PATIENTS' SAFETY: EMERGING ISSUES & CHALLENGES

Dr. Parimal H. Vyas and Dr. Madhusudan N. Pandya

ABSTRACT

One of the global issues that have affected both developed and developing countries in the recent past is the Patient Safety which is a new healthcare concerning for prevention of medical error that often leads to adverse healthcare events. It was not familiar till 1990s, when various countries begun to report on staggering numbers of patients who were either harmed and or killed mainly due to medical errors. The World Health Organization [WHO] has therefore described 'Patient Safety' as an endemic concern recognizing its impact of 1 in every 10 patients around the world. The science of patient safety has grown, and is constantly seeking to identify how and why things go wrong in patients' care. The emphasis has moved away from blame towards looking at how modern healthcare is delivered in complex, busy hospitals and clinics, and recognizing that sometimes the systems themselves create problems. Each year the treatment and care of hundreds of millions of patients worldwide is complicated by infections acquired during healthcare. The impact of healthcare-associated infection may imply prolonged stays in hospital, long-term disability, massive additional financial burden, and deaths. This paper offers a brief factual review of healthcare sector of India supported with some real live illustrations relating to Patients' Safety. An attempt has been made to raise diverse relevant as well as prevalent issues, and forthcoming challenges relating to the healthcare sector of India. It has become truly evident that 'Patients' Safety' is rapidly emerging dimension of the healthcare sector in India and worldwide. It therefore advocates on a serious need with strategic emphasis for minimization and gradual prevention of the occurrence of medical errors either resultant into untimely death and or disabilities of patients.

Keywords: Patient Safety, Patients' Satisfaction, Healthcare Error, Health Care, Health.

(I) PROLOGUE

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organization, Retrieved on 3rd February 2009); www.who.int (haroldjr.tripod.com /sitebuildercontent/sitebuilderfiles/definitions_of_health), and healthcare is the prevention, treatment, and management of illness, and the preservation of mental and physical well-being through the services offered by the medical and allied health professions (www.thefreedictionary.com). Patient satisfaction is the degree to which the patient regards the health care service or product or the manner in which it is delivered by the medical service provider as useful, effective, or beneficial to patient (Biology Dictionary Online.org (Retrieved on 03/02/2009); www.biology-online.org /dictionary).

It has been observed that the modern healthcare facilities continues to achieve excellent results in improving health conditions of people worldwide, but, one can still come across the events that show that the patients are put at risk either through errors of healthcare service providers through failure to assess patients' needs properly, or manage their care and recognize deterioration in the patients' health conditions (European Commission, Retrieved on 03 02 2009 http://www. healthfirsteurope.org). Health Care Error is a preventable adverse effect of care, whether or not it is evident or harmful to the patient that occurs due to complex and diverse Health Care System in form of structure that is nursing units, pharmacies, emergency departments, operating rooms, and professional mix that is nurses, physicians, pharmacists, administrators, therapists made up of multiple interconnected elements with adaptive tendencies having the capacity to change and learn from experience (Wikipedia, the free Encyclopedia, Accessed on 03/02/2009; "Healthcare Error" http://en.wikipedia.org/wiki /Healthcare_error).

Such healthcare errors are responsible for the emerging issues related with Patient Safety. Patient Safety is the mechanism that prevents or mitigates patients' harm stemming from complex and diverse healthcare processes that are compromised due to medical errors viz., an improper and wrong medication; improper medical treatment; incorrect & delayed test results; and avoidance of healthcare- related infections (European Commission, Retrieved on 03 02 2009; http://www.healthfirsteurope. org/index. php? pid=82).

It is a global issue affecting developed and developing countries and the healthcare errors are more prevalent in countries having weak healthcare systems. The major causes of insufficient patient safety are lack of training of

healthcare workers; time constraints on healthcare workers; and insufficient reporting and learning systems to prevent errors in the future. Due to the growth of the research evidence in the field of patient safety, an increasing number of countries have placed systematic action on Patient Safety on their political agenda as a policy priority.

To illustrate, the World Health Organization [WHO] globally launched the world alliance for patient safety to tackle healthcare-associated infections regardless of the level of development of healthcare systems and the availability of resources as well as to co-ordinate and accelerate improvements in patient safety in October 2004. Implementation strategies include the integration amongst different healthcare settings of multiple interventions in the areas of blood safety, injection safety, and clinical procedure safety, as well as water, sanitation, and waste management with the promotion of hand hygiene in healthcare as the cornerstone (Didier Pittet and Liam Donaldson, 2006).

(II) RATIONALE & METHODOLOGY OF THE PAPER ON PATIENTS' SAFETY

An attempt has been made in this conceptual paper to critically appraise on emerging issues and challenges concerning patient safety to showcase that patients have been suffering mainly due to laxity of healthcare service providers. This paper offers a comprehensive but critical appraisal on the healthcare sector of India with a specific and clear thought on 'Patient Safety' based on significant review of literature.

It calls for a broad-minded approach with a heavy emphasis on multy-party deliberations, consultative and collaborative discussion resultant into grave hard work for avoidance and minimization of magnitude of medical errors and up-liftment of initiatives for strengthening the most crucial aspect of health care that is patient safety.

