# Sister Doctors
## Forum of India

*Reaching the Unreached Through*
*Emergency Medical Care*



**23rd National Conference & AGBM 2017**

**Date: 21st - 23rd April 2017**

**Venue: St. Pius X College, Aarey Road, Goregaon East, Mumbai 400 063**

# BOARD MEMBERS OF SDFI

# Contents

## *From the Editor's Desk...*

Wow! It is 23 years since the seed of the Sister Doctors Forum of India was planted. There was a group of Sister Doctors now "pretty senior" who were enthusiastic and who recognized the need for the sister doctors to be in solidarity.This was vital, so that the energy needed as a group for the healing of all, especially the most needy becomes a growing reality. Jesus the Divine Physician who went about doing good is our inspiration.

Thus was born the Sister Doctors Forum of India in 1993.

The efforts made by every President, the Executive Committees and the Presidents of the 7 regions in the past 23 years, have nourished the seed and the tree now bears fruit... fruit in plenty.

The topics chosen at each Annual General Body Meeting have enriched all who attended. The theme for this year "Reaching the unreached through emergency medical care" is appropriate and necessary.

The inputs contributed by Sister Doctors and other Guest Speakers are also part of the wealth in this magazine. The inputs are inspiring and of academic value.

All the regions are represented in more than 200 Sisters present here, do read the reports and thank God for the healing they are bringing about, sometimes in almost impossible situations.

We invite you all to take in and appreciate the role of every Sister Doctor especially those in remote villages of India who with minimum facilities want the best for their patients through curative medicine and the prevention of disease through community medicine.

**Sr. Dr. Angela Rodrigues**
*Editor*

***Editorial Team***

## MESSAGE FROM THE PRESIDENT

My dear Colleagues and Seniors,

I wish each of you the Love, Peace and Joy of the Risen Lord!

The Theme of the 23rd AGBM & National Conference "Reaching the Unreached through Emergency Medical Care", is indeed apt for all the Sister Doctors who have dedicated their lives to the healthcare of the millions of unreached and less reached in our country.

Our Holy Father Pope Francis, says "We are called to reach out to those who find themselves in the existential peripheries of our societies and to show particular solidarity with the most vulnerable of our brothers and sisters, the poor, the disabled, the unborn child, the sick, migrants and refugees, the elderly and the young who lack employment."

For the last several decades, the Sister Doctors have reached out to the unreached, to provide quality care especially for the less privileged, in the remote villages and tribal areas of our country. The Sister Doctors, ignited with the passion of healing and compassion, continue to go where it hurts and enter into the places of pain to share the brokenness of human beings.

The Organizing Committee "Team Mumbai" has put in all efforts to set new benchmarks for this conference. A blend of scientific sessions and a cultural feast spread out over three days, is a transforming experience to refresh ourselves and get energized spiritually, mentally, emotionally and intellectually. May this conference propel each of you dear colleagues and seniors, to explore beyond limits and reach out to the broken world to restore life and wholeness.

May Christ the Divine Healer enthuse you and fill each of you with His Spirit as you continue His Healing Mission.

Yours affectionately,

**Sr. Dr. Beena UMI, MBBS MS(OBGy)**
*National President,*
***Sister Doctors Forum of India***

## MESSAGE FROM THE VICE PRESIDENT

Warm Greetings to all our dear Sisters Doctors!

***"The Spirit of the Lord is upon me …He has anointed me to bring good news to the poor, to proclaim liberty to captives and sight to the blind, to free the oppressed"*** (Lk 4:18-19).This is the Mission statement of our Master Lord Jesus Christ – to reach the marginalized people in society, to deliver the good news of healing and liberty. Our present Pope Holy Father Francis, always emphasizes reaching out to the poor, downtrodden and those who are neglected in the society.

***"Healing is a matter of time, but it is sometimes also a matter of opportunity"*** – Hippocrates. Many of us Sister Doctors, are in remote places to deliver healthcare to the unreached population. We are challenged with lack of adequate healthcare personnel, infrastructure, accessibility and sometimes one works as a single doctor in such a set up.These days, the doctors and our services are blamed and not acknowledged!! People still look for our services in remote areas, keep us in the place of God as they experience our compassionate love and care. This is the reward for our selfless service!

