CHRISTIAN MEDICAL JOURNAL OF INDIA

Communicating Health
Since 1895

# CMJI

A Quarterly Journal of the Christian Medical Association of India

VOLUME 30 NUMBER 2 : APRIL - JUNE 2015

# Are Our Hospitals Safe from Infections?

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**PRINTED AT:** New Life Printers, New Delhi





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*"As the sun was setting, all those who were sick with various kinds of diseases brought them to Him; and He laid his hands on each of them and cured them."*
Luke 4:40

**LETTERS / ARTICLES FOR CMJI**

We invite your views and opinions to make the CMJI interactive and vibrant. As you go through this and each issue of CMJI, we would like to know what comes to your mind. Is it provoking your thoughts? The next issue is on the subject "Skill Development for Health". Please share your thoughts with us. This may help someone else in the network and would definitely guide us in the Editorial team. E-mail your responses to: **ronald.l@cmai.org.**

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- Articles must be not more than 1500 words.
- All articles must preferably be submitted in soft copy format. The soft copy can be sent by e-mail; alternatively it can be sent on a CD by post. Authors may please mention the source of all references: for e.g. in case of journals: Binswanger, Hans and Shaidur Khandker (1995), 'The Impact of Formal Finance on the Rural Economy in India', Journal of Development Studies, 32(2), December. pp 234-62 and in case of Books; Rutherford, Stuart (1997): 'Informal Financial Services in Dhaka's Slums' Jeoffrey Wood and Ifftah Sharif (eds), Who Needs Credit? Poverty and Finance in Bangladesh, Dhaka University Press, Dhaka.
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- Every effort is taken to process received articles at the earliest and these may be included in an issue where they are relevant.
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- Readers of CMJI are encouraged to send comments and suggestions (300-400 words) on published articles for the 'Letters to the Editor' column. All letters should have the writer's full name and postal address.

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- Authors are requested to send the article in Microsoft Word format. Authors are encouraged to use UK English spellings.
- Contributors are requested to send articles that are complete in every respect, including references, as this facilitates quicker processing.
- All submissions will be acknowledged immediately on receipt with a reference number. Please quote this number when making enquiries.

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EDITORIAL

# THE PUTREFYING SORE!

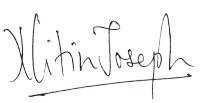
*Dr Nitin Theodore Joseph*

As medical professionals infection is something that we have to deal with on a daily basis. A very successful surgery can be ruined if infection sets in. A nurse has to ensure that a wound is taken care of so that it doesn't get infected. A laboratory technician has to deal with body fluids and tissues to help diagnose the causative organism and its sensitivity to antibiotics. The hospital administrator and chaplain are indirectly involved with infection by putting in place processes to prevent infection and to provide spiritual support to a patient respectively.

Interestingly in the Bible, Infection is always identified with sin. When God spoke through Isaiah and described Judah as a sinful nation He said, "From the sole of your foot to the top of your head there is no soundness-only wounds and welts and open sores, not cleansed or bandaged or soothed with oil."(Isaiah 1:6). The KJV calls it "the putrefying sore"! In Leviticus 13 we read that Leprosy, which was probably used to describe any skin infection at that time, was considered to be a type of a sinful state in an individual. A person suffering from Leprosy had to live on the fringes of civilization. Moreover in the unlikely event of a person being cured of his leprosy he had to undergo an extensive rite of purification and had to obtain a 'medical certificate' from the priest! Jesus during his earthly ministry had to deal with a wide array of diseases as Mark records, "…and Jesus healed many who had various diseases (1:34).

Medical science has made tremendous progress to prevent infections and to deal with them. The discovery of Penicillin by Alexander Fleming and the subsequent influx of 3rd and 4th generation antibiotics have indeed revolutionalised the management of infection. Gone are the days when patients with tuberculosis were relegated to a life of 'nutritious food and fresh air' in sanatoriums. Modern anti TB drugs are able to combat tuberculosis. However we are faced with challenges of drug resistance and we are all familiar with cases of tuberculosis reported recently that could not be treated with the anti TB drugs. Newer infections are emerging. Avian influenza or bird flu spread very rapidly a few years back. In 2007 there was a big epidemic of H1N1 infection, also known as swine flu. Pune was the 'epicentre' of this infection and the usually busy roads wore a deserted look making it look like a 'ghost town'. The current threat is the Middle East Respiratory Syndrome (MERS). The prevention and management of HIV/AIDS continues to challenge us.

Patients come to our hospitals and clinics for healing and we have to ensure that in our endeavour to do our best we should not be found wanting. This issue of CMJI is dedicated to Infections, with a special emphasis on Hospital Infections. Infections cause morbidity, increase hospital bills and patient stay. Prevention is better than cure is an old and respected adage. Simple techniques like hand washing, barrier nursing and keeping the environs hygienic can go a long way in the prevention and spread of infections. It is our hope that as you read through the pages of this issue you will find it enlightening and educative. Do send us your feedback and please pass on this journal to others. We also want to warmly invite you to the Biennial Conference to Jaipur in November. Do start planning. I am sure it will be an enriching experience.



*Dr Nitin Theodore Joseph*

# Life Affirming Initiatives

**Even in the age of unprecedented medical advancement, HAI is a major concern for the health professionals.**

The team of health professionals had started removing the equipment placed beside my father's hospital bed in the ICU of a leading Hospital in Delhi. They were acting on our family's consent to the medical advice regarding the life support system that my father was no longer responding to. As I stood still and watched him depart this life, I struggled to walk through the corridor towards my mother, who was being comforted by my wife and surrounded by few relatives and friends. I hugged my mother and said "Dad has gone to a much better place…"

Nearly a week before, everything was normal and well. My father and mother had gone shopping to stock supplies for the Christmas preparations as they awaited our visit as a family. But the next day he became seriously ill and he was rushed to the hospital where he had been receiving his cardiac treatment for almost two decades. During the three days of his hospitalization, we saw him responding to the treatment and recuperating fairly well from the cardiac problem. We were hopeful that within few days he will be independent of the ventilator. However this was not to happen. He was diagnosed positive for hospital acquired pneumonia, a type of Hospital Acquired Infection (HAI) (or recent Healthcare Associated Infection), which apparently could not be controlled and ultimately triggered other multiple health complications to which my father succumbed.

As a family, we have come a long way to accept his demise and have been comforted in the hope of life eternal in Christ Jesus. Initially, I felt that because of the Hospital Acquired Infection, the place of healing (hospital) became the source of ailment to my father. I was aware of my friends having incurred a similar loss due to HAI and had felt the same concern. I presumed that the health care professionals continued to encounter 'not so polite' reactions from the patients and families affected by HAI.

Even in the age of unprecedented medical advancement, HAI is a major concern for the health professionals. This issue of Christian Medical Journal of India (CMJI)

*Rev Dr S Dennis Lall*

**Initially, I felt that because of the Hospital Acquired Infection, the place of healing (hospital) became the source of ailment to my father. I was aware of my friends having incurred a similar loss due to HAI and had felt the same concern.**

is focusing on theme "Hospital Infection Control." This devotion explores the adaptation of few life affirming initiatives in the context of health and sickness in general and HAI in particular.

### Recognizing those who serve at risk

Ministering to the sick was an integral part of Jesus' ministry. It's written in Luke 4:40 "As the sun was setting, all those who were sick with various kinds of diseases brought them to Him; and He laid his hands on each of them and cured them." Jesus' healing ministry was characterized by His personal association with the sick and often involved Jesus personally touching the sick by laying of his hands on them. The approach remained the same for the one affected by leprosy (Mark 1:40). The act of Jesus' personal touch was so powerful and promising that the leader of the synagogue insisted saying "My daughter has just died; but come and lay your hand on her, and she will live (Mathew 9: 18)." This aspect of Jesus' ministry was so assuring that the woman with the flow of blood was certain of her healing even if she touched the fringe of Jesus' garment (Mathew 9:20 & 21). The concern and care of Jesus was actualized in his uninhibited touch and proximity to the sick.

Similarly, through their uninhibited service and care, the health professionals bring cure and healing to the sick. It must be noted that they too, like the patients and their relatives, are vulnerable to HAI. In fact health care professionals deal with HAI on a day to day basis. They are actively involved in the ongoing task to control, reduce, prevent HAI, while serving and treating the patients. This realization was a major source of healing to me after the initial resentment I had towards the hospital staff. The Christ-like service by the health professionals, even in the conditions where their own health is at risk needs to be recognized and appreciated by the rest of us.

### Redefining our Perspective

The theme of this issue of CMJI "Hospital Infection Control," suggests that hospital infection can be prevented, reduced and managed. This also implies that those who are affected by HAI are likely to feel that the infection could have been avoided. As human beings, we would prefer a life devoid of suffering or the loss of our loved ones but sickness and sorrow visit us unannounced and we struggle to cope up with the surprises.

In such times, apart from appropriate medical intervention, we require an enabling faith perspective to face our troubles. We need to learn from Job, who did not blame God or anybody else for the loss of his children and property. Instead he said, "… the Lord gave, and the Lord has taken away: blessed be the name of the Lord (Job 1:21)." Job's magnanimity in accepting his circumstances is an example before us to deal with those situations in our lives which are beyond our control.

We also have Paul as an example, who describes that though he appealed to the Lord three times to remove 'the thorn in the flesh', the Lord preferred to answer him

**We need to learn from Job, who did not blame God or anybody else for the loss of his children and property. Instead he said, "…** *the Lord gave, and the Lord has taken away: blessed be the name of the Lord* **(Job 1:21)."**

differently. The Lord assured Paul saying, "My grace is sufficient for you, for my power is made perfect in weakness" (2 Corinthians 12:9). This amazing promise of sufficiency of the divine grace is available to us too! Paul was able to live bravely while accepting his pain. We require perseverance like Paul, who, with God's grace, personified the Christian faith understanding that even in the absence of absolute cure, healing is possible.

Friends, there is much to learn from both, Job and Paul. As people of faith, they did not fall victim to the limitations they encountered in life but with a redefined perspective they moved ahead.

## Revisiting our Attitude and Behaviour toward Life

Jesus Christ said, "I came that they may have life, and have it abundantly (John 10:10b)." Jesus' promise for life in its abundance is to be experienced not just in the life hereafter but in our life here and now. It is about abundance in all aspects of life including health. Two of many factors that contribute towards health and wellbeing of a person are hygiene and sanitation. Thus, it can be opined that better hygiene promotes better health, which in turn contributes towards abundance of life.

The broader concern for hygiene and sanitation is apparently linked with the specific issue of HAI. It is likely that if a community has a predisposition towards hygienic lifestyle, then the health care units within such community will have an added advantage in successfully implementing measures for hospital infection control. Inversely, if a community does little to promote hygiene, then their health care units are unlikely to be effective in hospital infection control. In Indian context, it may not be inappropriate to submit that, by and large, we are generally conscious about our personal hygiene and that of our family. But our concern for hygiene at community and environmental level is relatively minimal. Such individualistic and exclusive attitude and behavior towards community hygiene needs to be checked, corrected and transformed.

