WHO INFLUENCES YOUR PRESCRIPTIONS?

Chinese Govt. accused head of a leading company for bribing doctors (Shanghai May 2014) which sent a strong warning to pharmaceutical industry. According to a sales representative of Pharma Company “while it is the doctor's job to treat patients, it is my job to constantly sway the doctors. It is a job I am paid for and trained to do so. Doctors are neither trained nor paid to negotiate. Most of the time they don't even realize, what they are doing.” Pharma companies spend billions of dollars annually to ensure that doctors, most susceptible to marketing, prescribe the most expensive, most promoted drugs for the most people possible. The foundation of this influence is a sales force of drugs that provides rationed doses of samples, gifts, services and flattery to a subset of doctors.

Another Medical representative was quoted saying “It is my job to figure out what a doctor's price is. For some it is dinner at the finest restaurant or family trip out, for others it is my attention and friendship….. but at the most basic level, everything is for sale and everything is an exchange”. Medical reps increase drug sales by influencing doctors, and they do so by titrated dose of friendship.

Reps may be genuinely friendly, but they are not genuine friends. They are trained to assess physician's personalities, practice styles, and preferences and to relay this information back to the company. Personnel information may be more important than prescribing preferences. Reps ask for and remember details about Doctor's family life, professional interests and recreational pursuits. A friendly doctor makes rep's job easy because the rep can use the friendship to request favours, in the form of prescriptions. Physicians who view the relationship as a straightforward goods for prescriptions exchange are dealt in a businesslike manner. Skeptical doctors who favour evidence over charm are approached respectfully, supplied with reprints from medical literature and wooed as teachers. Doctors who refuse to see reps are detailed by proxy; their staff is dined and flattered.

Gifts create both expectation and obligation. Many prescribers receive pens, notepads and coffee mugs, all items kept close at hand, ensuring that a targeted drug's name stays uppermost in a physician's subconscious mind. High prescribers receive higher-end presents. As Oldani states “the essence of pharmaceutical gifting is bribes that are not considered bribes. Anything that improves the relationship between the rep and the doctor usually leads to improved market share”.

One industry article suggests categorizing doctors as “hidden gems”. They are classified as “low value” and high value”. Some doctors can be labeled as loyalists, who are loyal to particular product and use it for most patient types. Physicians like samples and patients like samples too. Every word, every courtesy, every gift and every piece of information provided is carefully crafted, not to assist doctors or patients but to increase market share for targeted drugs.

Here is a word of caution. The uniform code for pharmaceuticals marketing practices (UCPMP) (aligned with MCI code) has been proposed on 12.12.14 by Govt. of India. The UCPMP is to be voluntarily adopted and complied with by the pharma industry. UCPMP has defined code of conduct for medical representatives; free samples; gifts; relationship with Healthcare Professionals including travel facility, hospitality and monetary grants.

In the interest of patients, we must reject the false friendship provided by reps. We must rely the information on drugs from un-conflicted sources, and seek friends among those who are not paid to be friends.

Dr. Dewan AK
Medical Director
Lung cancer has been the most common cancer in the world for several decades. There were estimated to be 1.8 million new cases in 2012 worldwide, 58% of which occurred in the less developed regions. In women, the incidence rates are generally lower (0.58 million new cases) and the geographical pattern is a little different, mainly reflecting different historical exposure to tobacco smoking. Lung cancer is the most common cause of death from cancer worldwide, estimated to be responsible for nearly 1.59 million deaths (19.4% of the total). In India there were 53728 (11.3% of all cancers) new cases with 48697 deaths (13.7%of all cancer deaths) of Lung cancer in 2012.

Lung cancer is comprised of two main histologic subtypes: non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC). In the past decade and with the advent of personalized medicine, multiple advances have been made in understanding the underlying biology and molecular mechanisms of lung cancer. Lung cancer is no longer considered a single disease entity and is now being subdivided into molecular subtypes with dedicated targeted and chemotherapeutic strategies. Subsets of NSCLC can be defined at the molecular level by recurrent 'driver' mutations that occur in multiple oncogenes, including AKT1, ALK, BRAF, EGFR, HER2, KRAS, MEK1, MET, NRAS, PIK3CA, RET, and ROS1.

Chemotherapy has been the traditional backbone for the management of metastatic lung cancer. Multiple trials have shown the benefits of treatment with platinum doublets in lung cancer. This “one treatment fits all” approach was further refined by the introduction of targeted agents and discovery of subpopulations of patients who benefited from treatment with these agents. With the introduction of epidermal growth factor receptor (EGFR) tyrosine kinase inhibitors and the discovery of activating mutations in the EGFR gene, further personalization of treatment for subgroups of patients has become a reality. More recently, the presence of a fusion gene, echinoderm microtubule-associated protein-like 4 – anaplastic lymphoma kinase (EML4-ALK), was identified as the driver mutation in yet another subgroup of patients, and subsequent studies have led to approval of crizotinib in this group of patients.

