

## Burden of cancer: An Indian Perspective

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### The Changing Prevalence of Cancer in the World

Over the last 2 decades, there has been a continuous transition in the global burden of disease among the low and middle income countries. This effect is in consequence to the changes in the global demographic. According to the 2014 World Health Organization report on non-communicable disease, cancer closely follows cardio-vascular disease and is the second most common cause of death worldwide, accounting for 9 million deaths annually (Forouzanfar et al., 2016). The increased incidence of cancer is associated with increased mortality and morbidity in both developed and developing countries.

The International Agency for Research on Cancer GLOBOCAN project 2012 has reported that the incidence of cancer in India is likely to double in the next two decades and approximately 1.7 million new cases would be reported by 2035 (Ferlay et al., 2014; Jacques et al., 2015). The anticipated rise in new cancer cases will be closely followed by increase in cancer related deaths (D'souza, Murthy Ns Fau- Aras, & Aras).

These numbers are expected to rise further as a cumulative result of increased life expectancy, increase in the number of geriatric patients, increasing population size and the lack of nationwide screening programs as well as changes in lifestyle due to increased urbanization and improper dietary habits. The most common cancers in India are breast, cervix and lung cancer (Mallath et al., 2014). The shift towards a westernized lifestyle among the urban female population puts them at a higher risk for developing breast cancer (Notani, 2001). In addition to lifestyle modification, there are other attributable factors as well such as early menarche, late age at first birth, nulliparity, late age at menopause, smoking or exposure to second hand smoke, alcohol consumption and increased intake of red meat (Rao, Ganesh B Fau - Desai, & Desai; Reddy, 2004). Multiple studies across the globe have successfully shown the beneficial effects of breast self-examination as a screening tool for breast cancer (Rao et al.; Reddy, 2004). However, the lack of knowledge among patients is a major cause for the ever increasing numbers of breast cancer (Takiar, Nadayil, & Nandakumar, 2010).

A large proportion of cervical cancer patients in India are diagnosed at advanced stages; when a cure is difficult if not impossible (Mishra, Pimple, & Shastri, 2011). The lack of regular cervical cytology examinations among women who are sexually active

combined with the lack of screening tools and awareness in conjugation with having intercourse at a young age, multiple sexual partners, high-risk sexual behavior, poor sexual hygiene and repeated child births, all contribute to the incidence of the cervical cancer (Mishra et al., 2011). This could partly be mitigated by intense health education in the community and by provision of the screening modalities (Basu & Chowdhury, 2009).

India is the second largest tobacco consumer in the world and follows closely behind china in production and consumption of tobacco. India faces a unique problem with tobacco due to the large variety in tobacco consumption techniques, both in the form of smoking and smokeless. Among the age group of 15-19 years, 57% of males and 11% of females consume tobacco in some form or the other (Mishra, Pimple, & Shastri, 2012). The primary factors associated with increased lung cancer incidence in India include increased tobacco smoking combined with the duration of smoking and a significant increase in the number of people starting to smoke at a young age.

There is an urgent need to control and better manage cancer in India by improving and prioritizing cancer screening and treatment at national, regional and district levels (Mallath et al., 2014). India needs to plan and develop measures to control cancer by first creating pathways for accurate estimation of cancer incidence.

The National Cancer Control Program of India should strategize the importance of early screening into the peripheral health facilities. Public health programs should emphasize the importance of reducing the consumption of tobacco in any form, and help increase healthcare delivery and access to areas of need. Well directed spending and improvement of public policy should be a priority for India. The national health mission has shown great promise in areas of reproductive health; and this should be used as a foundation for delivering quality health throughout the country (Thakur J Fau - Thakur).

### Rastriya Swasthya Bima Yojana

The introduction of insurance schemes such as Rashtriya Swasthya Bima Yojna (RSBY) (Rout Sk Fau-Rout, Sahu Ks Fau-Sahu, Swain S Fau-Swain, & Pati S Fau-Pati) and other similar initiatives that help prevent financial toxicity among the poor patients, are the necessary small steps that need to be taken in order to achieve the goal of affordable universal health coverage.

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