The Christian health professionals and pastoral care givers can be instrumental in sensitizing the patients and their relatives on the aspect of hospital infection control and on adapting hygienic behavior both during and after hospitalization. This information can also be transmitted to the larger community through printed literature, awareness programmes and other innovative activities. Such interventions must transcend and go beyond the four walls of the hospital to encompass our civic, familial and personal life. In short, the Christian health professionals and pastoral care givers have an important role to play in enabling people's experience in the abundance of life that Jesus promised, by promoting health and a healthy environment, both within the hospital and beyond.

*Rev Dr Dennis Lall, BD, MTh is Presbyter incharge, St Martin's CNI church in New Delhi.*

# Hospital Infection Control

*"It may seem a strange principle to enunciate as the first requirement in a hospital that it should do the sick no harm…….the actual mortality in hospitals, especially in those of large crowded cities, is much higher than the mortality of the same class of diseases among patients treated out of hospital……."*

*-Florence Nightingale*

*Dr Geeta Chitre*

**In high-income countries, approximately 30% of patients in ICUs are affected by at least one HAI. In low- and middle-income countries this frequency can be 2-3 folds higher; prevalence can vary between 5.7% and 19.1%.**

A Health care Associated Infection (HAI) is an infection acquired by a patient in a hospital. For most bacterial infections, an onset of symptoms more than 48 hours after admission is evidence of a Health care associated acquisition.

The primary role of an Infection Control Program is to reduce the risk of HAI, thereby protecting patients, employees and visitors.

The practice of Hospital Infection Control (HIC) has gained impetus towards the end of the last century. Though the roots of this practice go back to 1863, when Florence Nightingale made the remark quoted above, it was in 1970s, during Staphylococcal infection outbreaks in hospitals in the UK and US, that the interest in infection control issues started and resulted in the introduction of the first Infection Control Nurse (ICN) in UK in the early 1970s.

Hospital Infection Control (HIC) has become an essential need in health care facilities for the following reasons:

- To prevent patients from being infected while in the hospital and also to prevent employees from being infected by organisms present in patients. HAIs are a threat which endangers hospital admissions. As per WHO data, for every 100 hospitalized patients, 7 in developed and 10 in developing countries will acquire at least 1 HAI. In high-income countries, approximately 30% of patients in ICUs are affected by at least one HAI. In low- and middle-income countries this frequency can be 2-3 folds higher; prevalence can vary between 5.7% and 19.1%.
- HAIs are unfortunately caused by bacteria which are often resistant to multiple antibiotics. Besides the significant morbidity, sometimes mortality and increased financial strain on patients, these resistant bacteria can spill over into the community leading to their wide-spread.
- Accreditation of hospitals by any National / International bodies require the presence of a robust Infection Control Program with dedicated manpower who generate and monitor data and

take actions to reduce HAI. HIC is the 5th Chapter in the NABH accreditation guideline book which describes the standards and responsibilities for the Infection Control Program.

### Implementation of HIC program

- Health care institutes should have a HIC Committee who implements the Infection Control program whose objectives would be-To form protocols in relation to infection control
- Educate staff in prevention and control of HAI
- Surveillance for HAI and reduction in their rates.
- Incorporate Occupational health program for Health Care Workers (HCW)

### HIC Committee

Dedicated leadership that creates a culture for excellence is necessary for a successful HIC program. The committee should be multidisciplinary comprising of representatives from Administration, various medical and surgical units, ORs, Microbiologist, Nursing Superintendent, ICNs and representatives from CSSD, pharmacy, housekeeping,maintenance & Engineering departments.

### HIC team

Selected from the members of the HIC Committee includes a specifically designated Infection Control Nurse ( As per guidelines, 1 ICN is required for 250 beds), Infection Control Officer ( Physician/ Microbiologist) and a few additional members

### Infection Control Manual

It is prepared by the HIC Committee. It includes protocols such as Standard Precautions, policies on Sterilization & Disinfection, HCW safety, Surveillance of HAI and policies related to their prevention and disposal of Bio medical waste. There are Infection Control protocols for high risk areas such as ICUs, ORs, Blood banks and Dialysis. Infection control issues in non clinical areas like Kitchen, Linen and Housekeeping are also addressed.

### Infection Control Nurse (ICN)

It is the back bone of the Infection Control Program. A few of her numerous responsibilities are –

- Education - formal and informal teaching programs with regards to HIC practices for HCWs.
- Daily rounds to ensure that HIC practices are being implemented
- Maintains records of Vaccination of HCWs and data of Needle stick injuries amongst them.
- Carries out surveillance of HAIs and calculates their rates.

The microbiology laboratory plays an important role in the surveillance, treatment options and prevention of HAI and should be upgraded to ensure quality in the department work. Central Sterile Services Department (CSSD) should be managed by qualified staff who validate and monitor sterilization procedures regularly.

### Types of Hospital associated infections

- Ventilator Associated Pneumonia (VAP)
- Bloodstream Infection (BSI) related to the use of Central line catheters
- Catheter Associated Urinary Tract Infection (CAUTI)
- Surgical Site Infection (SSI)

### Transmission of HAIs

1. Contact – Patient to patient on the hands of HCWs or through shared equipment (B.P apparatus, linen, towels). E.g. Resistant bacteria.
2. Droplet route – Droplets are large particles (> 5 microns) produced during coughing, talking and sneezing. These may transmit micro organisms. Being heavy they cannot travel more than 3 feet and rapidly settle on surfaces E.g. Influenza viruses.
3. Airborne route- Aerosols are smaller particles (< 5 microns) produced during sneezing, coughing and during use of equipment such as suctioning. These remain suspended in the air and are spread by air currents and can infect others. E.g. Mycobacterium tuberculosis.

### Highlights of the HIC program

Some of these are the following practices-

#### A) Standard precautions

In 1996, CDC developed modified guidelines called Standard Precautions (SP) based on the principle that all blood, body fluids, non intact skin and mucous membranes may contain transmissible infectious agents.

**Infectious waste requires special procedures for handling, transport, and storage in order to prevent disease transmission to HCWs and the community.**

**THERE ARE SPECIFIC INDICATIONS WHERE EITHER OF THESE IS TO BE USED**

| HAND WASHING USING SOAP & WATER | ALCOHOLIC HAND RUBS |
|---|---|
| VISIBLY DIRTY HANDS | WHEN HANDS ARE NOT VISIBLY DIRTY |
| BEFORE ANY INVASIVE PROCEDURE ON PATIENT | BEFORE TOUCHING A PATIENT FOR ANY REASON (PULSE, TEMP, ETC…) |
| IF EXPOSED TO PATIENTS BLOOD/ SECRETIONS | AFTER TOUCHING A PATIENT FOR ANY REASON (PULSE, TEMP, ETC…) |
| BEFORE & AFTER WEARING GLOVES | AFTER TOUCHING ANY OBJECT NEAR THE PATIENT (FILE, BED, MONITOR ETC.…) |

Standard Precautions include the following components-

1. ***Hand Hygiene** (HH) – This forms the Corner stone of an Infection Control Program. It was Semmelweiss (1861) **(Father of Hand Hygiene)** – who pioneered the concept of asepsis and reduced Maternal mortality by enforcing hand washing. In spite of being the simplest and most effective way of preventing transmission of infection from one patient to another through hands of HCWs, it is the most underrated and reveals a poor compliance in many hospitals. WHO launched a campaign in 2005-2006 with the focus on preventing HAI by incorporating HH with the core message, ' Simple measures Save lives' WHO has also declared 5th May as the Global Hand Hygiene Day.

Compliance to HH must be reinforced repeatedly. Numerous studies have revealed that an increase in HH compliance reduces the incidence of HAIs. Hand Hygiene is accomplished by Hand washing or the use of alcoholic hand rubs following the 6 steps demonstrated in the adjoining page.

2. Use of Personal Protective Equipment (PPE) such as Gloves, Gowns, Masks, eye protection goggles
3. Practicing safe handling of sharps.
4. Respiratory etiquette/ Cough etiquette
5. Safe injection practices
6. Use of masks for insertion of Catheters or injection of material into spinal, epidural spaces via lumbar punctures.

In addition to the above which are to be followed for every patient coming to a hospital, Transmission based precautions (Contact/Droplet/ Airborne) called Isolation procedures should be implemented for those patients who may be colonized/ infected with resistant bacteria or are harboring micro organisms that may be transmitted by the droplet or Airborne route.

**B) Biomedical waste management** Generated during the diagnosis, treatment or immunization of humans includes infectious waste (15 % of total waste) like pathological waste e.g. organs, Blood and body fluids, IV tubing, needles, bandages and other contaminated items. Infectious waste requires special procedures for handling, transport, and storage in order to prevent disease transmission to HCWs and the community. Hospitals must ensure that this generated waste is treated appropriately and disposed off in a manner as per the drafted guidelines by The Ministry of Environment & Forests, Govt. of India.

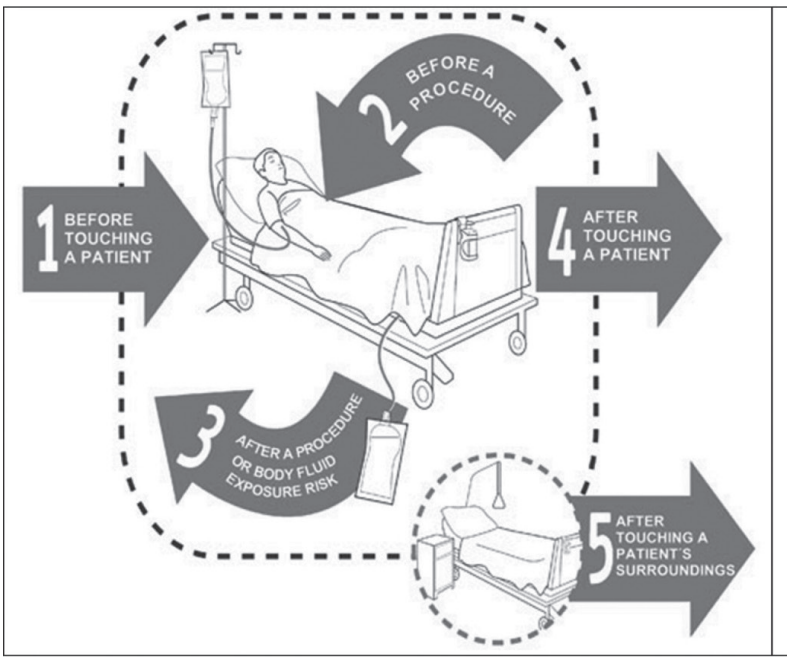
Some important features include -

- Segregating waste at source into color coded containers for different categories of waste. Needles and other sharp instruments to be discarded in puncture resistant containers
- Infected waste to be disinfected before final disposal

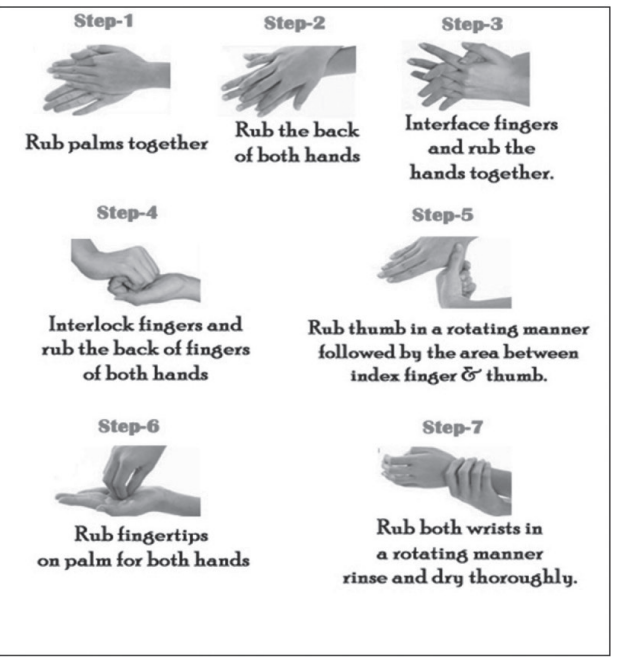
**C) Employee Health -** Because of their potential for coming in contact with infected specimens, HCWs are not only at risk of acquiring

# ***HAND HYGIENE – CORNER STONE OF INFECTION CONTROL

## 5 MOMENTS OF HAND HYGIENE




## STEPS OF HAND HYGIENE




infections but also of being a source of infection to patients. Therefore, both the patient and the HCW need to be protected from contracting or transmitting infections by adopting safe working practices. It is essential that HCWs are immunized for Hepatitis B infection. A protocol should be in place for the management of HCWs who are accidentally exposed to blood borne pathogens such as Hepatitis B, Hepatitis C or HIV viruses.

