

# Telemedicine

## An Emerging Powerful Tool in Public Health and Health Care Delivery

### Telemedicine Program in AIIMS Bhopal

Earliest form of Telemedicine was health & medical advises received in letters, newspapers, radio & telephone. Today doctors equipped with modern diagnostic gadgetry & molecular laboratories can also become avid users of high end Information Technology. Current usage of **Information Technology** by medical profession is meager. Outreach health care delivery and health parameter monitoring can be enhanced several folds by investing into IT hardware & Software, institutions creating the system for its best exploitation and individual health care provider developing a mindset to use IT for public health & medical practice.

Telemedicine can be extensively used for knowledge exchange, quick access, tele-teaching (*webinars*), tele-diagnostics, tele-consultation, tele-treatment & e-prescriptions. Telemedicine can also be used for health survey. Verbal tools will be required for data collection and health risk monitoring can be done efficiently, if added with GPRS.

The strengths of Telemedicine in India are availability of highly accomplished existing human resource in Information Technology and already established satellite & Fibre Optic cable coverage in India. Strong software platform for telemedicine that should include payment issues, call filter, quality control, call distribution, data storage and conflict minimization needs to be developed. The bigger challenge however, is to develop systems within the existing hospitals & medical colleges. The advocacy of telemedicine to convince the role model doctors and health care providers to take out that little extra time and effort to acquaint with the modern gadgetry of Information Technology is paramount to make Telemedicine a popular modality of health care delivery. It is the objective of this paper to sensitize the public health professionals and doctors that modern Information Technology has a great deal to offer that will enrich and complement the existing health care practices.

Telemedicine bridges the distance gap, It is available at the instance of the press of a button, it can be accessed by people in the most remote corner of the world. It is the ready reckoner of knowledge, data and a competent specialist. If combined with picture and image transmission (*video conferencing*) it is virtual consultation. Tender delivery by an experienced doctor who is also a good communicator can eliminate the void of touch & feel physical examination to a great extent. It will be a U-turn to good old clinical medicine using verbal tools and developing clinical prediction rules. Video consultation can be supplemented by on-site presence of a paramedical personnel or doctor.

The telemedicine shall soon emerge at least as useful as the ATM of the banks. The current perceived threat by the physician and poor physician response to take telemedicine seriously can be overcome by continued advocacy, efficient connectivity, online payment of services, voice based popularity (*like Amin Sayani*). Availability of the hardware in the physician's own clinic/office will go a long way to establish efficient telemedicine services. Development of telemedicine technicians and paramedical professionals will be able to share the added physician load for routine work.

All India Institute of Medical Science Bhopal has embarked upon an ambitious telemedicine program. In the 1<sup>st</sup> phase we have achieved ISRO satellite connectivity with 16 centers in various districts of Madhya Pradesh. An NKN (*National Knowledge Network*) line based linkages with various medical colleges. And its most popular at present SIP 104 BSNL toll free telephone line for simple voice based service. Mobile based applications on Watsapps, SMS & Swipe card for DOTS / Vaccination reminder, health messages, prescription transfer etc are under progress. We plan to establish an FM radio transmission dotted with Bollywood songs interspersed with health messages and redressal of telephonic consultation.