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Effectively using primary care givers in oncology care through capacity building, task sharing and techno-mentoring

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Background

The major challenge faced by cancer patients in developing economies today is access to care and for the health system is non-availability of qualified personnel. Governments are keen to offer universal health coverage but are in need of sustainable systems. Besides social issues of acceptance and financial challenges patients also face a dilemma of locating a nearest cancer care centre.

Healthcare systems all over the world are based on administrative and geographical divisions within which the district hospital based system is the most prevalent. In it, the primary point of contact is a general duty medical officer, who serves as the sole frontline soldier of healthcare. One such novel healthcare delivery system "techno-mentoring" which falls under the existing Pendharkar model of healthcare delivery empowers these medical officers (1). This is a unique design that is currently operational in several states of India.

Methods

General duty medical officers and nurses from government district hospitals are trained in oncology for one month. Their training includes learning administrative responsibilities like teaching peers, restructuring wards to ensure optimal care of cancer patients. All trainees have 24x7 access to mentorship and expert advice through WhatsApp®, telephonic communication and via continuing medical education (**Figure1**). Furthermore, the pharmacies at these designated hospitals are also equipped to distribute essential oncology drugs.

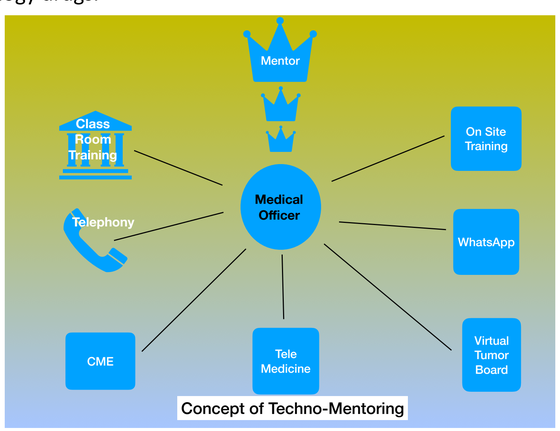

Figure1. - *Overview of techno-mentoring program*

Results

- A district hospital centred cancer care programme has been initiated in seven states of India, about 20 % of the Nation's districts constituting 176 hospitals **(Table 1)**.
- Each district hospital has a nodal cancer care unit headed by a cancer officer and deputised by a nurse in charge to oversee and administer cancer care at the centre.
- These trainees provide assistance, conduct counselling and navigation to patients through all stages of cancer care. They are also trained to deliver chemotherapy and follow up care including end of life palliative services.
- All patients hence have a major advantage to continue treatment at their local hospital with no obligation to travel distances for cancer care. In addition, it also ensures standard of care with full compliance without drilling a hole in the pocket.
- This refreshing change in healthcare delivery system has not only empowered local medical staff but also has allowed the government to bring previously inaccessible and expensive cancer care within reach of patients.
- Results of a survey conducted for patients from one of the enrolled states suggested that patients were completely satisfied with this new district centric model of cancer care and were determined to continue follow-up treatment within the district (2).
- This unique system of cancer care delivery gained momentum since and is in action currently in six more states across India catering to nearly 300 million people in total.

Table 1. - *Number of enrolled districts and area covered*

State	No. of districts trained	Size of the districts (Area in 000'Sq Km)	Population of the districts(in million)
Madhya Pradesh	51	308252	81.40
Odisha	30	155707	45.59
Himachal	11	055673	7.10
Rajasthan	33	342239	74.80
Bihar	16	033580	38.74
Uttar Pradesh	17	062107	70.81
Gujarat	18	081756	35.84
Total	176	1,039,314	354.28

Cancer unit in Khordha, Odisha

Public education session in Una, Himanchal

Bedside teaching in Ujjain, Madhya Pradesh

Roles being played by the Medical Officer

- Counseling at every stage of care
- Navigation through all cycles of care
- Assistance in diagnostics
- Manage referral system
- Offer chemotherapy services.
- Conduct post treatment / survivorship follow up.
- Offer palliative and supportive care.
- Participate in public awareness of cancer.
- Educate professional peers about cancer treatment.
- Educate/enroll patients in existing government health schemes
- Create and manage cancer patient database (Registry)

Conclusion

- Local government administered district hospitals which are most frequently visited by the majority of population should be the pillars of public healthcare delivery models.
- Primary care physicians form the core of healthcare delivery and can be effectively empowered to offer specialised cancer care in government-run facilities locally.
- Overall, decentralizing cancer care using existing human and financial resources is crucial. This can be achieved by sharing tasks and building capacity using "techno-mentoring".
- This model (Pendharkar model of healthcare delivery) is highly sustainable and is easily replicable worldwide especially in nations struggling to provide cancer care due to inaccessibility and lack of manpower

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References

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