**D) Environmental hygiene**– Hospital environment is an important source of pathogens for hospitalized patients. Technical issues such as air changes for ORs and ICUs; cleaning of AC ducts; change of HEPA filters, water supply, disinfection of Reverse Osmosis tank water used for dialysis and pest control all contribute to the control of Infections and require collaboration with engineers and other non medical professionals

**E) Housekeeping–** Policies including the products used and the frequency of cleaning should be defined. Protocol for appropriate management of blood spill should be available and all staff must be familiar with it.

**F) Antibiotic policy-** Begun in the 1940's, the antibiotic era is under 80 years duration, yet now is challenged by the worldwide increase in the incidence of resistance by microorganisms. So much so that in 2011, WHO had declared its theme for that year as "No action today, No cure tomorrow…" Regulation of antibiotic usage in the hospital is necessary to curtail the emergence of resistant strains of micro organisms, to reduce the cost of treatment and ensure that higher antibiotics are kept in reserve. Antibiotic policy should be drafted with the help of the local Antibiogram of the Institute and Standard guidelines. Doctors must abide by the Antibiotic policy of that institute while managing their patients.

**Conclusion**

Thus it is evident that Hospital Infection Control is a wide arena which encompasses numerous aspects of health care provision. It is also evident that prevention of HAI is an individual and collective responsibility of all Health Care Workers. Health care institutes owe it to patients and themselves to work towards this end.

*"Knowing is not enough; we must apply. Willing is not enough, we must do……."*

*Johann Goethe*

*Dr Geeta Chitre, MBBS, MD(Microbiology) is a Clinical Microbiologist & Infection Control Officer at Inlaks & Budhrani Hospital in Pune.*

# Blood Borne Virus Infections in the Healthcare Setting

Healthcare providers are particularly at risk for occupational exposure to blood borne pathogens i.e., HIV, HBV and HCV. Amongst them, nurses, postgraduate registrars, interns, other trainees, laboratory technicians and cleaning staff are at particular risk. The use of standard precautions, appropriate personal protective equipment in addition to early vaccination and reporting will prevent transmission of these viruses.

*Dr Priya Abraham*

*Dr Rajesh Kannangai*

**Epidemiology and burden of the problem**

Transmission of the three major blood borne viruses i.e., Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV), and Hepatitis C Virus (HCV) has been widely documented in health care setting[1,2,3]. Transmission occurs from patient to Health Care Provider (HCP), from HCP to patient, and from patient to patient. Though these viruses share common routes of transmission, the epidemiology of each virus differs based on the virus involved and circumstances of the exposure. In the 2008, it was estimated by WHO that unsafe injections caused 15 million, 1 million and 0.34 million infections of HBV, HCV and HIV respectively[4]**.** Transmission of HBV is higher than HCV which is higher than HIV, especially if the source is positive for Hepatitis B e Antigen (HBeAg), a marker for increased infectivity. HBV is 100 times more likely than HIV to be transmitted after a percutaneous exposure to infected blood. HCV on an average is six times more likely than HIV to be transmitted after a percutaneous exposure. It is therefore important for HCPs to be mindful of all of these blood borne pathogens.

**Occupational exposure in Health Care Provider (HCP)**

Over three million health care providers globally suffer accidental exposure to sharps injuries and mucosal splashes annually. Of these, two million are related to HBV, 0.9 million to HCV and 170,000 to HIV. These exposures may result in 15 000 HCV, 70 000 HBV and 500 new HIV infections. More than 90% of these infections occur in developing countries[5]. The most common occupational exposure is Needle-Stick Injury (NSI) which usually follows two-handed recapping of the needle and due to unsafe disposal of needles. Other forms of exposure include splash of blood or other body fluids into the eyes, nose, mouth or blood contact with non-intact skin.

A recent study from South India (Indian data) revealed 85% of occupational exposure was due to NSI[6]. In a study from North India, 79.5% of HCP have at least one NSI in the span of their careers[7]. Worse still, a majority of them go unreported[8]. A majority of NSIs are caused by hollow-bore needles (77%), followed by solid needles (20.9%)[9]. NSIs happen most frequently during blood collection(58.1%), followed by surgical procedures (22%) and due to improper disposal of sharps, including overflowing sharps containers (18.6%)[9]. Remaining NSIs happen when HCPs attempt manipulations like bending/breaking the needle or passing the needle from one to another.

Health care personnel in wards, accident and emergency rooms, operating theatres and labour rooms are at high risk of this type of exposure. Most studies have shown nurses and post-graduate registrars to be at high risk[8]. Additionally, staff at significant risk of exposure are recruits with less than one year of experience i.e. interns and trainees[9]. Cleaners and those responsible for collection of waste are also at high risk due to improper disposal of needles and sharps. Almost 25% of NSI occur from needles with unknown source[9]. This reiterates the need to complete the full course of Hepatitis B Virus (HBV) vaccination as early as possible, whereby protection is ensured for at least one of these 3 viruses.

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### Eliminating the risk of infection

Most such exposures are avoidable and can be prevented by implementing certain policies in the health care setting. The outlined preventive measures are common for these three viral agents. The implementation of standard precautions, immunization against HBV, and provision of personal protective equipment and clear protocol for immediate management of any such exposures prevents the potential transmission. The cardinal aspects of standard precautions are listed in **Table 1**. A check list of effective practices designed to protect HCP and patients from these infections is outlined in **Table 2.** Auto-disable syringes have been mandated for all medical injections in many developing countries including India. Many states in our country have however not yet implemented this approach of prevention.

### What to be done in event of occupational exposure?

The Post-Exposure Prophylaxis (PEP) that follows such an event is inclusive of comprehensive medical management to minimise the risk of infection among HCP.

This includes first aid, counselling, risk assessment and relevant laboratory investigations after informed consent from the index case and exposed person along with follow up and support[10].

**A. Immediate care**

- For Needle Stick Injuries**:** Wash with soap and water. Do not squeeze the wound.
- For mucous membrane exposure: If there has been a splash into the eyes, irrigate with copious amount of running water.

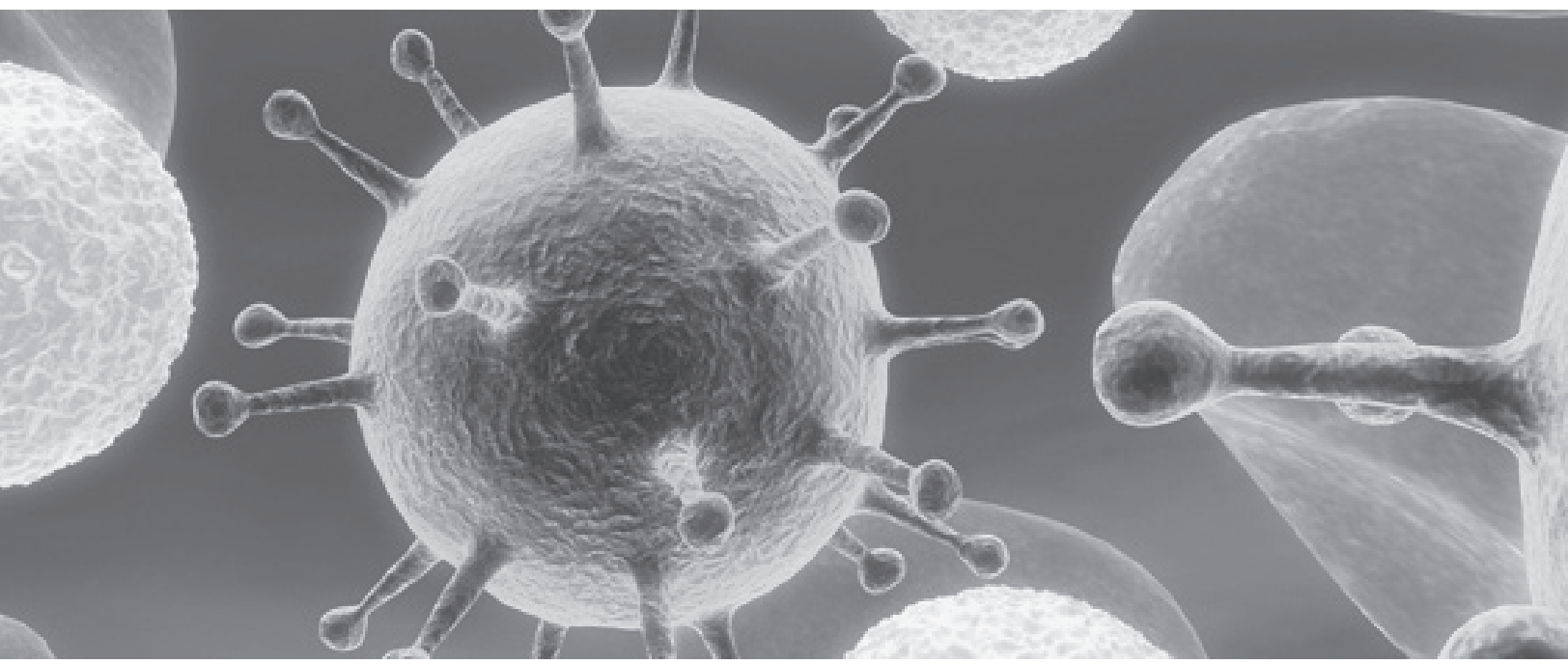

**Table 1: Cardinal rules of standard precautions**

| |
|---|
| Consider ALL patients as potentially infectious |
| Assume ALL blood , body fluids and tissue to be contaminated with a blood borne pathogen |
| Assume ALL unsterile/used needles and other sharps to be similarly contaminated |