(A) CONCISE APPRAISAL OF THE HEALTH SECTOR OF INDIA

An attempt to put forward a cursory overview on the health care sector of India is being made in this part on basis of available factual data concerning Health Care Indicators of India, Infrastructure for health, and Expenditure incurred for the Health Care Sector although in case of certain selected health indicators, India has improved substantially during 1951 to 2001.

The efforts of the Government of India for providing the safer and healthy environment can be witnessed in form of an in the introduction of various

Government programmes, policies, and legislations implemented from time to time. One can find continuous improvement in various health indicators from the year 1951. To illustrate, life expectancy had reached to 64 years; the Infant Mortality Rate (IMR) has fallen to 63 per 1,000 Populations; Crude Birth Rate has declined to 25 whereas Crude Death Rate has fallen to 8.1 (J. Kishore, 2006). As per the Report "Macro-Economics & Health, 2005" of the National Commission, longevity in India had reached to 66 in the year 2004 whereas IMR has declined by over 70 per cent in the year 1990.

Besides, the favourable changes were observed in case of selected diseases such as Malaria which has been contained at 20 lakh cases. Smallpox and Guinea-warm have been completely eradicated, and Leprosy as well as Polio has reached to nearly state of elimination. A significant improvement in the Quality of Health Care over the years becomes evident as shown in Table Number 01. Crude Birth Rate (Per 1000 Population) has induced from 40.8 in the year 1951 to 23.1 in the year 2007. Crude Death Rate (Per 1000 Population) has declined from 25.1 in the year 1951 to 7.4 in the year 2007. Similarly, Total Fertility Rate (Per Woman) had gone down from 6.0 in the year 1951 to 2.8 in the year 2006. IMR (Per 1000 Live Births) had reduced from 146 of the year 1951 to 55 in the year 2007. Child (0 to 4) Mortality Rate (Per 1000 Children) was 57.3 in the year 1972 which has reduced to 17.3 in the year 2006. The Life Expectancy at Birth for Males had increased from 37.2 in year 1951 to 62.6 during years 2002 to 2006. The Life Expectancy at Birth for Females had increased from 36.2 of the year 1951 to 64.2 during years 2002 to 2006. (The Economic Survey, 2006-2007, 2007 – 2008 & 2008-2009). During years 2000 to 2005, over 1, 00,000 deaths have been averted due to the up scaling of Directly Observed Treatment Short-Course (DOTS) (Ibid).

The progress has not only been observed in case of selected health indicators and diseases but the Indian health care is considered best at the global level. Indian doctors are comparable to the best in the world as they are technically proficient, and capable of performing sophisticated procedures and that too at a fraction of the cost available in the west (Ministry of Health and Family Welfare, 2005).

Further, one can also find significant improvement also in Health Care Infrastructure as shown in Table Number 02. One can find consistent increase in the total number of Dispensaries and Hospitals as well as Total Number of Beds in the Hospitals as well as Doctors & Nursing Staff (Ibid). The Rural Primary Public Health Infrastructure has recorded an impressive increase consisting of 1,

45,000 Sub-Centers as well as 23,109 Primary Health Centers, and 3,222 Community Health Centers, catering to a population of 5,000, 30,000 and 1,00,000 respectively as well as 3,000, 20,000 and 80,000 Populations in Tribes & Desert Areas respectively (Annual Report of Health & Family Welfare Report, 2005-2006).

Public health is of crucial importance to any community and it needs to be given priority. If one considers, the Health Expenditure of India in view of prevalent trends on basis of the various Five Year Plans of India as shown in the Table number 03, it becomes evident that the priority to Health Sector of India showed declining trend in terms of Expenditure incurred on Health as a per cent of Total Development Plans of India. The amount spent on Health Sector of India in the First Year Plan (1951-1956) was 3.33 per cent that has been reduced to 2.09 per cent in the Tenth Five Year Plan in India (2002-2007).Therefore, there exist a need to enhance and broaden the Public Health Knowledge with new research activities and community based experiences.

(B) A Critical Analysis of Healthcare Sector of India:

According to the Ernst & Young Healthcare Survey in the year 2007, the Indian Healthcare Industry is poised to grow at a Compounded Annual Growth Rate of 15 per cent. Nearly, 90 per cent of this growth in healthcare will come from the Private Sector. Further, Private Hospitals in India are expected to collect $35.9 Billion (Rs. 1, 47,154.1 Crores) in the year 2012 compared to $15.5 Billion (Rs. 63,534.5 Crores) of the year 2006. Correspondingly, along with a shift in emphasis from socialized to privatized healthcare, the share of the private sector in India's healthcare industry is set for a quantum increase in the decade of 2010.

In the early 2000s, healthcare was looked upon as a sunrise sector, three big corporate houses, Fortis Healthcare promoted by Ranbaxy Labs, Wockhardt Hospitals, and Max Healthcare announced its plans to set up hospital chains across India. Further, Mumbai-based Asian Heart Hospital and Global Hospitals and Care hospital in Hyderabad sprung up, which specialized in niche areas such as Cardiac Care, Eye Care, Orthodontics and Laparoscopy. The trend has since matured with Indian hospitals adopting many of the management practices and tools used by their counterparts in the West.

With hospital chains being seen as a capital intensive business with long gestation periods, pressure has grown for greater transparency. Most private hospital chains now insist on sweating their assets to gain operational efficiencies.