***"Our patients don't care how much we know, until they know how much we care".*** As Sister Doctors we are expected to treat all emergencies in our set up from womb to tomb. Hence, we need to equip ourselves in all ways – Human Resource, Infrastructure, Networking, Physical and Emotional stamina, Social support and updating to extend our emergency healthcare to the needy especially the unreached population of ours.

"I have come that you may have life and life in abundance" Jn 10:10.

With Best Wishes & Prayers,

**Dr. Sr. Alphonse Mary FIHM**
*Vice President*
***Sister Doctors Forum of India***

Oswald Cardinal Gracias

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# MESSAGE

***"Give thanks to the LORD, for he is good; his love endures forever. Ps 107:1.***

It is with great joy that I send this message to the Sister Doctors Forum of India (SDFI) on the occasion of their 23rd National Conference to be held at St. Pius X College, Goregaon East, Mumbai on the important and relevant theme: *Reaching the Unreached through Emergency Medical Care*.

The Church has always considered "service to the sick as an integral part of its mission". St. John Paul II stated that "every concern for illness and suffering is part of the life and mission of the Church". The vocation of caring for the sick and the dying is a great responsibility and requires a special grace from God. It is heartening to know that there are about a thousand Sister Doctors belonging to a hundred and four religious congregations, who are serving the Church in India not only by using their professional knowledge and skills but in particular, working with utmost dedication, care, compassion and selfless service especially in the remote and rural parts of India where medical technology and modern therapeutic facilities are not available. The contribution of the SDFI in improving the health of people, especially in the rural and tribal areas, through programmes like anaemia control and treatment, awareness of women's health, save the girl child program, work with HIV/AIDS patients, disaster relief, community health and developmental activities is truly commendable.

Our country severely lacks adequate emergency medical response services. Providing meaningful care especially to the poor and in particular, emergency medical care is a very challenging task given the huge number of rare medical cases, the lack of facilities, resources and trained professionals for treatment of the very many emergencies related to chronic diseases, infectious and communicable diseases, cardiac diseases, stroke, trauma, injury and road accidents. It is my hope that this National Seminar on *Reaching the Unreached through Emergency Medical Care* will be of great benefit to all the participants by sharing knowledge and vast experience in the field of medicine and also working out strategies of implementing efficient, timely and quality emergency care to reduce mortality and prevent life-long disability.

I express my sincere gratitude and deep appreciation to the Sister Doctors for their noble work and unique responsibility undertaken by them as the guardians of human life. I wish to place this National Convention of theirs under the protection and guidance of our Most Holy Mother, *Salus Infirmorum*, Health of the Sick and I impart God's blessings on all the Sister Doctors of India. I wish them every success in all their heroic missionary endeavours in the service of health.

OSWALD CARDINAL GRACIAS
ARCHIEPISCOPUS BOMBAYENSIS

✠ **Oswald Cardinal Gracias**
Archbishop of Bombay
&
President, CCBI
President, FABC

March 31, 2017

## MESSAGE FROM ARCHBISHOP PRAKASH MALLAVARAPU

Prayerful greetings to Dr. Sr. Beena Madhavath and to all the Sister Doctors who are gathering for the 23rd National Conference of the Sister Doctors Forum of India. You who are engaged in the all-important healthcare apostolate across the nation and contributing your share in assisting the humanity to take care of life will have many things to collectively recall and share at this National Conference.

I join you as you rejoice over what you are able to accomplish. I join you to thank and praise God, the Giver of life, for accompanying you to face the challenging situations in living up to the special call within the call to Christian life you are given, namely, to be a doctor who is a religious. This call makes you a unique category of people among the medical practitioners. You are a professional with a special philosophy of life that is founded on the values proclaimed by Jesus Christ!