**Table 2: Checklist to minimize blood borne virus related occupational exposure and infection**

| | |
|---|---|
| **Standard precautions** | |
| • Hand washing after direct contact with every patient | ☐ |
| • Safe collection and disposal of sharps, NO re-capping of needles | ☐ |
| • Use gloves for contact with mucous membranes, non-intact skin and body fluids | ☐ |
| • Wear gloves, protective goggles and apron if splash of blood/body fluids is likely | ☐ |
| • Cuts and abrasions of the health care provider to be covered | ☐ |
| • Cleaning up spills of blood/body fluids with 1 in 10 dilution of household bleach | ☐ |
| • Safe system for hospital waste segregation and disposal | ☐ |
| **Hepatitis B vaccination** | |
| • Immunize early in career | ☐ |
| • Preferred schedule is 0,1 and 6 months | ☐ |
| • Ideally, post-vaccination testing to be done 1-2 months after completion of course | ☐ |
| • Routine booster administration not required | ☐ |
| **Use of personal protective equipment** | |
| • Ensure adequate supplies | ☐ |
| • Train staff in correct use | ☐ |
| • Monitor compliance and appropriate use | ☐ |
| • Ensure safe disposal | ☐ |
| **Post-exposure management** | |
| • Set guidelines outlining all procedures | ☐ |
| • Dissemination of guidelines | ☐ |
| • Repeated rounds of information, education and communication | ☐ |
| • Actively encourage self-reporting | ☐ |
| • Support and counseling | ☐ |
| • Prompt provision of post-exposure medication/screening in high risk exposures | ☐ |
| • Analyze and communicate surveillance data | ☐ |

**Table 3: Post-Exposure Prophylaxis following exposure to HBV**

| S. No | Health care provider status | Recommended action |
|---|---|---|
| 1. | Unvaccinated | Administer HBV immunoglobulin (HBIG; 0.06 mL/kg) within 48 hours of injury. Initiate HBV vaccine as soon as possible. |
| 2. | Vaccinated & Anti-HBs ≥ 10mIU/mL | Reassure the individual. No specific post-exposure prophylaxis |
| 3. | Vaccinated & Anti-HBs ≤ 10mIU/mL | Administer HBV immunoglobulin (HBIG; 0.06 mL/kg) and one dose of vaccine. Plan to re-vaccinate |
| 4. | Vaccinated but anti-HBs levels not known | Test Anti-HBs levels and follow options 1, 2 and 3 |
| 5. | HBsAg positive (HBV carrier) | Counsel the individual. No specific post-exposure prophylaxis. Needs follow-up |

- For non-intact skin exposure: Wash with soap and water.

**B. Prompt reporting**

- All above mentioned exposures must be reported IMMEDIATELY to the supervisor/ medical officer in-charge.

**C. Management of specific exposures**

- Assess risk of transmission of these viruses
- For ALL exposures, the following to be done:

  1. The index patient has to be checked for the following:
     - HIV antibody
     - HBsAg (Hepatitis B surface Antigen)
     - HCV antibody

  2. After obtaining consent, the HCP must be checked for all or one of the following based on the index patient's status:
     - HIV antibody
     - HCV antibody
     - Antibody to Hepatitis B surface antigen (Anti-HBsAg)
     - HBsAg

Blood samples once drawn from index patient (source) or HCP need to be processed and tested and reported expeditiously.

1. If the index patient is positive for HCV antibody:

   HCP is screened for HCV antibody and alanine aminotransferase (ALT) at 0, 3 and 6 months and followed up if appropriate. No specific anti-viral prophylaxis is recommended currently.

2. If the index case is HBsAg positive, the possible strategies are outlined in **Table 3.**

3. If index patient is HIV antibody positive:

   The exposed HCP needs to be counseled before starting therapy. He/She needs to be counseled regarding benefits of PEP, risks and side-effects of PEP and prevention of further transmission. Anti-retroviral therapy (post-exposure prophylaxis for HIV) should be ideally started 1-2 hours within exposure. Prophylaxis is not recommended if it cannot be initiated within 72 hours of the injury. Haemoglobin, platelet count, reticulocyte count, white blood cells (total & differential counts), serum creatinine, liver function tests and random blood glucose should be done at the time of starting therapy. The recent PEP recommendations cover all types of exposures and all population groups[11,12].

**The regimens include:**

Tenofovir combined with either lamivudine (3TC) or emtricitabine (FTC) are the preferred backbone drugs. The recommended third drug is ritonavir-boosted lopinavir (LPV/r) for a period of 28 days. Atazanavir may be used instead of lopinavir for cost considerations. To improve uptake and completion of this PEP, WHO recommends providing the full course at first visit, rather than requiring individuals to return multiple times for prescriptions[11]. Every effort must be taken to ensure full adherence and completion of this schedule.

The HCP should be tested for HIV antibodies after 6 weeks, 3 months and 6 months following exposure. If it is certain that a fourth-generation combination HIV p24 antigen–HIV antibody test is being utilized, then the follow-up can be stopped at 4 months.

4. If injury is from an unknown source:

   The HCP will need to be tested for markers to all three viruses soon after the exposure and will need to be followed up and re-tested for the same at the 6 weeks, 3 months and 6 months.

**To improve uptake and completion of this PEP, WHO recommends providing the full course at first visit, rather than requiring individuals to return multiple times for prescriptions[11].**

Finally, instituting a Hospital Infection Committee will be useful to supervise compliance with standard precautions, ensure early vaccination and appropriate use of personal protective equipment and monitor and advice on management of accidental exposures as well as potentially risky procedures that need modification. This would go a long way in minimizing such infections in a healthcare setting.

*Contributed by Dr Priya Abraham, Professor and former Head of Department of Clinical Virology, CMC Vellore. Her special interests are hepatitis viruses and human papillomaviruses that cause cervical cancer. Also contributed by Dr Rajesh Kannangai, Professor and current Head of Department of Clinical Virology, CMC Vellore. His special interests are HIV and opportunistic viral infections, especially in HIV infected individuals*

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# Hospital Infection
# Nurses Perspective

**A study conducted in 14 developing countries shows the prevalence of hospital infections varying from 3% to 21% in individual hospitals.**

### Introduction

Management of health care waste is an integral part of hospital hygiene and infection control. Health care waste should be considered as a reservoir of pathogenic microorganisms, which can cause contamination and give rise to infections. If waste is inadequately managed, these microorganisms can be transmitted by direct or indirect contact. Infectious waste contributes to the risk of hospital infections. A study conducted in 14 developing countries shows the prevalence of hospital infections varying from 3% to 21% in individual hospitals.

It should be stressed here that other environmental health considerations, such as adequate water supply and sanitation facilities for patients, visitors and hospital staff are of prime importance.

Nurses occupy 60% employment of hospital manpower and they provide 24X7 care. To prevent Hospital infection, nurses and other hospital workers must have knowledge regarding epidemiology, sources and transmission of infection and prevention of hospital infections.

### Epidemiology of Hospital Infections

Hospital Acquired Infection (or recent Healthcare Associated Infection) is also known as ***nosocomial infection.*** They are not present at the time of admission in the hospital but develop during the course of the stay in hospital. They are of two forms:

- ***Endogenous infection, self infection*** or auto infection- Here the causative agent of the infection is present in the patient at the time of admission but there are no signs of infection. The infection develops during the stay in hospital as a result of the patients altered resistance.
- ***Cross infection, exogenous infection-*** Here the patient comes into contact with a new infective agent, and subsequently develops an infection.

Patients, newborn babies and elderly have less resistance and will probably develop an infection after exposure. Local resistance of the tissue to infection also plays an important role. The skin and the

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**If waste is inadequately managed, these microorganisms can be transmitted by direct or indirect contact. Infectious waste contributes to the risk of hospital infections.**

mucous membranes act as barriers to the environment. Infection may follow when these barriers are breached.

The sources of infection: - the hospital environment can be contaminated with pathogens- salmonella, shigella, Escherichia coli or other pathogens may be present in the food and cause outbreak of disease just as they can in a community outside the hospital. If the water distribution systems break down, waterborne infections may develop.

The source of an outbreak of nosocomial infection may also be through a health worker who is infected or a carrier. A symptomless carrier, however, is colonized by potentially pathogenic organisms but does not develop any infection.

The sources of most hospital outbreaks are infected patients, i.e. patients harbouring pathogenic microorganisms.

These microorganisms are often released into the environment in very high numbers, exceeding the minimal infective dose and infect other patients who subsequently develop hospital acquired infections.

## The routes of transmission

Microorganisms can be transmitted from their source to a new host through direct or indirect contact.

*Vector-borne transmission* is typical in countries in which insects arthropods and other parasites are widespread. These become infect by contact with excreta or secretions from an infected patient and transmit the infective organism to other patients.

*Airborne transmission* occurs with microorganisms that are dispersed into air and that are characterized by a low minimal infective dose. Only few bacteria and viruses are dispersed in large number as a result of sneezing or coughing.

*Direct contact* between patients does not usually occur in health care facilities, but an infected healthcare worker can directly transmit infection to a new host.

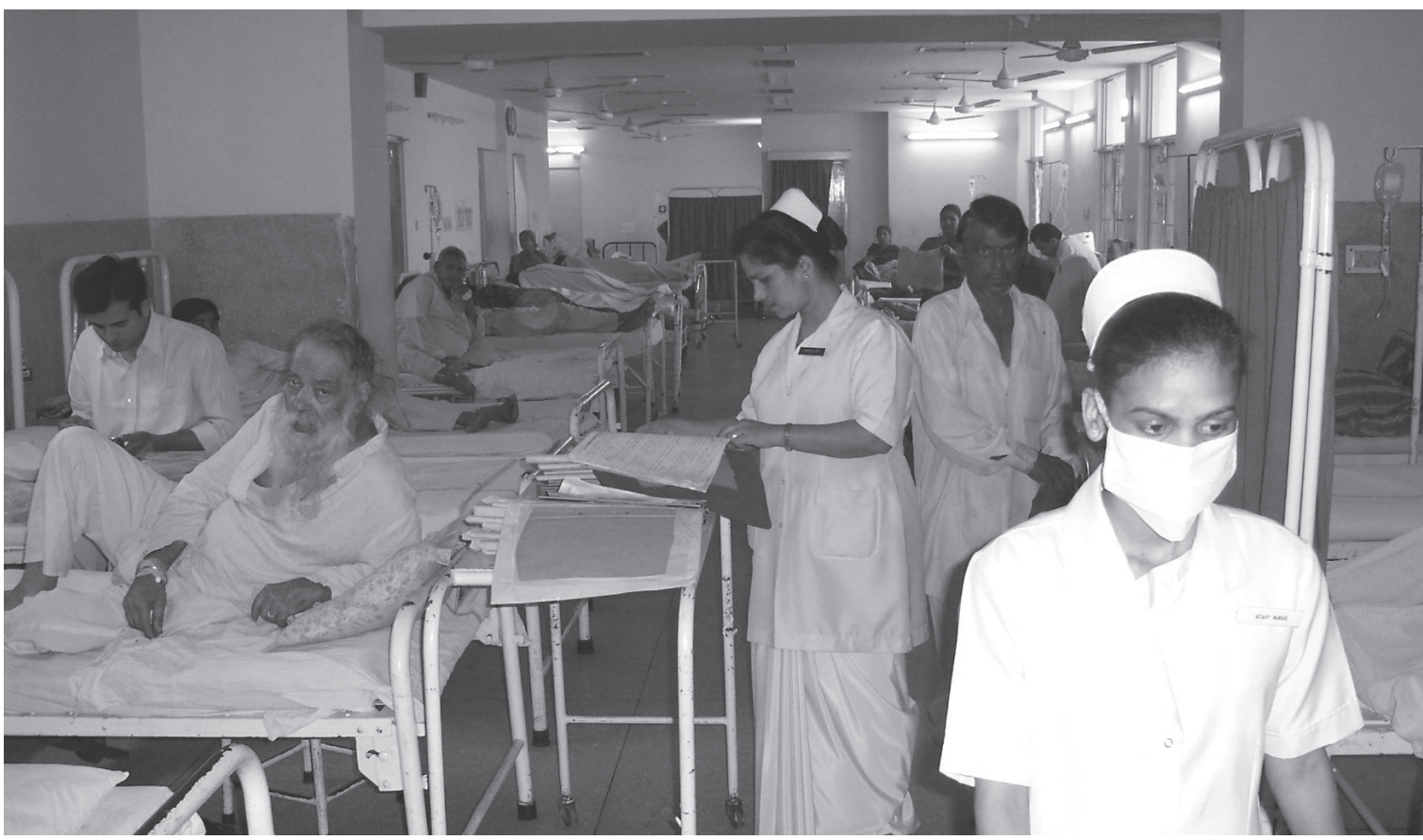
The most frequent route of transmission however is indirect contact. The infected patient touches and contaminates an object, an instrument or a surface. Subsequent contact between that item and another patient is likely to infect the second individual, who may then develop infection.