An Ernst & Young and Business World undertook the very first of its kind of Survey to identify and define the Key Financial Operational Parameters & Benchmarks of the India's Healthcare Sector with critical perspectives of Business and Operational Efficiency revealed favorably on India's Healthcare Sector's growing business and operational maturity. It also highlighted new change-agents and drivers of this sector coupled with emergence of multi-specialty hospitals that have been successful in garnering the most revenues. One also witnesses on the crucial influence of Third-Party Players that is insurance companies pushing hospitals for greater financial and operational efficiency. The other major growth drivers of the India's Healthcare Sector are e.g., rising literacy levels; growing public health awareness; higher incidence of lifestyle-related diseases; this sector's recognition by Government of India as a Priority Sector, and growth of Medical Tourism in India.

The flip-side to this progress is the Private Investments which are way below the levels of its actual requirement needed to bridge the financial gap of growing India's Healthcare Sector's (Business World Magazine, Accessed on 17/09/2009, http://www.businessworld.in/index.php/Surveys/Diagnosing-Indias-Healthcare.html). As per the Survey of the Ernst &Young's on The Business of HealthCare: An Industry Diagnostic revealed that the boom in Indian economy has catapulted India's Healthcare Sector on to the evolutionary roadmap. Growth rates have been frenetic with both private players and the Government evincing keen interest to nurture the industry with a view to providing universal healthcare. The windfall began when one critically evaluates quality of selected medical services in select hospitals of India for less than half the prices paid in the West.

So, it is hardly surprising that healthcare is widely seen as being India's next big growth story. But, such a high investment trajectory in the health sector with the absence of any standard operational and financial benchmarks is a lacuna that needs to be addressed. As per the World Health Organization's (WHO) estimates, China had a ratio of two beds for every 1,000 people in the year 2002 compared to just a miniscule figure of 1.1 Per 1,000 of India in the year 2006.

To get to where China was in 2002, India needs six more years, subject to an addition of about 1.2 Million more beds and an investment of $90 billion (Rs 3, 68,910 Crores, and a big portion of this investment would have to come from the private sector for the creation of Tertiary Care Infrastructure as the State increasingly focuses on the improvement of the India's Primary and Secondary Healthcare. In view of corporatizing of investment in healthcare and

considering element of the profitability of existing hospitals various questions have become pertinent concerning financial records of hospitals that are not open to the public. Besides, very few healthcare companies of India have been listed on the stock exchanges which too make the task of its benchmarking of the business performance difficult of such hospitals.

The survey revealed that a majority of the hospitals are not generating operating margins close to a competing industry like hospitality. Private investors always seek higher profitability. While the primary reason for low profitability of some hospitals may be the lack of proven business models, the Indian hospitality industry, on the other hand, has clearly established business models that are globally aligned and more mature.

The profitability of hospitals is also being affected by the increasing influence of Health Insurance Companies and Third Party Administrators (TPAs). Profitability is also impacted by issues such as utilization of high-end capital equipment, inadequate planning of capacity usage between various departments of hospitals, weak controls to arrest revenue leakages and the average length of stay. Finally, resource availability is the next frontier for India's healthcare industry.

With a low supply and high demand for doctors, nurses and paramedical staff, the war for talent is expected to intensify further, resulting in mounting payroll costs. Unlike the Hospitality Sector, where skills can be imparted in relatively shorter time-frames, it takes nearly six years before one can start practicing medicine and three years for the nursing staff to come on Board fully trained. Failing that, there will most likely be a deficit of 500,000 Doctors and a Million Nurses in India by the year 2012 (Business World Magazine, Accessed on 17/09/2009, http://www.businessworld.in /index.php/Surveys/Getting-Down-To-The-Brasstacks.html).

(IV) REVIEW OF LITERATURE

An attempt has been made to offer a comprehensive review of literature on patients' satisfaction and patients' safety as follows.

(A) Patients' Satisfaction:

The strongest and most consistent predictors of patients' satisfaction were older age and better self-reported health. Patients' characteristics were found as associated for more of the variance in satisfaction than did facilities characteristics. Older and healthier patients reported greater satisfaction with

mental health care services (Robert Rossenbeck, Nancy J. Wilson, and Mark Meterko, 1997). In choosing a hospital patients gave first preference to the efficiency of doctors followed by prior-family experience, and recommendations of friends and relatives. Those service encounters that were largely responsible for producing increased satisfaction were viz., knowledge; cooperation; interpersonal warmth; adequate and timely information; prompt services; efficiency of the staff, and convenience. Professional ability of doctors and medical and paramedical staff was ranked amongst the top three factors that influenced overall patients' satisfaction (R.D. Sharma and Hardeep Chahal, 1999).

Patients' overall satisfaction favourably reported on the major dimensions viz., accessibility; availability; convenience; communication; financial aspect; general satisfaction; interpersonal aspects; technical quality; and time spent with doctor. Corruption is the major cause of dissatisfaction apart from poor utilities such as water supply, fans, lights and poor maintenance of toilets and lack of cleanliness; poor interpersonal and communication skills (Prasanta Mahapatra, Srilatba S. Sridbar P., 2001).

