Cancer Care in “Covid” Times—Indian Solutions to Universal Problems

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“When we confront a problem, we begin to solve it...”
Rudy Giuliani

The present corona pandemic has indeed shaken the world, and a major paradigm shift in health care is imminent in the very near future. Like any other viral illness and in this case with even more deadlier outcomes, we are compelled in to revisiting the whole concept of health care, hygiene and social distancing. The values that were deeply embedded in our ancient culture are resurfacing now while rest of the world is busy re-inventing the wheel. It was always believed in this part of the world that preventing a disease is the best cure for it. And the key lay in a healthier and cleaner way of life. This could be seen as a part of our day to day activity in the form of regular hand wash and the ways we still greet each other. There was always a strong emphasis on issues like respect for the environment, the dietary habits (emphasis on vegetarianism, no alcohol etc.) and emphasis on simple living. India has a rich tradition of Yoga that has very deep roots as an Indian way of life. The word “Yog or Yoga” essentially means union with “mother nature” and is believed to have been started by sage Patanjali thousands of years ago [1–3].

It has got refined and redefined over centuries as an established scientific “way” of life. The technique has a unique power to alleviate pain, sorrow and stimulate healing by encouraging the learner in to working with his/her senses and intellect. By improving the immune system and stimulating release of endorphins, yoga has been shown to not only

help improve feeling of well-being but also better response to various diseases and their therapies [1].

There is now enough scientific evidence to highlight the benefits of yoga. Yoga postures and asanas help in exercising every muscle, nerve and gland in the body. The subtle movements help in addressing the tension that is holding and blocking energy in any organ or system. With the release of tension, energy can flow more freely leading to a sense of well-being and increasing the strength of body, mind and spirit [1–3].

Cancer in in the Light of Corona Pandemic

The fall outs of this pandemic have hugely impacted the care of other patients especially those with cancer. Majority of resources (human as well as material) have been diverted to Corona care and suddenly one is completely at a loss regarding management of these stranded cancer patients. The impact has been more in developing countries like India with limited health resources.

The Indian Problem

Recent estimates of incidence and mortality indicate that more than a million new cases of cancer were detected leading to nearly 700,000 deaths in 2018 alone. The principal factors for the rise in incidence being changes in lifestyle and increase in stress levels increased awareness leading to more cases getting diagnosed and rise in certain cancers associated with tobacco abuse like oral or lung cancer. It is estimated that in approximately 20 years’ time, the number of annual cancer deaths will increase from about six million to ten million. With these alarming statistics, cancer is expected to gather pace and soon will also become an epidemic in India. India may soon become the cancer capital of the world [4].

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Cancers of the oral cavity, lungs oesophagus etc. are more common in Indian males while cervix and breast are the most common sites in females. Indian patients have also been observed to have different genomics making Indian cancer unique in certain aspects. With more data emerging after analysis of the profile and outcome in Indian patients, it is being understood that unique biological behaviour of cancer will require a different approach. This discovery is going to be a game changer making mandatory the finding of “Indian solutions to Indian problems”.

There are some general observations pertaining to certain Indian cancers. For example, unlike in the west, breast cancer in India has two peaks. The first one affecting women in 30s and 40s (mostly the triple negative breast cancer). This younger age cancer has been found to be relatively more aggressive and more advanced at presentation thus making a woman vulnerable—socially, psychologically and financially. [5–7]

Cost of Cancer Care in India?

The recent National Sample Survey (NSS), 75th round (July 2017–June 2018) has revealed alarming pictures. At national level, average total cancer care expenditure was around Rs 116,218. In private hospitals, the total cost of cancer care was estimated to be Rs 141,774, whereas it was comparatively lower at Rs 72,092 in public hospitals. Further, there is an unequal state wise distribution of overall cost of cancer care. Another important feature that needs to be highlighted is the percentage share of medical and non-medical expenditure. About 90% of the total cancer care expenses relate to medical care, and 10% are on non-medical services including transportation of the family members and food etc. A recent report on cancer care in India states that the cost of chronic illness, especially cancer is much higher than that of communicable diseases [8–11].

It is not just the therapy, but the entire process of first arriving at the diagnosis that leads to an enormous cost with a multimodality approach being used. And, once the diagnosis is made, patients often require a combination of therapies making the cost prohibitive. With high cost, compliance is low. Insurance has really made it possible to implement the best care practices in the West; India needs to go that way [8–11].

A more disturbing aspect of cancer care expenditure in India is high out-of-pocket expenditure (OOP) which includes direct payments made to the health care providers for the services used, and it excludes any prepayment in the form of taxes or specific insurance premiums. Approximately, 93% of all cancer care expenses were met through out-of-pocket expenditure in 2017–2018. Another important cause for the spiralling cost of cancer care in India is that more than 70% of the latest technology, and devices are imported from

abroad. A linear accelerator, used in radiation therapy, costs up to Rs 15 crores plus an import duty of around 1 crore. The cost of a PET-CT machine ranges from 3 to 6 crores. Of the entire gamut of drugs used in cancer care, very few are manufactured in India with great variation in the prices of various drug formulations. There is a need to make amendments in the regulatory guidelines by the government so that the prices of both the branded and generic anti-cancer drugs can be brought down [8–11].