## The prevention of nosocomial infection

A) ***Understanding the principles*** –Two basic principles govern the main measures that should be taken in order to prevent the spread of nosocomial infection in health care facilities.

1. Separate the source of infection from the rest of the hospital.
2. Cut off any route of transmission.

The separation of the source has to be interpreted in a broad sense. It includes not only the isolation of infected patient but also all aseptic techniques- the measures that are intended to act as a barrier between infected or potentially contaminated tissues and the environment, including other patients and personnel.




In recent years increasing attention has been paid to protect the personnel in particular against the transmission of blood borne infections eg- AIDS and viral hepatitis B&C. Preventive measures are known as universal or standard precautions. Biomedical waste management policy is imparted to all hospitals. It is mandatory to have pollution control certificates to register and run the hospital and nursing homes.

It is impossible to avoid all contact with infected tissue or potentially contaminated body fluids, excreta and secretions. Even when they are not touched with bare hands they may come in contact with instruments, containers, linen etc. **All objects that come in contact with patients should be considered as potentially contaminated.**

If an object is disposable, it should be disinfected and then discarded as waste. Reusable articles and equipments should be cleaned, sterilized and then used.

***B) Isolating infected patients***

Isolation is the first and most essential measure in preventing spread of infection. The strictest form of isolation is needed in very infectious diseases like .- hemorrhagic fever, diphtheria, etc; less stringent precautions can be taken in case of disease like.- tuberculosis, respiratory infection and diarrhea.

***C) Practicing standard precautions***

Ten Commandments to prevent hospital infection or the so called standard precautions, summarized in Box-A, essentially protect health workers from blood borne infection and help to prevent transmission of microorganism.

***D) Cleaning***

One of the most important measures for maintaining hygiene. The principal aim of cleaning is to remove visible dirt. Diluting and removing the dirt also removes the breeding ground or culture medium for bacteria and fungi. The effectiveness of disinfection and sterilization is improved by increased (prior or simultaneous) cleaning.

***E) Sterilization***

Articles for patient care should be sterile. Sterilization can be achieved by both physical and chemical means. Physical methods are based on the action of heat (autoclaving, dry thermal or wet thermal sterilization), irradiation or mechanical separation by filtration. Chemical means include gas sterilization with ethylene oxide or other gases and immersion in disinfectant solution with sterilizing properties (eg glutaraldehyde).

***F) Disinfection***

The term disinfection is difficult to define as the process of disinfection

**There is no ideal disinfectant and the best compromise should be chosen according to the situation.**

can vary widely. The guidelines of Centers for Disease Control and Prevention (Garner& Favero1986) allow the following distinctions to be made:

- *High Level disinfection:* can be expected to destroy all microorganisms with exception of large numbers of bacterial spores.
- *Intermediate disinfection:* inactivates mycrobacterium tuberculosis vegetative bacteria, most viruses and some fungi, but does not necessarily kill bacterial spores.
- *Low-level disinfection:* can kill most bacteria, some viruses and some fungi but cannot be relied to kill resistant microorganism such as tubercle bacilli or bacterial spores. There is no ideal disinfectant and the best compromise should be chosen according to the situation. In general use of the chosen disinfectant at appropriate concentration and for appropriate time, should kill pathogenic microorganism, rendering an object safe for use in a patient or human tissue free of pathogens to exclude cross-contamination.

***G) Hand washing***

Hands of health care workers are the most frequent vehicle of nosocomial infections, hand hygiene- includes hand washing and hand disinfection.

Killing all transient flora with all contaminants within a short time necessitates hygienic hand disinfection. Only alcohol or alcoholic preparations act sufficiently fast. Hands should be disinfected with alcohol when an infected tissue or body fluid is touched without gloves.

During a surgical intervention, a high proportion of gloves get perforated. Hands should therefore be disinfected with long- acting disinfectant before gloves are put on. This will not only kill the entire transient flora, but will also prevent the microorganism of the resident flora from taking the place of the transient flora during the intervention. For this purpose, hands should be washed for 5-10 minutes with an antibacterial detergent containing chlorhexidine or rubbed twice for two minutes with an alcoholic solution.

With all the above measures, nurses and other hospital workers can prevent nosocomial infection. Nurses are the most important personnel in this regard and more responsible for prevention of nosocomial infection. She should follow the Ten Commandments to prevent nosocomial infection.

In 1854, Florence Nightingale during Crimean war set an example, that nurses have the power to change the scenario of high rate of hospital infections and accept the challenge to improve patient's health condition by using her knowledge and skills with positive will power.

Nightingale was given the task of improving the quality of sanitation in the military hospital. Before her arrival the soldiers were poorly cared for, hygiene was totally neglected and infections were rampant. Nightingale found the clothes of soldiers swarming with bugs, lice and fleas. The floors, walls and ceilings were filthy and rats were present under their beds. There were no towels, basins or soaps and only 14 bathrooms for approximately 2000 soldiers were present. Many soldiers were dying from diseases than from wounds. Nightingale worked towards the improvement in sanitation, nutrition and activity for the patient of the hospitals. Death rates reduced drastically with the introduction of such measures. She proved herself to be resourceful. Now this is time for us to prove ourselves.We nurses working in hospitals, have a great opportunity to prove our potentials and competencies to prevent nosocomial infection. In some of the hospitals, an Infection Control Nurse is appointed but it is not only her responsibility. We together can make a difference and face the challenge of hospital infection. We will and we can prevent hospital infection.

*Dr Sangeeta Sanjay Sane Jacob is Vice Principal at Public Health Nursing School, Nagpur (Maharashtra).*

## *Ten Commandments to prevent Hospital infection.*

***(Standard precaution to be used in the care of all patients)***

1. Hand washing- Nurses must wash their hands before and after each nursing procedure.
2. Use of protective measures/equipments – Nurses must wear gloves, masks and gowns while handling infectious patient and body fluids, secretion and blood.
3. Proper sterilization –Nurses must use sterilized articles and dressings for surgical procedure.
4. Concurrent disinfection – Nurses must disinfect infectious material and contaminated articles.
5. Environmental control- Nurses must ensure that the hospital has adequate procedures for routine care of cleaning and disinfection of environmental surface.
6. Occupational health- Nurses must take care to prevent needle stick injury.
7. Place of care of patient - Nurse must place a patient, who contaminates the environment or who does not assist in maintaining appropriate hygiene in an isolated room.
8. Handling of used linen- Nurses must handle used linen soiled with blood , body fluids, secretions and excretions in a manner that prevents skin and mucus membrane exposures and that avoids transfer of microorganisms other patient and environment.
9. Bio-Medical waste management- Nurses must follow the guidelines of bio-medical waste management.
10. Own health –Nurses must maintain their health and always be a fit and fine on duty. If she is having any infection, she has to be treated before joining the patient care duties.

# You Better Die, Before You Die,

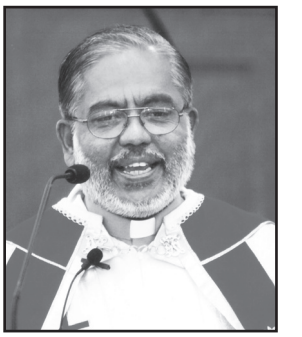
## If You Have a Wish for Eternal Life

An elderly man reviewed his life on his 78th birthday and realized in a moment of great introspection: "First I was dying to finish high school and start college. And then I was dying to finish college and start work. And then I was dying to marry and have children. And then I was dying for my children to grow old enough for school so I could return to work. And then I was dying to retire. And now I am dying… and suddenly waking up to the fact that I forgot to live." How true it is in most of our lives in today's hurry-burry world. However, God our Father, the Author of life and the Creator of man has in His Word something very valuable, interesting and practical to say; about how a human person is to live his/her life and on life and death. God has His DESIGN for every man and woman in the world i.e. **You better die before you die that you may live forever and ever** about what. How is it possible?

Jesus said to His followers: **"Unless a grain of wheat falls to the ground dies, it remains only a single seed, But if it dies, it produces many seeds (John 12:24).** A seed remains only a single seed, but if it dies, it produces many seeds and that is the message of our Lord Jesus Christ for us today. In other words, you better "die" before you die, or else you will never see life eternal. Die to yourself, that is your "whole self" = to let Christ have all of you for Himself. Then you could say with Paul: "Not I but Christ" as in Gal. 2:20. That way we need to learn from Jesus that "BY PAYING THE COST, WE BECOME A BLESSING TO OTHERS." Let me reiterate what Jesus said; **the seed remains only a single seed unless it dies but when it dies, it produces many seeds.**

Michaelangelo was asked once why he always wore a miner's cap when he painted. His reply was that HE NEVER WANTED A SHADOW OF HIMSELF TO FALL ON HIS CANVAS.

Socrates said, "KNOW YOUR SELF."
Marcus Aurelius said, "CONTROL YOURSELF."
Other sages of the world said:"GIVE YOURSELF."
Jesus said: "DENY YOURSELF."



*Rev Dr J Albert D Selwyn*

**However, God our Father, the Author of life and the Creator of man has in His Word something very valuable, interesting and practical to say about how a human person is to live his/her life and on life and death.**

He did not stop there as He continued to saying, "Take up your cross and follow me." Each one of us has chosen voluntarily to follow Jesus. It also means we have accepted the cross He gave to each of us in following Him. It needs to be carried by ourselves individually. The Lord provides each of us daily with the much needed grace, strength, wisdom and courage to follow Him. Others may help and support but carrying it is our choice and our privilege; the joy and responsibility solely becomes ours, leading us to a life of abundance and fruitfulness.

There are two basic attitudes OR two approaches to life in this world; the question before us is always what the decisions we are taking for our lives are.

Jesus' approach as per John 12:24 is an approach of self-denial, self-control and self-restraint. It is the NARROW WAY in the words of Jesus (Matt 7:14). It is hard and few who find it.

The other approach is the way of the world. It is called the WIDE WAY in the words of Jesus (Matt 7:13). It is easy and many enter by it. It is opposed to God, His word and Jesus Christ. In our contemporary world this second approach is detailed as follows: A) Live as you please; B) Have what you want; C) Don't let anyone tell you what you should do; D) It is your life, you have a right to live it the way you want. Therefore we wish to know, What is the biblical view of life and death?