Patients' perceptions' found very high levels of satisfaction on doctors' work. The technical aspects of nursing care too were found as satisfactory by the patients. Moderate levels of satisfaction were recorded regarding the general attitude of nurses and ward servants. Some of the patients felt the expressed that treatment facilities need further improvement (Arpita Bhattacharya, 2003).

The results of parents' satisfaction based on use of an instrument Youth Services Survey for Families (YSSF) provided for support to the reliability of the YSSF in evaluating children's mental health services in Community Mental Health Centers (CMHCs) (Sharon E. Riley,2005).

Venkatapparao Mummalaneni (1995) offered two models on patients' satisfaction called as the Meditational Model and the Moderator Model. According to Moderator Model Patients' Satisfaction was influenced by both characteristics of the delivery system and patients' socio-demographics. Six major dimensions of Patients' satisfaction were considered viz., access; financial aspects; availability of resources; continuity of care; technical quality, and the interpersonal manner of the physician. Its results indicated that a huge proportion of the variance in patients' satisfaction was accounted for by the delivery system characteristics. Income was the only socio-demographic variable that appeared to have much influence on patients' satisfaction having relevance

provide it targeted only a specific income group (Venkatapparao Mummalaneni, 1995).

D. Andrew Loblawa (2004) undertook study and asked respondents to complete two questionnaires called as t1 and t2 packages. Exploratory Factor Analysis extracted two factors described as 'Physician Disengagement' and 'Perceived Support,' with average co-efficient alpha values of 0.93 & 0.90. Test–retest reliability was found as 0.83 and 0.73 for the two factors respectively. The two (t1 & t2) questionnaire was a brief, valid and reliable questionnaire that taps two complementary facets of patient satisfaction (D. Andrew Loblawa, 2004).

Iris Gourdji (2003) measured the patients' satisfaction and importance of ratings of quality in an out-patient Oncology Center which indicated that patients were satisfied with their care. Patients' perception of waiting time and lack of questioning regarding their medications by the pharmacist were identified as two areas that called for an improvement. (Iris Gourdji, et. al., 2003).

(B) Patients' Safety:

A brief summary on available literature on Patients' Safety is offered herewith as follows.

Thomas V. Perneger, (2006) considered Patient Safety as global level problem that calls for global solutions. The study described that the rich field of research area that offers exciting opportunities to researchers of many disciplines includes In-depth studies of errors, mishaps, and Patient Safety incidents; epidemiologic studies of incidents and errors identification of risk factors for Patient Safety events; research on human factors; patient involvement in safety; development of Patient Safety indicators; and evaluation of interventions to improve safety. The study also gave importance to the impetus given by the World Alliance to Patient Safety Research and Other Governing bodies (Thomas V. Perneger, 2006).

Improving Patients' Safety should be considered as an issue that has affected health systems in both developed and developing countries. To co-ordinate and accelerate improvements in patient safety, the World Health Organization (WHO) has supported the creation of the World Alliance for Patient Safety launched in the month of October 2004 with a focus on the six action areas viz., Taxonomy; Research; Solutions for Patient Safety; Reporting and Learning, and a Biennial Global Patient Safety challenge. (Didier Pittet, Liam Donaldson, 2006). Patient Safety Culture includes selected dimensions viz., Patients' Safety; Non-

Punitive Response to Error; Hospital Transfers & Transitions; Staffing; Teamwork Across Hospital Units & Within Hospital Units found to be low to average in all the selected hospitals and called for an improvement (Johan Hellings, 2007).

The use of Patient Safety Initiatives (PSIs) included approaches such as open discussion of Errors, Education and Training, and System Redesign. The identified barriers which significantly impeded implementation of PSIs were viz., lack of top management support; lack of resources; lack of incentives, and lack of knowledge, while other factors related with perceived importance of PSIs facilitated the implementation of PSIs. It was also found that implementation of PSIs was associated with benefits to the hospital in areas such as medical error reduction, cost reduction, and patients' satisfaction (Kathleen L. McFadden, et. al., 2006). Patients' feedback plays an important role as a contributing factor in the endeavor for continuous quality improvement in the health-care system. (Rachel Javetz, Zvi Stern, 1996).

The complaint handlers were insufficiently empowered; information sharing was limited within the hospitals; communication among professional Staff and between management was inadequate. The physical safety of workers was threatened, and improvements were not sustained. It became evident that the hospital failed to use patients' complaints as a source of learning to promote higher standards of medical care.

It was found that hospitals need to establish clear policies and mechanism to improve its performance in patients' complaints handling. Second, complaint handlers were sufficiently empowered to deal with different kinds of patients' complaints.

An effective Communication Network between departments is highly essential to make required follow up on the procedure of patients' complaints handling in order to enhance monitoring and improvement activities within the departments (Sophie Y. Hsieh et. al., 2005).

(V) AN IMPACT OF HEALTH CARE & MEDICAL ERRORS IN PATIENTS' SAFETY: A CRITIQUE

An attempt has been made by the researchers to outline the areas of medical errors due to which patient has to suffer as follows.

