

# Colorectal Cancer Epidemiology and Trends from 2008 to 2016 of the Cases Registered in Government Hospital, United Arab Emirates

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## Abstract

To aim of the research is to study the incidence rates, time trends and socio-demographic associated factors of colorectal cancer among patients registered in Dubai hospital for the period 2008-2016, to study some. There was about 1.4 million new cases around the world of colorectal cancer (CRC) and almost 700 000 deaths in 2012. The distribution of CRC burden varies, with more than two-thirds of all cases and about 60% of all deaths occurring in

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## Introduction

International medical literature shows that about 1.4 million new cases of colorectal cancer (CRC) are reported with around 700,000 deaths worldwide in 2012. Colorectal cancer distribution and burdens showed a wide variety, almost two-thirds of all cases or even as well as 60% of all deaths are taking place in b b s o 61 s r r infection-related cancers in countries went through rapid societal and economic changes. Along with other cancers predominantly linked to western lifestyles [2-4].

Recent observation shows declining trends in incidence in high-income countries. Trends appear as partially

reflect, increased early detection and prevention through polypectomy (at least in the SA). In addition to all factors that have brought about declines in incidence, improvements in perioperative care, as well as chemotherapy and radiotherapy, may cause uniformly decreasing trends in CRC mortality in many high-income settings [5,6].

With the temporal profiles and demographic projections in mind, the studies revealed that the global burden of CRC is anticipated to increase by 60% counting for 2.2 million new cases and 1.1 million cancer deaths by 2030. Identifying the present profile of CRC is well understood to be the major reason behind morbidity and increasing mortality rate worldwide. The western world lifestyle like Australia, New Zealand, USA, Canada, and other European countries are identified to be reflecting the major portion of Colon cancer diagnosis and deaths. Yet lifestyles in other countries such as China, India, Africa

and South America stayed at the lowest risks in case of colon cancer [7-10].

Colon cancer remains first in male's gender and third in females in Saudi Arabia among all other cancers. KSA is currently recognized to be with a low incidence rate in case of Colon cancer; nonetheless, it has been shown that over the last ten years the number of Colon cancer identified and registered and the mortality rates due to CRC has been increasing significantly. Older persons aged 75 years or more are more prone to this cancer [11-14].

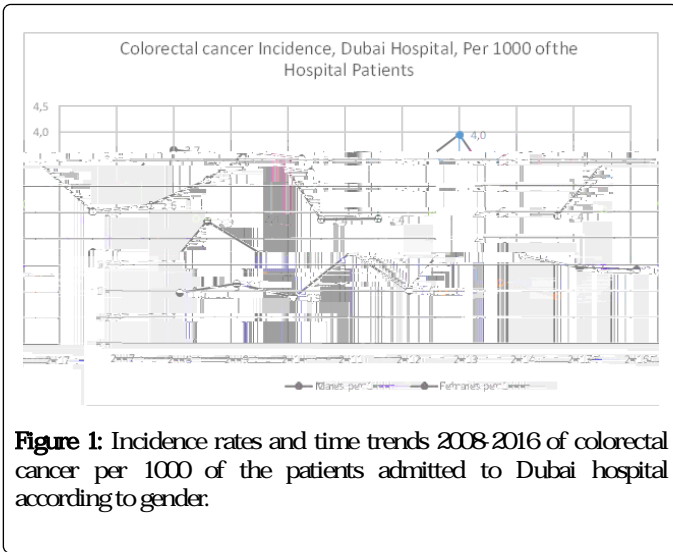
## Methodology

Hospital based cancer registry and records in Dubai Hospital for the period 2008-2016 has been revised. All cases were confirmed and treated in Dubai hospital. All ages, genders and nationalities were included.

Incidence varied from year to year. The incidence among males was 2.4 per 1000 in 2008, 3.5 per 1000 in 2010, and then decreased to 2.5 per 1000 in 2011. It became 4.0 per 1000 in 2014 and finally decreased to 2.4 per 1000 in 2016. On the other hand, the incidence was lower among female, which was 1.0 per 1000 in 2008, and increased to 1.7 per 1000 in 2011, 2.3 per 1000 in 2013, and decreased to 1.4 per 1000 in 2016. Among Emirati, incidence was 0.9 per 1000 in 2008. There was no increase as the incidence was also 0.9 per 1000 in 2016. Among non-Emirati, the incidence was 2.2 per 1000 in 2008, reached 4.4 per 1000 in 2013, and dropped again to 2.6 per 1000 in 2016.

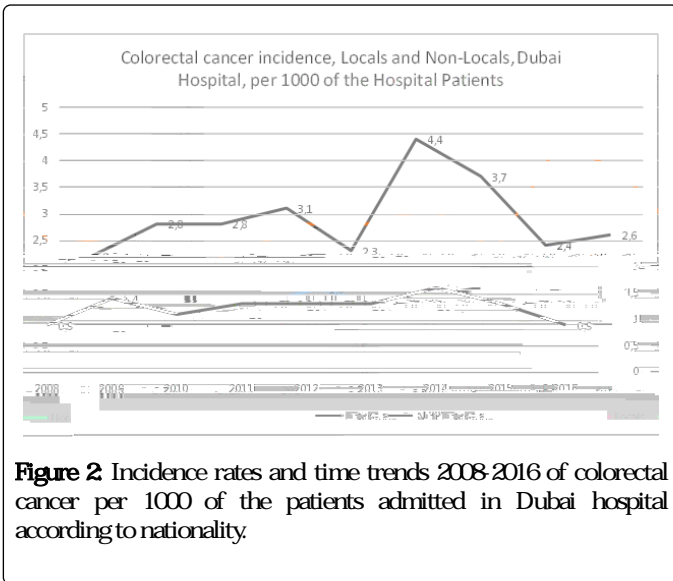
## Results

Figure 1 shows the incidence rates of colorectal cancer cases registered in Dubai hospital per 1000 of the registered patients from 2008 to 2016.



**Figure 1:** Incidence rates and time trends 2008-2016 of colorectal cancer per 1000 of the patients admitted to Dubai hospital according to gender.

Figure 2 shows incidence according to nationality. Among Emarati, incidence was 0.9 per 1000 in 2008. There was no increase as the incidence was also 0.9 per 1000 in 2016. Among non-Emirati, the incidence was 2.2 per 1000 in 2008, reached 4.4 per 1000 in 2013, and dropped again to 2.6 per 1000 in 2016.



**Figure 2:** Incidence rates and time trends 2008-2016 of colorectal cancer per 1000 of the patients admitted in Dubai hospital according to nationality.

Figure 3 shows the incidence of colorectal cancer among non-locals. Among males, the incidence was 3.0 per 1000 in 2008, 5.6 per 1000 in 2010, 2.8 per 1000 in 2011, 5.3 per 1000 in 2014, and 3.5 per 1000 in 2016.

the Arab Countries age-standardized rate (ASR)=25.59 According to GLOBOCAN (2012), Jordan had the second place for the incidence of CRC after Palestine. As study done by Ismail et al. in Jordan revealed that Colorectal was the most common cancer in Jordanian males from 1996 to 2009 [18]. In Saudi Arabia and Yemen, studies have reported a higher proportion of male to female in patients with CRC. In contrast