By itself, a seed is weak and useless but when it is planted where it should be and when it dies according to the laws of God's nature, it becomes fruitful. There is both beauty and bounty when a seed dies and fulfils its purpose. If a seed could talk it would no doubt grumble and complain to the master, why do you put me into the cold, dark and dirty earth. But the only way it can achieve its God-given purpose in its life ***is by being planted where the Master wills so as to ease its death in order to produce more seeds***. Multiplication is the law of life enunciated by none other than the Creator God Himself, the Author of Life for both the human-kind as well as the plant-kind on the earth. (John 15:5, 8,16)

God's children like you and me are the seeds. We are very small and insignificant in ourselves but we have God's life within us. God Himself dwells in us by His Holy spirit. However, that life can never be fulfilled unless we yield ourselves to God and allow Him to plant us where He wants. Deal with us how He wants either by breaking, melting or moulding us (John 15:2). Thus we need to die to ourselves so that God may live in us and work through our lives. That is what we persist in saying WE BY PAYING THE COST THAT OTHERS MAY BE BLESSED BY US.

Jesus used this image of the seed to illustrate the following truth:

1. There can be no glory without suffering;
2. There can be no fruitful life without death;
3. There can be no victory without surrender.

We wish to illustrate this from the life of the first-ever Martyr of the early church Deacon Stephen in Acts 7:54-60. What were the effects of Stephen's death upon others ? Or how God used the death of Stephen to bless the world? (Acts 7:54-60)

1) For Stephen, **death meant *coronation*** ( Rev.2;10) (Crowning of a King)

He saw the glory of God and the Son of God standing to receive him to heaven (see Luke 22:69). Our Lord sat down when He ascended to heaven (Ps. 110:1; Mark 16:19), but **He stood up to welcome the first Christian martyr to glory**,(Luke 12:8).This is the last time the title "Son of man" is used in the Bible. It is definitely a messianic title (Dan. 7:13–14), and Stephen's use of it was one more witness that Jesus is indeed Israel's Messiah. Stephen was not only tried in a manner

similar to that of our Lord Jesus Christ but he also died with similar prayers on his lips (Luke 23:34,46; Acts 7:59–60). A heckler once shouted to a street preacher, "Why didn't God do something for Stephen when they were stoning him?" The preacher replied, "Friend, God did do something for Stephen. He gave him the grace and strength to forgive his murderers and to pray for them!" What A perfect answer!

2) For Israel, **death of Stephen meant *condemnation***. This was their third murder: (1) they had permitted John the Baptist to be killed; (2) they had asked for Jesus to be killed; and now (3) they were by themselves killing Stephen. When they allowed Herod to kill John, the Jews sinned against God the Father who had sent John (Matt. 21:28–32). When they asked Pilate to crucify Jesus, they sinned against God the Son (Matt. 21:33–46). When they stoned Stephen to death, Israel sinned against the Holy Spirit who was working in and through the Apostles (Matt. 10:1–8; Acts 7:51). Jesus said that this sin could never be forgiven (Matt. 12:31–32). Judgment finally came in A.D.70 when Titus and the Roman armies destroyed Jerusalem and the temple in history.

3) For the church in Jerusalem, **the death of Stephen meant *liberation***. They had been witnessing ever since Pentecost "to the Jew first", but now they would be directed to take the message out of Jerusalem to the Samaritans (Acts 8) and even to the Gentiles (Acts 11:19–26). The opposition of the enemy helped prevent the church from becoming a Jewish "sect" and encouraged them to fulfill the commission of Acts 1:8 and the great commission in Matthew 28:18–20. Someone called it rightly the great OMISSION of the contemporary church.

4) Finally, as far as Saul was concerned, **the death of Stephen eventually meant his *salvation.*** (Acts 7:58)

He recollects that event in his life on the Damascus road in Acts 22:17–21, and no doubt Stephen's message, prayers, and glorious death were used of the Holy Spirit in preparing Saul of Tarsus (who later became Apostle Paul) for his own ENCOUNTER with the risen Lord Jesus Christ. "And as he journeyed, he came near Damascus: and suddenly there shone round about him **a light from heaven**. And he fell to the earth, and heard a voice saying to him, Saul, Saul, Why persecutes thou me? (Acts 9:3, 4)

Saul that day SAW the same glory that Stephen saw and beheld the Son of God and heard Him speak! That was the beginning of a big TURN AROUND in his life. By paying a very heavy price with his own life, Stephen became a great blessing to Paul. What God could make of Paul to become a blessing to the world is now on record in the historical annals of the world and the impact of his legacy will remain forever till our Lord comes in His glory at the Second Coming.

The words "a light from heaven" reminds me of something I have read about Mahatma Gandhi from Dr E Stanley Jones. Some 15 years years before his death, Gandhi wrote: "I must tell you in all humility that Hinduism, as I know it, entirely satisfies my whole being, and I find a solace in the Bhagavad and Upanishads that I miss even in the Sermon on the Mount." Later just before his death, Gandhi again wrote: "My days are numbered. I am not likely to live very long, perhaps a year or a little more. For the first time I find myself surrounded by darkness. As all around me is darkness; I am praying for light."

How much every human person who comes into this world however big or small, rich or poor, powerful or weak **NEED** that '**light from heaven'**? Is it not what the gospel of Jesus Christ is all about?

God does not call all of us to be martyrs. But surely "He does call every one of us to be "living sacrifices" for Him! (Rom. 12:1–2) In some respects, it may be harder to live for Christ than to die for Him; but if we are living for Him, we will be prepared to die for Him if that is what God calls us to do. Is it not what Frances Havergal meant when she penned these words in her most popular Hymn, "Take my life and let it be…...? (554 in Hymns for Today's Church)

"Take my love-my God I pour,

at your feet its treasure- store;

take myself, and I will be

yours for all eternity."

*"Be faithful, even to the point of death, and I will give you the crown of life " (Rev. 2:10)*

Rev Dr J A D Selwyn is a retired Presbyter from the CSI Karnataka Central Diocese. He served the diocese as the Diocesan Secretary from 1987 to 1991. He was on deputation with the Anglican Diocese of Singapore and was the Vicar of Parish of Christ Church in Singapore. He is presently working as Hon. Senior Promotional Executive for the TAFTEE, India in Bangalore.

# FROM OUR ARCHIVES

The Journal of the Christian Medical Association of India, Burma and Ceylon
Vol XV No. 2 - 1940


Modern Theory and Practice of Healing
By HOWARD E. COLLIER, M.B. Ch.B.

On a sunny November morning I was descending a hill-side, when I was aware-with deep emotion that a clean cut must be made with the past. I must cease striving for my own ends and purposes, must cheerfully embrace whatever plans or purposes God might have for me: must be prepared to be well or ill: must subject my hitherto dominant self to the one purpose of the Lord of Life for me. As I did so, a deep Peace followed and spread out to Joy. For inward strife and chaos were given Peace and Joy. At such times we experience a lightness of heart, an adventurous abandon, which he who calculates chances in the lottery of life can never know nor comprehend. From this time on my physical health steadily improved.

Here we find, I am persuaded, the essential living core of Spiritual Healing. It arises from the glad submission of the self as a whole, and as a personality, to the Will of God for us. To heal is to make whole: to be healed is to be made whole. It was in this manner that the Healer came to me. The Human Personality is a unity of many subordinate parts. It is a living organism, made up of Body and Mind. The Body is the instrument of the Spirit, or 'Whole Soul'; and the Mind is the inward environment of the Soul or Self. No better or more accurate description of the 'Unity' that is oneself can be found than to say that one is an 'Embodied Soul'. Most of our waking lives are spent immersed in details.

We seldom live, feel, or experience 'spiritually', that is to say' as a whole', as an active being. When we do so live, we are able (if we will) to touch Reality as a Whole. This mingling of the vital forces of the Self with the Life of Reality as a Whole constitutes a spiritual experience. Every spiritual experience is a healing.

I believe that most diseases start with the Personality rather than in the parts, and that permanent and progressive healing starts there also. I am sure that health is largely, determined by the attitude of the Personality to its life problems.

## FROM OUR ARCHIVES

The Journal of the Christian Medical Association of India

Vol XL - No 1, January 1965

IS THERE ANY FUTURE IN CHRISTIAN MEDICAL WORK?

Rev F S Downs, B A, BD, Ph.D

Acting Principal, Eastern Theological College, Jorhat, Assam

I have been asked to discuss the question posed by the above title from the viewpoint of a theologian. This is a most welcome opportunity for among professional - whether they be medical or theological-there is an unfortunate tendency to think that a layman in their field has nothing to say to them that is of any value……

What was the objective of Christ's healing ministry? In the answer to this question lies the answer to our own question-what is the future of Christian medical work in India? Certainly Christ's purpose was more than humanitarian; If it had been only that, he would have set out to cure all those he could find to lay his hands on. But we are told that at times he actually ran away from the sick who were clamoring to be cured. He certainly did not intend to find what today we would probably call a Palestinian Health Service. It would have been difficult to improve upon the efficiency of such a service had it been established! He could have worked a kind of comprehensive miracle through which all the sick in Palestine were cured at once. But he did not. For Jesus, healing was a form of preaching which pointed beyond the physical to the spiritual malady. The physical cure was of secondary importance. Through the healing of the body he sought heal the spirit-not only of the individual involved but of all those who witnessed it.

# The Journey of Mukti Mission by Pandita Ramabai

**Pandita Ramabai was a social reformer who was passionate about Christ and passionate about women. Ramabai was born in 1858 to a high caste Brahmin Sanskrit scholar, Anant Shastri Dongre. Her father breaking tradition, taught his wife and daughter, Pandita, the sacred languages.**

**PANDITA RAMABAI** A brief History 1858 - 1922

The family traveled, Ramabai's father teaching the Holy Scriptures for a living. Tragedy struck as her mother, father and sister all perished in the famine of 1877. Ramabai and her brother continued to travel and teach. Ramabai's knowledge was so impressive that she was the first woman to be given the title Pandita and Saraswati, meaning wisdom. After the death of her brother, Ramabai married a Bengali lawyer below her caste and her husband soon died of cholera, leaving with her a baby daughter.

Ramabai's travel throughout India made her aware of the terrible plight of women in India. Many women were married as children to much older men and therefore were widowed and left without status or protection.

Ramabai soon became a leading advocate for the rights and welfare of women in India. Through her work she came into contact with Christians who paid for her to travel to England. There she was taken in by the sisters at St Mary's Home in Wantage. The sisters taught her about Christ. Ramabai undertook serious study of the Bible and decided to be baptized.

On re-touring to India, she continued to study the Bible and accepted Christ as her personal Saviour, a moment she described as being shut up in a dark room and suddenly released into bright daylight. In 1889 she established Sharada Sadan, a school in Bombay for child widows. She promised not to pressure the girls to become Christians but she had daily devotions which the girls could choose to attend. Many of the girls became Christians.

*Mrs Lorraine Francis*

**Ramabai soon became a leading advocate for the rights and welfare of women in India. Through her work she came into contact with Christians who paid for her to travel to England.**

In 1890 she moved the home to Pune. In 1896, 300 girls were rescued from the Madhya Pradesh famine. During a plague outbreak in 1902, she moved Sharada Sadan, purchasing a farm property outside Pune. During a severe famine Ramabai toured the villages of Maharashtra with a caravan of bullock carts and rescued thousands of outcast children, child widows, orphans, and other destitute women and brought them to the shelter of Mukti and Sharada Sadan.