There are many areas which can be attributed to healthcare errors such as receiving the wrong drug or wrong surgery, or complications of surgery and other treatments, or failure to diagnose correctly or to spot the patient whose condition is deteriorating and to do something about it. The outcomes of healthcare error are different for patients, his/her families, and for healthcare service provider. It can be in terms of patients' health improvement; permanent disability or even death. The earlier research supports evidence that a significant number of healthcare errors are preventable. (Sarah Williamson, www.asianhhm.com)

According to estimate of the European Commission in Europe, 1 out of 10 patients are affected by healthcare-related infections. 3 Million Deaths are caused by healthcare-related infections. 50,000 people die each year because of healthcare-related infections which can be attributed to health care errors (http://www.healthfirsteurope.org). It is estimated that in European Union (EU) Member States around 8 to 12 per cent of patients admitted to hospitals suffer from healthcare errors much of which is preventable (European Commission, Retrieved on 03/02/2009, http://ec.europa.eu).

A conservative average of the Institute of Medicine and Health Grades Reports, USA had indicated that there were about 400,000 to 1.2 Million healthcare error-induced deaths attributed to human factors, medical complexity, system failures, infrastructure failure during the year 1996 to 2006. Human factors that causes healthcare errors consists of variations in healthcare provider training & experience, fatigue, depression and burnout; diverse patients', unfamiliar settings, time pressures, and failure to acknowledge the prevalence and seriousness of medical errors. Medical complexity resultant in to healthcare error is caused due to complicated technologies; powerful drugs; Intensive care and prolonged stay in hospital. A system failure that leads to healthcare errors included poor communication, unclear lines of authority of physicians, nurses, and other healthcare providers.

It is also caused by complications increase as patient to nurse staffing ratio increases. Disconnected reporting systems within a hospital, fragmented systems in which numerous hand-offs of patients results in lack of coordination and errors, and drug names that look alike or sound alike also result into healthcare errors.

Other reasons for the healthcare error may be due to an impression that action is being taken by other groups within the institution; reliance on automated

systems to prevent error; inadequate systems to share information about medical errors hampering analysis of contributory causes, and improvement strategies.

The healthcare error is many times result of cost-cutting measures put in by hospitals in response to reimbursement cutbacks; environment and design factors. The American Institute of Architects has identified concerns for the safe design and construction of health care facilities. According to the WHO, 50 per cent of medical equipment in developing countries is only partly usable due to lack of skilled operators or parts. As a result, diagnostic procedures or treatments cannot be performed, leading to substandard medical treatment. Other leading causes of healthcare errors include inadequate assessment of the patient's condition, and poor leadership or training (Wikipedia, the free encyclopedia, Accessed on 03/02/2009; http://en.wikipedia. org/wiki/Patient _safety).

An attempt has been made by the researchers to offer few illustrations of healthcare errors to highlight the fact that patients have suffered largely due to negligence of healthcare service providers.

*On 23/06/1997, MS. Sheetali Bhargawa, aged 17 years, were given blood transfusion, the 5 units of blood platelet concentrate prepared in blood bank from five different donors was transfused. On 25/06/1997, patient's blood was tested and found that patient was suffering from Hepatitis C. Patient had to spend huge amounts for her treatment of hepatitis infection. It was the negligence of hospital and compensation of 18 laths was ordered by National Consumer Disputes Redressal Commission, New Delhi to Indraprastha Apollo Hospital (MS. S.S. Purnapatre, 2004).

*A lady was admitted in Civil Hospital, Aurangabad, on 10/07/1963, for delivery of child and subsequent sterilization operation. The hospital is associated with Medical College. After operation patient developed high fever and acute pain in abdomen. The patient was examined by surgeon attached to the hospital and advised that patient should be reopened and on reopening it was found that a mop (Towel) was left in the abdomen of patient during sterilization operation. Condition of patient did not improved and patient died because of negligence of Gynecologists and Medical Officer. Trial Court held Medical Officer guilty of negligence and ordered compensation of Rs. 36,000 to be paid by Medical Officer, Gynecologist and Government of Maharashtra. High Court reverses the decision but Supreme Court set aside High Court decision and upheld Trial Court decision. [Decision of Supreme Court in Civil Appeal No. 3318/1979 dated 20/02/1996. published in AIR 1996 Supreme Court 2377].

*A Patient was operated for Hernia by Surgeon, on 08/01/1995, under general anesthesia and after operation Anesthetist and Surgeon left Operation Theatre immediately after operation without checking whether patient is out of Anesthesia. Patient's breathing stopped and Surgeon rushed to hospital but patient remained unconscious and died. District Forum held Anesthetist and Surgeon negligent and compensation of Rs. 4 lakh was awarded. Appeal of doctors was not considered and State Commission too upheld decision of District Forum due to Anesthetist and Surgeon found guilty [Ibid].

(VI) WORLD HEALTH ORGANIZATION'S INITIATIVES IN PATIENTS' SAFETY

The World Health Organization (WHO) launched the World Alliance for Patient Safety in response to World Health Assembly Resolution In the month of October, 2004 that urged WHO and Member States to pay the closest possible attention to the problem of patients' safety. It is aimed at raising awareness and political commitment to improve Patients' Safety, and Medical Care and also for developing Patients' Safety Policy and Practices. Each year the core element is the formulation of Global Patient Safety Challenges. Every two years a Challenge is formulated to stimulate global commitment and action on a patients' safety issue addresses a significant area of risk for all WHO Member States.

