

**Colorectal Cancer in Pakistan: Is prevention possible?**

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*Dear Madam,* Among malignancies, colorectal cancer (CRC) has the third- largest incidence Globally.<sup>1</sup> Even though Pakistan is considered as a low-risk area, in 2018, Idrees et al. reported a 4% to 6.8% incidence.<sup>2</sup> This number is itself significant considering that underreporting remains a grave problem. The aetiology of CRC is vastly based on genetics, but is dietary intake is another major factor to consider.

A 2017 meta-analysis shows that the inflammatory extent of diet, measured by the Dietary Inflammation Index, is associated with a 40% increased risk of CRC.<sup>3</sup> Evidence suggests that a diet rich in proinflammatory foods like proteins and fats affects gut microbiota, increases metabolite formation and enhances the risk of CRC. On the contrary, the increased fibre in the diet is shown to have anti-inflammatory effects and reduce this risk.<sup>4</sup>

Due to our constraints in resources, healthcare facilities must use aforementioned knowledge to tackle the disease at all fronts. First degree relatives of CRC patients and high-risk individuals can be counselled about life style and dietary modifications at family healthcare facilities. They should be provided with a complete list of foods containing the above-mentioned components. This is especially important in the red-meat consuming areas of Northern Pakistan. This approach of prevention before treatment surpasses the major limitation of costly screening procedures and can be a great benchmark for mass campaigns. A good foundation for our campaigns can be established by taking notes from the CDC's Screen for Life organization (SFL). In September 2018, through their search engine marketing and digital advertising efforts, SFL garnered more than 360 million impressions and 2 million clicks to web pages.<sup>5</sup> Similar avenues need to be explored

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in Pakistan to reach the general public. Raising awareness about CRC, the related lifestyle changes and pro-inflammatory foods can be achieved through pamphlets, advertisements, and social media platforms. Funding from such campaigns can also aid further research into CRC, specific to the Pakistani community. The aim should be to promote a more centred knowledge of risk factors prevalent in our society and target them.

Considering the inaccessibility of screening methods, this approach of modifying dietary intake in first degree relatives leaves much room to be explored and has a potential to be a cost-effective solution. Further research on this approach, centred on the Pakistani population, is required.

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