

Re: Acute Coronary Syndrome, Diabetes and Hypertension

Oman must pay more attention to chronic non-communicable diseases

رد على: متلازمة الشريان التاجي ومرض السكري
وارتفاع ضغط الدم
على عمان أن تولي اهتماماً أكبر للأمراض المزمنة غير المعدية

Sir,

I read, with great interest, the editorial article written by Prof. Lamk Al-Lamki in the August 2011 issue of SQUJ, on Acute Coronary Syndrome, Diabetes and Hypertension.¹ Dr. Al-Lamki reported in his article that the Ministry of Health (MOH), Oman, needs to sort out its priorities and give more attention to the management of chronic non-communicable diseases (NCD's). He imperatively called the Ministry to invest a significant portion of its finance and manpower to control and reduce the prevalence of diabetes mellitus and hypertension (HTN) as well as other chronic NCD's. As he indicated, three other articles in the same issue of the journal showed that diabetes and HTN, the two major factors predisposing to acute coronary syndrome, were clearly being sub-optimally managed in Oman.²⁻⁴ I am afraid to say that these articles, collectively, have participated in giving SQUJ readers the erroneous impression that the MOH is reluctant in fulfilling its duty to reduce the magnitude of NCD's in Oman.

Moreover, in the last few years, other published reports have conveyed the same picture and mentioned a drastic increase in the prevalence of diabetes and HTN in Oman.⁵⁻⁷ Nonetheless, in the light of the available valid statistical information collected over the last 15–20 years from hospitals and the community, the MOH's continuous efforts to face the double burden of both communicable diseases and NCD's in Oman have been proven, so the picture is not as black as many may think. Table 1 contains some data from MOH institutions that show that outpatient morbidity due to NCD's has shown instability in the period 1996 to 2010. They represented 42.5% of total outpatient morbidity in 1996, then increased to 53.2% in 2000, and rose again to 54.6% in 2005, before it dropping sharply to 39.5% in 2010. Regarding inpatient morbidity, NCD's have represented a more or less a stable proportion of cases during the last 15 years; however, there was an overall decline from 37.4% in 1995 to 36.8% in 2010.

Data from different successive national surveys conducted in Oman in the last two decades are shown in Table 2 and reveal a marginal increase (2.3%) in the prevalence of diabetes over the last 18 years (1991–2008). During the same period, the prevalence of HTN increased from 27% in the year 1991 to 40.3% in 2008, with a rate of increase of 2.25% annually. However, the rate of increase of HTN prevalence during the period 2000–2008 was only 0.57% per annum. Such a remarkable reduction in the rate of increase of HTN prevalence indicates that successful preventive measures have been adopted during the last decade. In addition, it should be remembered that in the 1990s and early 2000s, a large proportion of the people with high blood glucose levels and high blood pressure were not known about. Accordingly, the statistics likely reflect more the success in case detection than an increase in the prevalence of diabetes and HTN. This success in control of the two most important NCD's in the country should be attributed largely to the efforts of MOH in increasing public awareness about various causes of these health sapping diseases and engaging health-related sectors and the entire community in activities that cover all the various aspects necessary for

Table 1: Outpatient and inpatient morbidity due to communicable and non-communicable diseases in Oman (1995–2010)⁸

	Percentage of total Outpatient morbidity				Percentage of total Inpatient morbidity			
	1996	2000	2005	2010	1995	2000	2005	2010
Communicable diseases	43.2	34.2	35.1	30.4	22.6	20.9	17.3	18.0
Non-communicable diseases	42.5	53.2	54.6	39.5	37.4	40.5	39.8	36.8

Table 2: Prevalence of diabetes mellitus and hypertension in Oman

Survey/Year	Prevalence of Diabetes mellitus	Prevalence of Hypertension
National Diabetes mellitus Survey, 1991	10% ⁹	-
National Blood Pressure Survey, 1991	-	27% ¹⁰
National Health Survey, 2000	11.6% ¹¹	38.3% ¹² (age-adjusted prevalence)
World Health Survey, 2008	12.3% ¹³	40.3% ¹³

the nurturing of a healthy community.

There is no doubt that Prof. Al-Lamki's call for more and better specialised centres and modern medications and equipment should be supported and advocated by all. The MOH, if it has the financial resources to respond to these demands, should do so immediately. However, management of chronic cases is costly, especially at the advanced stages, and that is why preventive strategies, including primary prevention, early diagnosis and treatment, are always given priority.

The challenge faced by the MOH in Oman, was to deliver interventions which could promote behavioural changes in the population, and to disseminate such changes nationally. Accordingly, the MOH has focused heavily, since 1991, on health promotion activities through the various health programmes incorporated in its successive five-year health development plans. Health planners have focused on meeting public demand for specialised health facilities and services by providing curative clinical services to all governorates of Oman at the health centre level. Mini diabetes clinics, run by family physicians on specific days of the week, have now been established in most health centres. The Ministry of Health has ensured the availability of Arabic-speaking diabetes specialists in every governorate of Oman. Diabetes and hypertension management guidelines for doctors and nurses have been developed by the MOH and distributed to all doctors and nurses. Most of these activities were planned in harmony with international and regional policies and strategies such as the *WHO Global Strategy for the Prevention and Control of Chronic Diseases* (2000), the *Eastern Mediterranean Approach to Non-Communicable Diseases – EMAN* (2001), the *Framework Convention for Tobacco Control* (2003), and the *Global Strategy on Diet, Physical Activity, and Health* (2004).

It is worth mentioning that the MOH started to encourage the implementation of various community-based activities and projects planned by community volunteers and Wilayat (district) Health Committees starting from 1991 and 1998 respectively. The community-based projects focused mainly on health promotion activities to raise awareness among healthy people of the risk factors for chronic diseases including diabetes and HTN. Efforts were specially exerted to impart health promotion among school students as well as throughout adulthood. These projects also included campaigns for the early detection of both diseases, as many people are unaware that they have a high blood glucose level or high blood pressure and thus remained undiagnosed for too long. Through such projects, the benefits of medication and lifestyle modification were directly communicated to patients and the public, in order to prevent diabetes and HTN, or to manage them as early and effectively as possible.

All of these activities are documented, advocated and appreciated by all concerned inside and outside Oman. What is really lacking in order to convey the bright picture to the public of the MOH's efforts in combatting NCDs is a proper studying of Oman's health status during the period of "epidemiologic transition"

that started in Oman 20 years ago. Clearly, what we need now is more foundational information about the epidemiology of NCD's, their distribution, and the consequences of them in the community. Such information must be used not only to plan, but also to properly manage and evaluate past and current national health programmes and community-based projects.

Obviously, the epidemiological surveillance and response capacity of the MOH in Oman must be further strengthened, by the provision of a sufficient number of trained epidemiologists, the support of modern and efficient public health laboratories and use of information technology. Also, a greater level of interaction is needed between MOH epidemiologists and social researchers for uncovering, in a multi-disciplinary way, social, cultural, economic, environmental, and ecological health determinants in the Omani community. Such an approach will enable us move beyond health problems *per se* to a new set of complex social and human developmental challenges, and then, through the use of the principles of epidemiology and of social sciences, we can together formulate effective national strategies and health programmes.

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