The first Challenge concerning patients' safety has focused on health care-associated aspect of infection, while safe surgery was chosen as the topic for the second challenge of the global patient safety. It is fact that surgical care is an essential component of health care worldwide for over a century.

As the incidences of traumatic injuries, cancers and cardiovascular disease continued to increase the impact of surgical intervention on public health systems will grow. An estimated 234 Million major operations are performed around the world each year, corresponding to one operation for every 25 people alive. Yet, surgical services are unevenly distributed with 30 per cent of the world's population receiving 75 per cent of major operations. Lack of access to high quality surgical care remains a significant problem in much of the world despite the fact that surgical interventions can be cost effective in terms of lives saved and disability averted. Surgery is often the only therapy that can alleviate disabilities and reduce the risk of death from common conditions. Each year an estimated 63 million people undergo surgical treatment due to traumatic injuries, another 10 million operations are performed for pregnancy-related

complications, and 31 million more are undertaken to treat malignancies (http://www.who.int).

(A) WHO's World Alliance Action Areas for Patients' Safety:

The World Alliance for Patient Safety has identified six action areas viz., Patient Taxonomy, Research; Solutions for Patient Safety; Reporting; Learning, and a biennial Global Patient Safety Challenge. The first Challenge covered in the year 2005 to 2006 launched in the month of October, 2005 under the banner of Clean Care is Safer Care addressed health care-associated infection, a major, Patient Safety problem affecting hundreds of millions of people worldwide. Three core principles underlie the choice of these action areas viz, First, a commitment to placing patients at the centre of efforts to improve Patient Safety worldwide. Second, a focus on improving the ways to detect and learn from information about Patient Safety problems within and across countries, with a particular emphasis on methods and tools for detecting Patient Safety problems in developing countries. Third, a need to build up the knowledge base of interventions which have been shown to help solve Patient Safety problems, together with a more rapid and systematic dissemination of information worldwide on successful strategies (Didier Pittet, Liam Donaldson, 2006).

Patients for Patient Safety (PFPS) emphasize the central role patients and consumers can play in efforts to improve the quality and safety of healthcare around the world.

It works with a global network of patients, consumers, caregivers, and consumer organizations to support patient involvement in Patient Safety programmes, both within countries and in the global programmes of the world alliance for patient safety. Its ultimate purpose was to improve health care safety in all health care settings throughout the world by involving consumers and patients as partners. Taxonomy for Patient Safety is working to develop an internationally acceptable framework for defining and classifying adverse events and near misses. Prevention and mitigation of adverse events require improved information sharing about the prevalence, types, causes, severity, and consequences of near misses and adverse events at both national & international levels. The lack of a standardized nomenclature and taxonomy of near misses and adverse events hinders this effort.

Research for Patient Safety is an attempt to develop an agreed International Research Agenda for Patient Safety that was set up by the WHO to foster research on Patient Safety research agendas aimed at to facilitate the spread and

use of research findings to inform safer health care in all WHO Member States. The goal of Solutions for Patient Safety is to increase International Collaborations for the promotion of existing Patient Safety interventions and better co-ordination of efforts to develop future solutions. It is defined as any system design or intervention that has demonstrated the ability to prevent or mitigate patient harm stemming from the processes of health care.

The International Steering Committee approved 09 solutions available for use by WHO Member States from the month of May, 2007 viz, look-alike, sound-alike medication names; patient identification; Communication during patient hand-over; Performance of correct procedure at correct body site; Control of concentrated electrolyte solutions; Assuring medication accuracy at transitions in care; Avoiding catheter and tubing Mis-connections; Single use of injection devices, and Improved hand hygiene to prevent health care-associated infections. Reporting and Learning Systems have emerged as a major tool to help identify Patient Safety problems, and provide data for organizational and system learning. The most important knowledge in the field of Patient Safety is how to prevent harm to patients during treatment and care. Its fundamental role is to enhance Patient Safety by learning from failures of the health care system.

Health-care errors are often provoked by weak systems and often have common root causes which can be generalized and corrected. Although, each event is unique, there are likely to be similarities and patterns in sources of risk which may otherwise go unnoticed if incidents are not reported and analyzed (World Health Organization, Retrieved on 03/02/2009 http://www.who.int /patientsafety/research/en).

The Alliance is to identify specific topics for action which address significant risk to Patient Safety relevant to all countries each 2 years. The first theme called as 'Clean Care is Safer Care' for the year 2005–2006, whereas the second challenge is 'Safe Surgery Saves Lives', and third one is 'Tackling Antimicrobial Resistance' (Didier Pittet, Liam Donaldson, 2006).

(B) A Bird-Eye View on WHO Guidelines on the Health Care:

WHO has developed new Guidelines described as 'Hand Hygiene in Health Care (Advanced Draft)' with a thorough review, and specific recommendations to improve practices and reduce transmission of pathogenic microorganisms to patients and HCWs to provide Health Care Workers [HCWs], Hospital Administrators, & Health Authorities with the best scientific evidence and recommendations to improve practices intended to be implemented in any

situation for delivery of the healthcare to a patient or a specific group of population (World Alliance for Patient Safety, 2006).