The major road block of financial resources can also be tackled with the support of equity investors. EMI scheme (monthly instalments) for the patients who cannot afford to pay at one go should be useful and must start. It is a collective responsibility of the government and healthcare professionals to ensure that no cancer patient is deprived of quality treatment because of financial constraints [11].

For a Selected Few by a Selected Few

Considerable variations in cancer care expenditure between public and private healthcare facilities are another matter of concern. For an average patient afflicted with cancer in India, health care remains highly privatized, with more than 80% of outpatient care and 40% of inpatient care provided by the private sector [8, 11].

The government has definitely made attempts to bridge this gap by establishing 22 Regional Cancer Centres (RCCs) under National Cancer Control Programme, 325 tele-therapy units, 113 remote brachytherapy machines and development of oncology wings in government institutions, but considering the burgeoning number of cancer cases, it will never be enough. The spectrum of contrasting healthcare is likely to widen further, likely to present even more complexity in future [5–11].

Do We Have some Indian Solutions?

The ancient Indian way of life has been found to be of great benefit in ensuring a healthier lifestyle and preventing diseases like cancer. There is evidence to suggest that growth of tumours and other indicators increases with chronic stress which takes away the function of “killer cells” that are responsible for our defences. This also makes us more vulnerable to the growth and spread of tumours. [1]

Integrative oncology is fast becoming an integral part of cancer care, and yoga forms the most important part of it. There is now ample evidence to support that yoga takes care of mood disturbance and distress in cancer patients, which goes a long way in to improving compliance and also response to therapy. A lot has been done and is being done in the field, but we need to do more to find “Indian solutions” for the rest

of the world. This would address the “grey zone” or the “third space” of oncology, and yoga can be an important tool in our hands [1–3].

So, maybe India can take a lead and teach the world about judicious use of resources and integrating it with a holistic approach towards health through traditional yogic wisdom. It is time to rediscover the healing of the past and put it in to a new pattern with technology to make it easier and affordable.

Indian Guidelines for Cancer

Author was actively involved in the making of Association of Breast Surgeons Of India (ABSI) guidelines that were closest to finding an Indian solution for the entire developing world and also the western world where one is waking up to the cause and concept of optimizing the health care expenditure [11]. There are in addition the Indian Council of Medical Research (ICMR) guidelines for various cancers. Reducing the burden even in the poorest settings is firstly a matter of prevention, and this is where India may have a lead role to play. Revival of a glorious tradition of public health which mentions “Arogya” as “holistic well-being” has been implemented and is working for the benefit of the masses. This can effectively work for the rest of the world too. Prevention is better than cure, and cost effectiveness lies in spending resources in preventive health care and training health care workers into yoga [1, 7–10].

Screening in India

It is well known that a less complex and cost-effective management can cure cancers that are detected at an early stage. While in the West, mammographic screening has been found

Fig. 1 The Urobag zipper laparostomy. A cheap and inexpensive solution being patented by the author

Fig. 2 The zipper applied

to be instrumental in reducing mortality in breast cancer; in India, the tumour size (average T size being 4 cm) and younger age are factors to be taken in to consideration. Clinical breast examination and greater awareness have emerged as the only options available to reduce the T-size. Author has also worked for a feasible option for screening in India using dermatoglyphics (finger print analysis) and concluded that this might prove to be an anatomical, non-invasive, inexpensive and effective screening tool in the high-risk population. Although the results of this ongoing study are encouraging, this would be too early to say that we have found answers on our finger tips [12].

Making the Interventions less Expensive

Finding new ways to combat the problem must be an important endeavour for health care providers. There are various cheaper Indian options at reducing the cost of management of cancer in limited resources setting that can work as global solutions. Author has successfully been using simple, easily

Fig. 3 Superglue for preventing peristomal skin erosions

Fig. 4 Outcome of use of superglue after 3 weeks

available and inexpensive Liga clips to mark the tumour in locally advanced breast cancer (LABC) before initiating them on neoadjuvant chemotherapy instead of fancy and expensive markers. While addressing the axilla, methods like low axillary sampling recommended by the Tata Memorial Hospital group and blue dye alone methods or “targeted” four-node sampling as performed by the author can be a simple, reliable and cost-effective approach while addressing node negative axilla of breast cancer patients in countries where high-end facilities, such as gamma camera and isotope studies, are scarce [13–20].

The author has been using urobag zipper laparostomy for nearly two decades now for patients with burst abdomen following laparotomy for cancer. Author has also pioneered the management of peristomal erosion by using a relatively inexpensive superglue that can be used globally instead of expensive creams thus reducing the care of these chronically ill cancer patients with any form of stomas (Figs. 1, 2, 3, and 4) [17–19].

This world is truly a global village now, and we have no choice but to share it with all. The lessons learnt from this unfortunate pandemic should not be forgotten. The ancient Indian wisdom borne out of the sacred Upanishads “Vasudheva Kutubhkam or The whole world is a family” should guide us all in order to create one world where we all can live as one family. As soon as we truly commit to making something happen, the “how” will reveal itself. In the end, our reality can only be as good as our intentions.

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