "Abu Dhabi Hospital" can be seen. The lower photos show the management team of the health services in action. (Courtesy of Abu Rakan, Abu Dhabi).

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1966, and sped up the process (Figures 3, 4). The newly appointed director of Abu Dhabi Health, a British physician. in a TV interview and in his own memoirs years later, explained how important Sheikh Zayed was to the speedy completion of the hospital (7-8). "I remember when I first arrived, there weren't any dedicated hospitals but instead the then ruler had generously arranged for pre-fabricated huts to be provided to us, which were limiting in terms of allowing us to treat patients... but after Shaikh Zayed Bin Sultan Al Nahyan became the ruler, he gave instructions for better facilities to be established, including Tawam Hospital, which was completed in 1977," said Dr Philip Horniblow OBE, who was Director of Health in Abu Dhabi between 1967 and 1971 "I remember that one of the challenges we faced was making sure that everyone was vaccinated against smallpox, which was the last outbreak of the disease in the world... after vaccinating, we would give patients a certificate and some believed that having the certificate alone was enough to ward off the disease so we had to make sure that they really were vaccinated." He continued, It is noteworthy that Horniblow himself is not a stranger to Arabia as he was an ex-SAS agent in Yemen as it was revealed later and his father was personal school friend of TE Lawrence (of Arabia) and on his recommendation. The Horniblow senior was invited to treat Prince Fisal.

"The Central Hospital" was the only hospital serving the community of the Abu Dhabi central area until more government hospitals were developed (Table 1). The military health services expanded progressively over the years, and offered care to military personnel and their immediate family members (Table 2). The new Sheikh Khalifa Medical Center (SKMC) opened in 2000 as a tertiary referral center with particular interest in cardiac sciences. Al-Jazeera, Central, and the SKMC were all "amalgamated" in 2005 to form the new Shiekh Khalifa Medical City (maintaining the same acronym SKMC). Of historical interest, the Chief Executive Officer of SKMC in his address celebrating the 10th anniversary of SKMC (center), recognized the opening of the Central Hospital over forty years earlier as the true start of the SKMC City. Through the years, increasing members of private establishments have developed additions such as Al-Noor Hospital, mainly preferred by the Arab expatriates, and New Medical Center, mainly preferred by Asian expatriates, to offer medical care for both the local and expatriate populations (Table 1).

Clinical Services

Central hospital began with 50 beds and expanded progressively. In its heyday, all specialties were represented

(10-20). It had a busy emergency department to which a high dependency unit was later added. It had its own lab and x-ray facilities. It had a busy clinical life and staffing level. However, clinical activities decreased over the later years of its existence (Table 3). Even after the opening of Al Jazeera Hospital in 1978, services continued to be developed and expanded in the central hospital. Its activities continued to be reported as an independent entity (Table 3). Intentions and plans of closure of the central hospital were first discussed in 2003. In 2005, it was absorbed into SKMC by the newly formed (General Authority of Health Services (GAHS), which took over the role of the Ministry of Health in the Emirate of Abu Dhabi.

Academic Life

In addition to its busy clinical workload for many years, being the oldest hospital (or the only government hospital) in the capital for such a long time meant that it had to include teaching, training and research roles. Published work resulting from this period (21-59) are summarized in Table 4. Many young Emirati doctors recall spending time at the Central hospital as elective students, and as young doctors in training later. Some young expatriate doctors spent time there before later developing lucrative careers in the West. With the introduction of the new schemes of continuous medical education, one can see major contributions from its staff before or after merging with Al-Jazeera Hospital. Many major national and regional medical events were organized by the Central's staff. Perhaps the most remarkable have been the number of publications produced by the Nephrology Department.

Notable Professionals

Many people are notable for their contributions to this clinical and academic life. Some of the work reported here has predictably been conducted in collaboration with other institutions. It is noteworthy that a high proportion have been published in renowned international journals such as the Lancet, American Journal of Hypertension and Transplant proceedings, in addition to regional journals. In recognition of these clinical and academic achievements, many of the senior staff have been honoured at the national level, and were awarded Fellowships in Western professional associations. Perhaps the most notable has been Dr. Avinash Pingle, FRCP. He practiced as a renal physician between 1971-2005. He appeared on 2001's Top 50 NRI in the world list, and won the Hamdan award in 2006 for his work in UAE. Dr. Shaukat Ali Chowdhry, a paediatrician from Karactchi, is thought to have been the

Attribute/ Activity	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bed capacity:										
Number of beds	374	477	477	200	200	200	184	165	151	130
Bed occupancy (%)	52.2	52.2	68.2	86.5	99.6	91	100	79	81	84
Average LOS (days)	10.84	13.7	14.1	9.4	9.0	10.2	14.5	8.6	7.6	9.5
Outpatient (OPD)	activities:									
Total OPD visits:	222,265	217451	225,212	225,993	247,624	186,645	179,248	185,927	189,064	185,708
New OPD visits:	173,586	168,133	174,221	180,645	188,512	140,145	137,614	148,616	153,866	148,511
F/U OPD visits	48679	49,218	50,991	45,348	59,112	46,500	41,634	37,311	35,198	36,197
Admissions	6,573	6,956	7,313	6,708	8,052	6,466	5,602	5,546	5,098	4,215
Stay days	71264	95,225	102,741	63,164	72,694	65,742	81,377	47,542	44,594	40,036
Operations	2,040	2,165	2,241	1,972	2,083	1,934	2,162	1,776	521	0
Blood transfusions	:									
Number of units:	-	3,143	3,051	3,393	3080	3091	2832	2733	1673	1338
Benefiting patients	-	1,702	1805	2,043	1975	1851	2028	1825	1299	1131
Deaths	146	175	149	152	150	130	130	148	59	20
Staffing levels:										
Total number of staff:	758	715	751	776	705	570	690	640	622	622
Doctors										
Consultants:	6	5	3	6	4	5	5	3	4	4
Specialists:	3	3	3	2	3	4	4	6	7	7
Practitioners:	47	51	48	49	49	18	138	52	53	53
Pharmacists (assistants)	2(16)	2(14)	2(14)	2(14)	3(14)	4(0)	4(5)	4(9)	4(8)	4(8)
Nurses (assistants)	245(51)	228(44)	272(55)	263 (68)	245(60)	212(45)	211(45)	242(41)	258(50)	258(50)
Technicians (assistants)	42(62)	43(61)	45(61)	49(61)	42(49)	36(42)	34(38)	48(45)	51(51)	51(53)