Pandita Ramabai's philosophy:

A LIFE TOTALLY COMITTED TO GOD HAS --

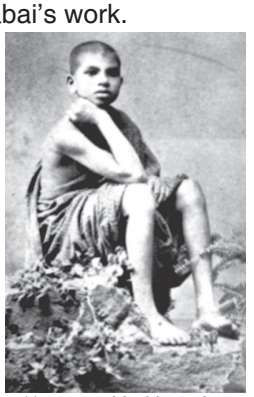
Nothing to Fear

Nothing to Lose

Nothing to Regret

By 1901 there were almost 2000 residents including those rescued from the Gujarat famine.

A learned woman knowing seven languages, she also translated the Bible into her mother tongue – Marathi – from the original Hebrew and Greek. She was the first native speaker to do so, not just the first woman. She died at Mukti in 1922 soon after completing the translation. She was awarded the Kaiser-I-Hind medal, the highest honour under the British Raj. The Indian government released a stamp in 1989 commemorating Pandita Ramabai's work.



*Tara, a 11 year – old widow who was branded with a hot iron before seeking shelter at Pandita Ramabai's Home.*

The condition of child widows during Ramabai's time was horrendous. I am sure your heart will be moved as you read this prayer:

**The prayer of a child-widow**

I am a little child, yet none will save.
When five years old betrothed to age,
To age with one foot touching the grave,
Yet when he dies the family rage.

The family storm, and curse, and swear;
The little wife has caused his death!
How shall I tell how widows fare?
O God! I have not the power nor breath.

Sold into bondage, a helpless slave!
One hundred rupees! The paltry sum
My parents took; the old man gave,
And I was his whate'er might come!

And oh, the sorrows when he died!
The harsh words as hard as blows,
E'en red-hot iron their hands applied,
The scars my injured body shows.

When but eleven, from my head
They shaved the soft, dark locks of hair.
They counted me as with the dead;
The dead! I wish that I were there.

Yes, with the dead I long to be;
There, surely, I'll find rest and peace.
Come, oh my God! And set me free;
In death's cold arms give me release.

***By A little Brahmin Widow***

*A little girl (L) just admitted for care, shelter and safety, now a young, healthy and empowered woman (R)*

**From**

## the Mission Director's heart

**Dear like-minded friends sharing the same Vision:**

In Mukti, there's never a dull day. From dawn to dusk, several adventures are witnessed. While I sit quietly at my desk, I would suddenly receive calls about someone at the door seeking help or families who pours out their blessings on us and so on. There also would be shocking and dramatic news given to me about an intruder encroaching Mukti's property or fantastic news that a long awaited registration is now in our hands and we have to go to the concerned office to collect it.

The word Mukti means freedom. It's my job to see that the women and children who enter the gates of Mukti find freedom and enable a transition from their horrendous past to a life full of hope and a bright future.

However in order to achieve my dreams, it is a big battle to face every day. These precious words from 2 Chron. 20:17. "You do not have to fight this battle. Stand firm, take up your position and see the deliverance the Lord your God will give you today." I am in wonder and amazement of what God is doing in Mukti in the midst of every obstacle and onslaught of the evil one. I'd

*Mukti children enjoying a little chat with the Mission Director*

also like to quote from Lam. 3:22 – "It is because of the Lord's great love that we are not consumed. His compassions fail not. They are new every morning. Great is your faithfulness."

It is the Lord's special anointing and amazing grace which is poured out on all of us we (the leadership team) have a share in the momentous task of taking Mukti forward in the 21st Century.

The Lord has enabled us through our transition in the valley experience and in the reproach we faced. Ezekiel 36:33-36 says, "In the day that I cleanse you from all your iniquities, I will also cause the waste places to be rebuilt. The desolate land shall be tilled and all those who pass by shall say, 'This land that was desolated has become like the garden of Eden and the waste places fortified again.' Then the nations around you shall know that I, the Lord have rebuilt the ruined places and replanted that which was desolate." The Lord's promises will never return to us void and this is the proof:

- A big break- in the farm/dairy
- A new Sunshine Nursing Home- as part of the Preventative Care Unit.
- Influx of new Indian donors with large gifts.
- Sections of Mukti locked for years have now been opened and utilized.
- New partnerships with Agape Research Foundation, Mizoram Presbyterian Church & Church Mission Society.
- Revival rain and repentance among the residents and refreshing prayer times with staff.
- Roof renovation/painting in Flower Families, Sadans and Hospital.
- Environment and ecology beautification.
- Boldness to face opposition.
- Enhancement in the School for Creative Arts.
- Involvement of staff in outreach, discipleship and Church planting.
- New home in Madla, Madhya Pradesh (Central India).
- Opening of Day-Care Centre in Khandamal, Orissa and Mirzapur, North India.
- Opening of Navegaon & Supa Day-Care Centres with people living below poverty line.
- Un-utilised land now in good use with shops being leased and income used for education, rehabilitation and empowerment.
- Enlarging our Community Care Vision of Education with:
  1. Junior College
  2. School for Special Needs
  3. English Medium School breaking new grounds in infrastructure.
  4. Dongar Vasti Compound Wall Project.
  5. Fencing and protection of farm lands.

I dream of the fire of Holy Spirit falling on Mukti as never seen before, and for India to know that the God of Ramabai is alive in our midst. The dream of seeing in reality an International School, new campsite, new construction of Sadans to give our women dignity and acceptance, and an Overseas University in Mukti grounds and launching new Mukti home/day-care centres in Uttar Pradesh, Himachal Pradesh, Delhi and Bihar will be much cherished in my heart.

Thank you, dear people of God who labour and partner with us to continue the vision the Lord gave His servant Pandita Ramabai. I am confident that with your continued prayers and support, Mukti will continue to be a catalyst in the growth and development of every needy person who walks through our gates, seeking to find care and solace and eventually that they will find Jesus as their personal Saviour and Lord.

Mukti's major focus is giving quality education to the girls

Little blind girls find new joy and hope at Mukti

Mukti Mission is standing as a BEACON OF LIGHT for the past 126 years. Very little has changed with regard to giving dignity to children and women since the inception of Mukti in 1889. The trauma of victimized children and women who are unwanted and abandoned still continues. Mukti opens doors to wives deserted by society, children, flung off the railway tracks, some abandoned in secret places and some denied of their existence.

In closing, a visitor who recently came to Mukti blessed us by declaring, "This year and the coming years are going to be YEARS OF JUBILEE and the Lord is going to do extraordinary things in this place." Isn't your partnership worthwhile?

For the rest of my life, this is ***MY VISION:***

I SEE MYSELF AS A **VOICE** TO THE VOICELESS, SERVING THE ***MASTER*** WITH EXCELLENCE AND UPRIGHTNESS OF HEART, MAKING USE OF EVERY OPPORTUNITY TO BRING A SPARK IN SOMEONE'S DARK WORLD.

## *About Myself*

Born in a non-Christian family, my world was dark and unsafe. As a young woman, I was always confused with myself. For years there always used to be an inner turmoil and I was going helter-skelter to find purpose and peace in life. After high school and training, I took up a job in a secular organization where the good news of salvation came miraculously to me through the gospel of John 14.6 "***I am the way the truth and the life. No one comes to the Father except through Me."*** It was a turning point in my life and an amazing encounter with the Lord Jesus Christ. The burdens of my heart were rolled away and I was free.

Since my conversion and my transformation, the Lord has been reminding me of the trauma faced by women and children and His ambassadors should go and reach out to them. I made a commitment to be the Voice to the Voiceless. Through my home church, I was introduced to the wonderful work started by Pandita Ramabai and how it is making an impact in the Society.

Hence in 1988, my husband and I along with a little girl of 16 months old joined the work of Mukti Mission and we have been serving since then. We have two daughters now and hundreds of children from Mukti Mission who are our spiritual children. After completing 14 years at

*A couple of months ago, a grandmother along with her daughter and granddaughter came to Mukti seeking help and guidance from us. The baby was one day old and born out of wedlock. The grandmother was in a distraught condition and did not know the way forward. She had told her husband that their daughter had a growing tumor in her tummy and it had to be operated. After counseling that calmed them down, the grandmother and mother decided that the best option was to leave their little girl into the safe arms of Mukti Mission. In no way, could they take the child back home and shock the grandfather. With tears in their eyes and with an aching heart, the two ladies handed over the precious bundle to us for care and safety.*
*Isaiah 49.15: "…Surely they may forget, Yet I will not forget you."*

*"…Yet, I will not forget you."*

Mukti, the Board decided to give us a two year Sabbatical break, when we had an opportunity to study at All Nations Christian College, Hertfordshire, England for two years. It was a refreshing time and a time to equip ourselves and sharpen our skills for greater work of the Lord.

It has been an exciting journey with Mukti Mission for the past 27 years and I can hear the words resonating from Isaiah 62.1 "For Zion's (Mukti's) sake I will not hold my peace, and for Jerusalem's sake I will not rest, until her righteousness goes forth as brightness…"

*For more details, please contact: The Mission Director, Pandita Ramabai Mukti Mission, Kedgaon-412 203, Pune Dist.Maharastra, India Phone: 02119-223122, E-Mail: superintendent.prmm@gmail.com*

*Mrs Lorraine Francis is the Mission Director of Pandita Ramabai Mukti Mission*

## Reflections on Ethical Living

# Doubt and Faith

**"Doubt acknowledges our own limitations and confirms — or challenges — fundamental beliefs, and can be a crucial part of our belief and faith".**

When the Most Reverend Justin Welby, the archbishop of Canterbury, publicly admitted to occasional moments of doubt about the existence of God, the media predictably went to town in their reporting of it, with juvenile headlines screaming for attention. The world was also startled when Mother Teresa's diaries, released after her death, revealed that she too was tormented by doubt and had a strong yearning to see or sense God's presence. Calvin and C.S. Lewis, famous Christian writers, too have acknowledged times of uncertainty.

Alfred Lord Tennyson suggested, "There lives more faith in honest doubt, believe me, than in half the creeds." Flannery O'Connor said there was "no suffering greater than what is caused by the doubts of those who want to believe". She admitted that these doubts were "the process by which faith is deepened." Even Jesus had momentary doubts on the cross when he said "My God, why have you forsaken me?" His disciples were also full of doubts and misgivings. Psalm 88 is the traditional Biblical text, which clearly demonstrates doubt.

The issues involved in courage persisting in the face of fear and faith persevering in the presence of doubt are similar. Faith becomes a commitment, a practice and a pact that is sustained by belief. Doubt does not necessarily mean vulnerability and weakness; it can also be indicative of strength. Doubt acknowledges our own limitations and confirms — or challenges — fundamental beliefs, and can be a crucial part of our belief and faith.

Some of us live contentedly with our doubts. Others seem to be more certain of their faith. Surely, our mortal brains cannot fathom our complex universe and the unpredictability of life. Many faithful believers argue that they may not have absolute certainty but see that faith makes a positive impact on their life and that of those around them. We need to accept both the common prevalence of doubt among human beings and to acknowledge its importance. This will make us humble, acknowledge the possibility of misjudgments, and reduce our intolerance and self-righteousness. Doubts can help deepen, clarify and explain our faith.