The response to TKI therapy correlated with the presence of activating mutations present in the tyrosine kinase domain of the EGFR receptor. Exons 18 to 21 of the EGFR gene codes for the tyrosine kinase portion of the EGFR receptor, and mutations in any of these regions may confer either sensitivity or resistance to EGFR TKI directed therapy. The most common mutation is a deletion in exon 19. The second most common type of mutation is point mutations in exon 21, the most common of these being L858R. Besides mutations in these exons, there can be activating mutations in exon 18 and exon 20, but these are much less common. Most mutations in exon 20 are associated with a resistance to TKI.

Initial studies with EGFR TKIs enrolled all-comers without any knowledge of the mutational status of patients. BR.21 was a large, randomized, placebo-controlled, double-blind Phase III trial that evaluated the efficacy of erlotinib versus placebo in patients with previously treated NSCLC. A reported median PFS of 2.2 months in the erlotinib group versus 1.8 months in the placebo arm led to the approval of this agent. The median overall survival was 6.7 and 4.7 months in the erlotinib and placebo arms, respectively. A subsequent subgroup analysis showed that the maximum benefit was seen in women (P = 0.006), non-smokers (P < 0.001), Asians (P = 0.02), and adenocarcinoma histology (P < 0.001). It is now known that these groups have a higher likelihood of harboring EGFR-activating mutations, and are therefore more likely to respond to TKI therapy. Presently three EGFR TKIs, erlotinib based on OPTIMAL & EURTAC trial, gefitinib based on IPASS & NEJSG002 trial & afatinib based on LUX Lung 3, are approved for advanced NSCLC with EGFR activating mutations.

The EML4-ALK gene rearrangement is a relatively new finding in lung cancer and was first reported in 2007. In this translocation, a deletion and translocation in chromosome 2p brings the EML4 gene in conjunction with ALK receptor tyrosine kinase, making a fusion protein in which the tyrosine kinase activity is permanently turned on. EML4-ALK rearrangement is detected in approximately 5% of patients with adenocarcinomas. Like EGFR mutations, EML4-ALK positive tumors are usually seen in non-smokers or very light smokers, and tend to be adenocarcinomas. Presently Crizotinib & Ceritinib are the agents approved for advanced NSCLC with EML4-ALK rearrangement.

We have a much better understanding of some of the driver mutations that impact patient outcome in lung cancer. In the coming years our ability to target pathways of interest as opposed to individual genes will open new possibilities for treatment.

Dr. Ullas Batra
Consultant & Chief of Thoracic Medical Oncology
CONGRATULATIONS TO DR. SUDHIR KUMAR RAWAL

Vatikutti Foundation felicitated Dr S K Rawal for his record setting feat of performing more than 1000 robotic surgeries. In crossing this milestone, he has become the **First Surgeon in Asia** to have achieved this mark in the shortest period, and the **First Surgeon in Asia** to have performed as many robotic surgeries on cancer patients.

He received this honor from Dr. Prof. Catherine Mohr (Stanford Medical Centre), who was the Chief Guest. The event saw participation of senior and eminent surgeons from all over India, and eminent speakers from Stanford School of Medicine, and Intuitive (USA). Many faculty members of RGCIRC were present to witness this proud moment for our Institute.

NURSES’ WEEK – NURSES - A FORCE FOR CHANGE

**Improving Health and Well-Being**

Nurses' week celebration started on 6th May, 2015 with an academic session on Chemo Drugs Handling and administration which was followed by lamp lighting by Mr. D. S. Negi, CEO, Dr. A. K. Dewan, Medical Director, Dr. D. C. Doval, Director – Medical Oncology & Research. A brief history of Florence Nightingale “The Lady with a Lamp” founder of Modern Nursing was illustrated.

**The week's activities were as follows:**

Academic session on medication safety by Dr. Sanjeev Gupta, Medical Superintendent, Ostomy & Wound care management by Coloplast, Inauguration of Prerna module for Oncology nursing training sessions, Balloon bursting, Tambola and Quiz.

Finally on 12th May 2015 Nurses' Day was celebrated in Aashray, there was a cultural program & magic show which was the main attraction and was enjoyed by everyone, followed by cake cutting & high tea after vote of thanks by Ms. Kathleen G Jacobs, Chief of Nursing.
RGCIRC organized a CME on Oncology in association with IMA, Kaithal on Friday, 15th May 2015. Dr. A. K. Dewan, Medical Director & Chief of Head & Neck Surgical Oncology delivered a talk on “Overview of Head & Neck Cancers” & Dr. Surender Dabas, Consultant – Head & Neck Surgical Oncology, spoke on “Robotic Surgery in Head & Neck Cancers”. The talks were attended by more than 50 doctors.

RGCIRC organized a CME on Oncology in association with STNM & Manipal Medical College, Gangtok on Saturday, 23rd May 2015. Dr. A. K. Dewan, Medical Director & Chief of Head & Neck Surgical Oncology delivered a talk on “Cancer Care at RGCIRC”, Dr. D. C. Doval, Director – Medical Oncology & Research spoken on “Lung Cancer: Advances in Medical Oncology” and Dr. L. M. Darlong, Head & Consultant – Thoracic Surgical Oncology, spoke on “Lung Cancer Vs TB”. The talks were attended by more than 50 doctors.