^{*} Based on the reports published in the annual statistical reports of the UAE Ministry of health (1995-2004). Derived from references 10-20

Table 4. Summary of the academic activities in central hospital over the years*				
Subject	Descriptive Summary	References		
Ethics	Classification of the issues related to e ethical dilemmas concerning the commerce in live donor renal transplantation and an Islamic viewpoint of organ transplantation.	21,22		
Genetics and Immunology	The relevance of HLA A,B,C, matching on graft survival, patient survival, and graft function in living related renal transplant patients treated with cyclosporine. Association study between the ANF gene and hypertension and studies of deletion polymorphism in the angiotensin-converting enzyme gene and hypertension.	23-25		
Epidemiology	Prevalence and characteristics of hypertension and treatment of end-stage renal failure in the UAE. Renal transplantation in UAE and mortality among recipients of bought living-unrelated donor kidneys. Data from the UAE renal diseases registry on analysis of 490 kidney biopsies.	26-34		
Surgery and Gynecology	Several case reports on giant hydronephrosis; obstructive vaginal angiomyoma and endometriosis as an unusual cause of obstruction in duplex ureters, unilateral diffuse xanthogranulomatous pyelonephritis. perforation of superior vena cava by subclavian haemodialysis access cannula and unique arterial collaterals in the presence of renal and aortic occlusions. Evaluation of the impact of catheter design on preventing CAPD complications	35-43		
Infectious disease	Studies of the prevalence of hepatitis C virus infection among dialysis patients and prevalence and management of hepatitis B after renal transplantation in UAE. Evaluation of the safe use of acyclovir (Zovirax) in renal transplant patients on cyclosporine A therapy.	44-46		
Clinical Medicine	Reports on Cyclosporine monotherapy versus conventional therapy in the renal transplant. Reversibility of captopril-induced renal insufficiency after prolonged use in an unusual case of renovascular hypertension. Studies on Cyclosporine dosage according to pharmacokinetic profiles suggesting better graft and patient survival rates and a decrease in cyclosporine consumption. The status of anaemia, ferritin, and vitamins in continuous ambulatory peritoneal dialysis. Peritonitis as a limiting factor in use of CAPD in developing countries. Testing if the new rHuEPO alpha (epoetin) in the management of anemia of end-stage renal disease in patients on maintenance haemodialysis Erythropoietin and plasmapheresis in highly sensitized patients. Pharmacokinetics of cyclosporine in renal transplant patients on Diltiazem. Impact of renal transplantation on liver disease of diverse etiology. Studies of factors responsible for elimination of potential kidney donors in a living-related donor kidney transplant program. Comparison of three 2.5-liter exchange vs. four 2-liter exchange in CAPD.	47-59		

Based on published research work from Central Hospital solely or in collaboration with other institutions. Corresponding references are given in parentheses (21-59).





5b

Figure 5, The site of the central hospital cordoned off for demolition (5a). The management team of SKMC is seen inspecting the demolition team starting the work (5b) on Thursday 28 June 2008. (Courtesy of the Public Relations and Media, Sheikh Khalifa Medical City).

longest practicing physician (39 years beginning in 1967) when he retired. Dr. Nazir M. Kazi, FRCS, who practiced between 1971 and 1993, is writing an accompanying commentary, a personal account in the same issue of the journal (60).

Closure of a Hospital and the End of an Era

In the new millennium, it became obvious that the Central hospital as it stood could no longer undertake the expected role of a tertiary referral center. Therefore, medical services were progressively transferred to nearby Al-Jazeera Hospital and the new Sheikh Khalifa Medical Center. The hospital remained fully operational until five years prior to its closure. The role of the last functioning department was assumed by "Khalidiyah Urgent Care Centre," an ultramodern facility, which opened February 7 as one of several of its kind to be established around the City. The Renal Unit was relocated to a newly renovated ward in the Medical Pavilion. Demolition of the central hospital started soon after its closure (61).

The "Hospital of the People": Memories and Sentiments

The multiethnic population of Abu Dhabi developed an emotional attachment to the hospital. Many people recalled having had an operation (most likely a tonsillectomy as a child or an appendectomy as an adult), being taken to its accident and emergency unit after an accident, or even giving birth there before the opening of the Corniche Hospital. The hospital was featured in the news on many occasions when the injured or deceased were brought to its accident unit mortuary. A curious but interesting

observation could be of symbolic meaning. Brochures announcing the closure of the Central's emergency department giving a classification of cases and best venues that can be served were printed. These were made available in Arabic, Bengali, Urdu, English, Malayalam, and Tagalog languages. The production of such a brochure in so many languages (probably for the first time in this manner) reflects the role played by this institution in serving the multiethnic expatriate community in Abu Dhabi. Today, four years after the closure and complete demolition of The Central Hospital of Abu Dhabi, many signs posted directing to "The Central Hospital" may still be seen in Abu Dhabi City center. Perhaps it is a reminder that will remain in the memory of Abu Dhabi residents for many years to come.

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