(VII) PRINCIPLES & QUALITY OF THE HEALTH CARE

The basic principles for Patient Safety are the principles for Quality of Health Care which includes to do the Right Thing for the Right Patient Using The Right Method & at the Right Time, & To Communicate Well with the Patient and the Rest of the Clinical Team to facilitate recording of the findings; planning of prompt and clear actions to ensure that instructions are understood and carried out, and report concerns to a senior colleague when necessary. (Sarah Williamson, Retrieved on 03/02/2009, www.asianhhm.com)

(A) *Enhance Effectiveness By Doing the Right Thing:*

It means to ensure the conduct of the correct test in line with the patient's symptoms based on choosing of correct drug that is given in the correct doze, and that surgery is performed on the correct side of the body supported with recording of correct observations on a sick patient at the correct frequency.

The procedures and training to guide all the staff implies improving safety and quality of care in form of unambiguous and clear prescription of drugs, proper and safe administration of drugs, marking and preparing patients for surgery, knowledge of appropriate timing of tests and different methods of interpretation of results that are provided. The right thing might also convey having up-to-date knowledge and skills to allow clinicians to give their patients the best care.

All healthcare organizations need to consider how much they can rely on individual clinicians' judgment and to what extent they can intervene with directives or by taking action to force compliance with changes.

(B) *Offer Medical Treatment to the Right Patient:*

Although, it sounds painfully obvious, but many health care errors occur because patients have similar names. Errors could occur when the wrong patient is taken to X-ray, or a doctor picks up the wrong set of notes, or specimens are mislabeled, or even because in a busy ward there is a new patient on the bed. It should be routine for staff to check at each stage of care that they are dealing with the correct patient, and if they have heard the patient's name correctly when they are asked to carry out an instruction.

(C) *Provide Medical Treatment Using the Right Method:*

It implies ensuring of diagnostic tests that are correctly performed and interpreted. Similarly, many errors occur where drugs are given by the wrong route or in the wrong concentration. It is also very important that untrained staff know that, and abstain from that they should not perform certain tasks that carry significant risks. It also suggests keeping medical equipment clean and in good working order.

(D) *Provide Medical Treatment At The Right Time:*
It includes giving of drugs as prescribed time as well as checking the patient and recording observations to avoid the patient's deteriorating condition. Some of the hospitals in UK and USA uses early warning systems designed to alert staff about a deteriorating patient, and to guide and empower them for seeking required assistance.

(E) *Ensure Effective Communication:*
In most cases, faulty treatments can be attributed to improper communication of critical data. It helps not only patients in understanding their condition but also healthcare providers in providing proper care to patients. Listening to patients and respecting their wishes shall form the basis of offering effective healthcare in the 21st century. Many industries have learnt that it is important for Patients' Safety to have a culture where no one is above criticism because any human being can make a mistake, and where junior staff can put forward suggestions or concerns, and have these treated with respect.

(F) *Maintain Proper Medical Records of Patients:*
Multiple medical teams are involved for record keeping and providing health care facilities to the patients consisting of Doctors, Nurses, Therapists, Technicians, and Pharmacists whose relationship with each other requires sharing of information and acting on instructions.

It is highly desirable that in each of their shift s/he must record changes in the patient's condition, results of tests, new plans for care, and anything else that everyone caring for the patient needs to know.

(G) **Develop A Culture & Systems of Patients' Safety**:
There exists a need to set up policies, procedures and for providing training to multiple medical teams involved for record keeping and providing health care facilities to the patients for ensuring patient safety. These teams should clearly understand instructions; ensure proper use of the equipment to avoid infection

and improve hygiene by following safety norms and use of incident reporting system (Sarah Williamson, Retrieved on 03/02/2009, www.asianhhm.com).

(VIII) EPILOGUE

India's healthcare sector is on a high-growth trajectory propelled by domestic economic optimism, increasing public health awareness, and growing global interest in India's low-cost service delivery systems. But, the major issue is the growth of private players' that has led to rise in real estate costs. To attract investments amounting of $ 70 Billion that is Rs 2, 86,930 Crores in the healthcare sector of India by the year 2012, the Government's increased emphasis on primary healthcare, an explosion in patient base, and a boom in medical tourism call for a strategic emphasis on cost reduction and quality of the healthcare in India.

To ensure better implementation of the WHO's World Alliance for Patient Safety aimed at handling the global challenge of Patient Safety and for ensuring a high level of hygiene, it is essential that health care facilities focuses on viz., clean hands; clean equipment; clean products; clean practices; and above all clean environment. One also finds presence of a large number of innovative technologies aimed at enhancing and strengthening patient safety.

Despite the introduction of Blood Screening and Testing Measures, patients remain at risk of Infection & Transfusion-Associated Reactions because Micro-Organisms such as Viruses, Bacteria and Parasites likely to be present in Blood & Blood Products that remains invisible. New medical technologies such as Pathogen Inactivation Technologies have been developed for improving Blood Products.

The single use medical devices such as Syringes, Surgical Drapes and Surgical Gowns to more complex technologies such as Biopsy Forceps & Balloon Catheters have been developed to increase standards of health care worldwide. In general, the use of safety features including Alarms, Programs, and Automatic Identification Technology in Medical Equipment have increased patients' safety (Sarah Williamson, Retrieved on 03/02/2009, www.asianhhm.com).

