The month of March is dedicated to Colon Cancer Awareness. Worldwide, colorectal cancer (CRC) incidence has been on the rise. It is currently the third most common cancer in men (746,000 cases, 10.0% of the total) and the second in women (614,000 cases, 9.2% of the total). A recent meta-analysis reported a 61% risk reduction in CRC incidence with colonoscopy. Unlike screening programs for breast and prostate cancers, not only has CRC screening reduced mortality from colon cancer and detected early CRC, it has also decreased the incidence of CRC through detection and removal of pre-cancerous lesions. Studies have shown that screening for colorectal cancer provided 152 to 313 life-years-gained (LYG) per 1000 forty-year-old individuals.

A number of modalities exist for CRC screening, which can broadly be categorized into stool-based tests and direct visualization tests. Stool-based tests include fecal occult blood testing (FOBT), fecal immunochemical testing (FIT) and stool DNA testing. Direct visualization tests include endoscopic procedures such as colonoscopy and flexible sigmoidoscopy; and radiographic tests such as CT colonography, which has largely replaced air contrast barium enemas.

The only reported population-based data for CRC in Pakistan comes from Bhurgri et al. in 2011. It described Pakistan as a low risk region with an age standardized incidence rate (ASR) world per 100,000 of 7.1 in males and 5.2 in females, but with a much younger age and advanced stage at diagnosis. The ratio for individuals diagnosed with CRC under the age of 40, as oppose to over 40 years, was 3:1, which is much higher than the international average. Noteworthy as well, is an increase in incidence especially among men, noted between the study periods of 1995-1997 and 1997-2002. It ranks 7th in incidence among males, and 8th among females, with tobacco related malignancies topping the list. There has since been additional cross-sectional data from Pakistan echoing these findings of a younger age and advanced disease at presentation.

Speaking from a public health perspective, Pakistan, while still battling communicable diseases, is now seeing an increasing incidence of non-communicable diseases, including cancer. Lambert et al. in 2009 wrote that population-based screening programs for CRC were not justified in most developing countries, citing low reported incidence and low resource health authorities; but that in limited regions with an ageing population and a shift to Western lifestyle, organized screening strategies needed to be developed. This can well be extrapolated to large urban centers in Pakistan.

In a resource poor, conservative country like Pakistan, with poor health literacy, there exist many barriers to CRC screening which were summed up very articulately by Ahmed F in 2013. Quite appropriately, areas identified for further pursuit included, among others, the training of gastroenterologists, especially female ones, less expensive and more culturally acceptable screening options, and cost-effectiveness analyses.

The recipe for any cancer screening program to be successful, begins with epidemiological data to document disease burden. There has not been any population-based cancer registry to report incidence data for the past few years. There is also no centralized cancer registry to effectively unify and coordinate data from across the country. Furthermore, even with a cancer registry there is no mandated reporting of malignancies from a health policy standpoint, as exists in the more developed world. The last population-based data we have for CRC was for cases reported until 2002, and there was already an increase in incidence noted in less than a decade, starting in 1995.

Health awareness is another important factor. There is no data from Pakistan regarding patient or physician awareness regarding colon cancer. If one is to extrapolate, a cross-sectional study on breast cancer awareness, for which Pakistan demonstrates one of the highest incidences worldwide, reported that a mammogram had been performed in only 4.9 % of women in the cohort, while 61.5 % of the remainder had never even heard about it.

It is also unclear if we have the infrastructure including endoscopy centers and adequate numbers of gastroenterologists to service the population at large. FOBT is available and cheap, but there is no data regarding the availability of FIT or stool DNA testing. In the absence of health insurance, it will certainly be a challenge to make CRC screening widely accessible.

At what point does a disease warrant attention? While we may not have the luxury or the immediate necessity to introduce mass population-based CRC screening, we can certainly start with individual screening in...
populations who are at high risk of colorectal cancer due to family history and have adequate access to healthcare. There should be a concerted drive to revitalize cancer registration in order to guide health policy and to have an effective national cancer control program. Awareness programs are also needed to be established for the public and, specifically, for physicians as well.

REFERENCES