### Points for reflection

1) Do you have occasional doubts about your faith? How can you use it to strengthen your belief?
2) How can we be tolerant of others who have doubts about their faith?

Very often religious teachings, which exhort us to live ethical lives, become frozen in dogma and orthodoxy. We need to address everyday issues based on ethical principles we hold. This reflection is part of a series, which attempts to discuss such issues that focus on ethical living. Contributed by K.S. Jacob, Professor of Psychiatry, Christian Medical College, Vellore, Tamil Nadu 632002 India. Email: ksjacob@cmcvellore.ac.in

# Strengthening of Infection Control System through an HIV Assessment Process

### The problem

The response to HIV and AIDS through care and support has been at various levels depending on the capacity of the institution, as a result of which widely differing quality of services are prevalent nationwide. In order to ensure to help institutions provide consistent and standard care, various guidelines have been prepared by international and national organisation and agencies.

However, there have been limited initiatives in India to formally assess the quality of HIV related services provided, in a manner that enables the institution to document where it stands and to plan for its improvement. There is a need for such a process, using an approach that is facilitative, rather than prescriptive. In view of differing prevalent practices, a modular approach to accreditation is needed to facilitate the institutions standardize as well as categorize the service delivery.

Though NABH service standards exist but the resource constrained institutions (especially the missionary hospitals offering HIV care) find it almost impossible to meet those stringent and prescriptive standards. CMAI felt the need to include human touch to a prescriptive scale in order to facilitate the institutions offering HIV care, to assess themselves in a tiered manner (based on their evolving capacity).

### The innovation

CMAI has initiated a process of assessment of willing mission hospitals for being HIV friendly and to develop necessary standards. For assessment and accreditation, new tools have been developed by modifying nationally and internationally used standards. Ten hospitals have been assessed. In the North East, a mission hospital has been converted into a learning centre for HIV friendly status, through a series of capacity building and by installing new systems towards universal precaution and infection control.

### The benefits

- Demonstrates the hospital's commitment to excellence in HIV care
- Strengthens patient's confidence
- Quality Improvement
- Improves staff morale

*Dr Ronald Lalthanmawia*

**In view of differing prevalent practices, a modular approach to accreditation is needed to facilitate the institutions standardize as well as categorize the service delivery.**


- Recognizes the achievements/ innovations of the hospital
- Facilitates information sharing within the hospital and with other hospitals
- Assists hospital in addressing changes in HIV care and support
- Demonstrates accountability to supporting funding agencies and to the public

## The process

The process involves review and collation of various tools available nationally and internationally on HIV Friendliness of a Hospital. The areas assessed included Counseling, Out – patient HIV care, Medical Care, Obstetric Care, Surgical Care, HIV Testing, Infection Control, Blood Safety, Post - Exposure Prophylaxis, Staff Education, HIV Team, HIV Policy and guidelines, Organization of positive people/Community Organization, Networking with NGO/s private practitioners and other hospitals, Home based care, Discrimination/Stigma, Drug availability and access. A maximum score of 105 denotes complete compliance to the standard. Infection Control plays a foundational criterion of establishing a quality HIV Service.

Experts finalized the tool and assessors are trained. Willing hospitals are assessed in the process. The learning was also disseminated at various meetings.

## The findings and learning

The process enabled the hospital to take prompt effective action to improve gaps in infection control. Policy and guidelines to ensure implementation of quality HIV services to ensure stigma – free and non – discriminating environment. The Accreditation of HIV services assisted the hospital in developing action plans for improvement and also use it as a follow up monitoring tool. Participatory approach of the assessment ensured ownership by the hospital from administration to all the staff.

## The evaluation

There has been a mid-term evaluation of the process by an external evaluator. Some of the major findings and recommendation are as follows:

- Document the experience of making Durtlang hospital an HIV learning site.
- Disseminate the value of this resource and lobby for private hospitals, medical and nursing colleges, theological institutions and Government health institutions and programs to be trained at this place.
- The cost effectiveness of practicing universal precautionary principles should be made known to especially the mission hospitals. The use of this tool to revive the healing ministry of the church, shedding inhibitions, and heeding to the call of God has to be popularized.
- This is a visionary intervention. Despite the reputation of mission hospitals in dealing with disease victims in the past which no one else would touch, the response towards treatment of PLHIV, especially those requiring admission, invasive procedures, and complications has been slow. The reasons are many. This assessment and accreditation tools would provide the safe hospital setting for health care providers and non-infected patients, and equip the teams with knowledge and skills to compassionately tend the PLHIV and those with hepatitis C and treat them more competently

## The future

The major learning has been disseminated at various national and international meetings and conferences. The project in on-going and the tools are available for sharing. Any interested institutions can contact CMAI – CHD for the details. Hospitals are welcome to be part of this initiative.

*Dr Ronald Lalthanmawia*
*Head, Community Health Dept., CMAI*
*ronald.l@cmai.org*

## SHORT COURSE FOR DOCTORS IN DIABETES MELLITUS

**The Department of Endocrinology, Diabetes and Metabolism will be organizing an Intensive CME in Diabetes Mellitus for Doctors from 28th September, 2015 to 3rd October, 2015 (6 days programme) - with practical and theoretical intonation followed by assessment.**

**The course is recognized by the Dr. MGR Medical University for 30 CME credit points.**

***(This training module is conducted every 2-3 months)***

**FOR REGISTRATION DETAILS & DATES, CONTACT :** Mrs. Ruth @ 09994746927.

**E MAIL : endowdf@yahoo.com / dfid@cmcvellore.ac.in**

**WHO CAN APPLY : MBBS/MD General Medicine / MD CommunityMedicine / MD Family Medicine .**

**COURSE FEE : 4,500/-**

## SHORT COURSE FOR COUNSELORS IN DIABETES MELLITUS

**The Department of Endocrinology, Diabetes and Metabolism will be organizing a Diabetes Educator Training Programme from 31st August, 2015 to 10th September, 2015.**

**The course is recognized by the Dr. MGR Medical University for 30 CNE (Continuing Nurses Education) credit points.**

**Certificates will be awarded on completion.**

***(This training module is conducted every 2 months)***

**FOR REGISTRATION DETAILS & DATES, CONTACT - Mrs. Vijaya @ 9789725281 / 0416-228-3156.**

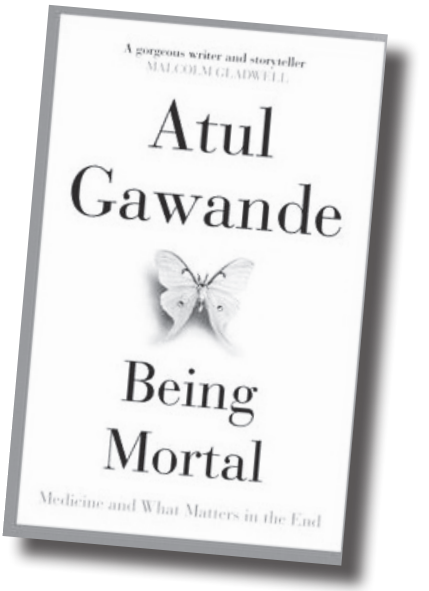
**EMAIL :** endowdf@yahoo.com

**WHO CAN APPLY : Nurses, Dieticians**

**COURSE FEE : 3,500/-**

# What Matters in the end..?

## A review of *Being Mortal* by Dr Atul Gawande




*By Atul Gawande*
*Penguin Books India*
*ISBN 978-0-670-08606-1*

It is normally granted that honesty and kindness are basic responsibilities of a medical doctor. They are trained to save people. Usually they do not want to accept defeat and try their best to use their gifts, knowledge and skills to practice and help their patients. How do they arrive at decisions in terms of choice of treatment for patient, do they inform about the options and impose decision, or accept autonomy and decision making capacity of patients and limit themselves to sharing various options and perspectives?

Medical Education teaches very little about how to manage the realities of certain unusual cases that had been or had not been managed in the past and those efforts/ treatments resulted in prolonging a patient's life. But when the inevitable occurs, they struggle with how to respond?

Dr Atul Gawande, the bestselling author, surgeon at a reputed hospital in Boston, professor at Harvard Medical School and Harvard School of Public Health, and Staff writer at The New Yorker, in his Book "Being Mortal" calls for a radical transformation in how we approach the end of life.

Dr Atul has the gift of storytelling, sharing his experiences that deeply affects and moves his readers. He engages his reader with continuous dialogue, where the reader associates himself to the situation and characters. Besides clinical precision, management analysis and the socio-political details, Dr Atul has a touch of empathy to his writing. No wonder these stories touch the reader, giving insights on the philosophy of life. For medical fraternity, it is essential to read on Doctors - Patients communications.

Besides the introduction and epilogue, there are eight chapters, each of them devoted to the milestone in the final journey of mortal life. In each chapter, there are stories of persons who are elderly, suffering from debilitating conditions or terminal illness and for care providers and their methods and perspectives. Based on the history of Nursing Homes to Assisted Living Communities, different models of care and community life was explored with the analysis of socio-economic political circumstances; working towards the policy framework of medical treatment and the holistic care of the elderly.

In the first chapter on the independent self, autonomy and freedom are basic to human dignity and self-respect is important or gets limited due to medical intervention or care model is explained. Often good intentions create harm. The second chapter on Things Fall Apart, shares early signs of forthcoming dependence and response of the elderly. The pattern of decline has changed in USA due to policy changes and government support for nursing homes. Instead of a sudden fall, in the past few decades there is a slow and steady decline with bouts of recovery and hence the challenge and needs have become manifold. The third chapter, Dependence, talks about the fear of old age. How losing their memory, hearing, friends and way of life impacts and develops the need and sense of dependence. The next chapter is on Assistance. It explains the care taken for the elderly and is an overwhelming combination of the technological and the custodial aspects. It negates their psycho-social needs. This paves for better life with the evolution of retiring communities with assisted living facilities that recognizes freedom and autonomy. Letting go after protracted battle is not an easy choice but with the support and companionship of family, there is a sense of assurance and freedom. The chapter on Hard Conversations describes the importance of valuing autonomy and choice in a straight forward manner. There are no easy answers, so question need to be different. Family members may avoid, but person involved is sure that he or she is reassured with promises of fulfilling his/her wishes or plans.

The last chapter is on Courage. In aging and sickness, courage is required to confront the reality of mortality- courage to seek out truth of what is to be feared or hoped and the courage to act on the truth. It is no surprise after reading that the reader would find new perspective of mortal life and courage to act on the truth- sense of fulfilment.

In the epilogue, he touches briefly on belief and religious practices. However, throughout the presentation, the scope of psychosocial care is limited to affiliation; very secular in nature. Certainly in spiritual care, the role of religious beliefs and values are not touched, presenting an opportunity for Christian Health work to add theological perspectives with the view of life experiences.

*Dr Shailendra B Awale*
*He is enthusiastic about medical mission and ecumenism, accompanying initiatives on social enterprises, institutional development and personal excellence.*
*Contact him at shailendra.awale@gmail.com*

2nd Announcement

# MANDATORY

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Criteria:

- Post Graduate Medical Doctor with Public Health background/ MBBS with Master of Public Health Degree.
- 8+ years of management experience in health care management
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