There is a significant transdisciplinary body of theoretical and research literature available on the science of patient safety. It has emerged as a distinct healthcare discipline supported by an immature yet developing scientific framework. It calls for ssystem-wide action on a broad range of fronts to identify and manage actual and potential risks concerning Patient Safety that calls for actions in areas

viz., Performance Improvement, Environmental Safety, & Risk Management, including Infection Control, Safe use of Medicines, Equipment Safety, Safe Clinical Practice, & Safe Environment of health care. It embraces that the challenges faced by the world populations for Patient Safety are enormous, but the rewards too are important if appropriate actions are planned and implemented in near future.

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Table Number 01: Selected Health Indicators in India

Sr. No.	Selected Indicators	1951	1981	1991	Current level
01	Crude Birth Rate (CBR) (Per 1,000 Population)	40.8	33.9	29.5	**23.1 (2007)**
02	Crude Death Rate (CDR) (Per 1,000 Population)	25.1	12.5	9.8	**7.4 (2007)**
03	Total Fertility Rate (TFR) (Per Woman)	6.0	4.5	3.6	**2.8 (2006)**
04	Maternal Mortality Ratio (MMR) (Per 1,00,000 live births)	NA	NA	437 (1992-1993) NFHS	**254 (2001-2004)**
05	Infant Mortality Rate (IMR) (Per 1,000 live Births)	146 (1951-1961)	110	80	**55 (2007)**
06	Child (0 to 4) Mortality Rate (Per 1,000 Children)	57.3 (1972)	41.2	26.5	**17.3 (2006)**
07	Couple Protection Rate (In Percentages)	10.4 (1971)	22.8	44.1	**48.2 (1998-1999) NFHS**
08	Life Expectancy At Birth	37.2	55.4 (1981-	59.0 (1991-	**62.6 (2002 –**

	[8.1] Males		1985)	1995)	**2006)**
	[8.2] Females	36.2	54.7	59.7 (1991-95)	**64.2**

Source: The Economic Survey 2006 – 2007, 2007-2008 & 2008 – 2009.
(NFHS: National Family Health Survey; NA: Not Available).

Table Number 02: Trends in the Health Care Infrastructure in India (1951 – 2004)

Sr. No.	Particulars	1951	1981	2005	(Period/Source)
01	SC/PHC/CHC	725	57,353	**1,71,608**	*
02	Dispensaries and Hospitals (All)	9,209	23,555	**27,770**	**
03	Beds (Private & Public)	1,17,198	5,69,495	**9,14,543**	(All types)**
04	Nursing Personnel	18,054	1,43,687	**8,65,135**	@
05	Doctors (Modern System)	61,800	2,68,700	**6,56,111**	@

Source: The Economic Survey 2006 – 2007, 2007-2008 & 2008 – 2009.

Table Number 03: Trends in Health Expenditure of India (1951 – 2002) :(Rupees in Millions)

Five Year Plans	Period	Amount	Total Plan Investment (All Development Heads)	Health (Central & States)	
				Outlay/ Expenditure	Per cent of Total Plan
First	**1951-1956**	**Actual**	**1,960**	**652**	**3.33**
Second	1956-1961	Actual	4,672	1,408	3.01
Third	1661-1966	Actual	8,576.5	2,259	2.63

Annual	1966-1969	Actual	6,625.4	1,402	2.12
Fourth	1969-1974	Actual	15,778.8	3,355	2.13
Fifth	1974-1979	Actual	39,426.2	7,608	1.93
	1979-1980	Actual	12,176.5	2,231	1.83
Sixth	1980-1985	Outlay	97,500	1,821	1.87
Sixth	1980-1985	Actual	1,09,291.7	20,252	1.85
Seventh	1985-1990	Outlay	1,80,000	33,929	1.88
Seventh	1985-1990	Actual	2,18,729	36,886	1.69
	1990-1991	Actual	61,518	9,609	1.56
	1991-1992	Actual	65,855	10,422	1.58
Eighth	1992-1997	Outlay	4,34,100	75,822	1.75
Ninth	1997-2002	Outlay	8,59,200	19,818.4	2.31
Tenth	2002-2007	Outlay	14,84,131.3	31023.3	2.09
Eleventh	**2007-2012**	**Outlay**	**36,44 ,718**	-	-

Source: Central Bureau of Health Intelligence, Ministry of health & Family Welfare- http://www.cbhidghs.nic.in & Human Development in South Asia, 2004.

Professor Parimal Vyas is a Head of the Department, Chairman, Board of Studies & Course Director, PG Management Diploma Programs of the Department of Commerce And Business Management and has also served as Dean, Faculty of Commerce, The Maharaja Sayajirao University of Baroda. He has participated in the 23rd FDP of the Indian Institute of Management, Ahmedabad. He holds Ph.D. in Commerce [Marketing Area], and has produced several research scholars for the Ph. d & M. Phil Degrees.

Dr. Madhusudan N. Pandya is a Faculty Member in Department of Commerce And Business Management, Faculty of Commerce, The Maharaja Sayajirao University of Baroda. He holds Ph.D. in Commerce in the Area of Marketing and publications in his name in peer reviewed Journals. He also provide guidance to students of BBA, M. Com. and PG Diploma courses for their Project Work.