Doctors and Physicians are an iconic presence in our modern society, commanding special respect and recognition. This respect and dignity should be coming from what a doctor stands for, helper in sustaining life. But, when business and commerce are the predominant preoccupations in the dynamics of day to day life, living up to the noble vocation of being a medical doctor is rather difficult. This is where should come the faith in the power of God working in and through us. After all, it is God who not only gives life but also heals and restore life! Human beings in need of healthcare are in the focus and no other consideration is as important as the well-being the human person. I wish and pray that every "Sister Doctor" is filled with a confidence that comes from this faith in Christ and in the empowerment he gives to fulfil the mission at hand! May this National Conference give new energy and enthusiasm to every participant and may every one go back to their healthcare centres with greater sense of mission!

Invoking the blessings of God and with every good wish for the success of the 23rd National Conference of Doctor Sisters Forum of India.

Yours sincerely in the Lord Jesus,

**+ Prakash Mallavarapu**
Archbishop of Visakhapatnam and Chairman,
***CBCI Office of Health Care***

## MESSAGE FROM MOST REV PERCIVAL FERNANDEZ

*This photograph was taken when Mother Theresa visited*
*St.John's National Academy of Health Sciences, Bangalore on Oct. 24, 1995*

I am thrilled to know that the 23rd National Conference of the Sister Doctors Forum of India is to be held in Mumbai, and that too at St. Pius X College in Goregaon where I reside!

It was during my term as the Director of St. John's National Academy of Health Sciences that the Sister Doctors Forum was born and St. John's gave space for the Forum to have its Office in the Campus. Although I was anxious to be present at the 22 National Conferences held in different parts of the country, circumstances did not allow me this privilege! Precisely because of this I am thrilled that this time I will not only be part of the Conference but will meet so many of the Good Sisters who were part of St. John's National Academy of Health Sciences during my term as its Director!

I pray that each Religious Sister Doctor continues to be a genuine reflection of Jesus at all times, and especially when they are given the privilege to assist God's people who approach them for their healthcare needs!

**Bishop Percival Fernandez**
*Emeritus Auxiliary Bishop of Bombay*
***First Director of the St. John's National Academy of Health Sciences, Bengaluru***

## MESSAGE FROM REV. DR. MATHEW ABRAHAM

8th March 2017

Greetings from the Catholic Health Association of India (CHAI)!

On the occasion of the 23rd National Conference of the Sister Doctors Forum of India (SDFI), I extend my heartfelt appreciation to all the Sr. Doctors committed to the Church's healing mission. As you minister to those who go through your hands, the words of Jesus become alive through you,"I have come that they may have life and have it in fullness." (Jn. 10:10)

CHAI is always proud of the Sister Doctors, since you have been very much part of her mission and journey so far. In May 2017, we are celebrating the 60th death Anniversary of Sr. Dr. Mary Glowrey, the founder of CHAI. As the first Sister Doctor in the country, she always felt "like a solitary grain of wheat that dreamt of a Golden Harvest." Today there are over 1000 Sister Doctors reaching the unreached in remote areas of this country! CHAI is also proud of the fact that SDFI was born during the National convention of CHAI at Kaloor, Ernakulam, twenty-four years ago, in 1993. As part of your mission, you continue "offering unambiguous services to the miracle of life", celebrating life! On this occasion I look upon you dear sisters with great admiration, reverence and love for all that you are, and have been doing for this noble and prophetic mission. You make healthcare accessible, available and affordable to the marginalized living at the peripheries!

I take this opportunity to thank all the members of SDFI for their collaboration and support in implementing CHAI's efforts in repositioning the Church's Healing Ministry for the future.

With prayerful wishes and regards to the Board and all the members,

**Rev. Dr. Mathew Abraham CSsR, MD**
*Director General*
***Catholic Health Association of India***

## MESSAGE FROM FR. MATHEW PERUMPIL

Greetings and Prayerful wishes from the CBCI Office of Health Care.

May the Risen Lord fill your hearts with new Hope and Joy during this Easter Season.

It gives me immense joy and happiness to wish and thank you, the most visible ambassadors of healing ministry of Jesus in India, as you come together for your 23rd Annual General Body Meeting of Sister Doctors Forum of India in Mumbai.

Following the fundamental principles of Accessibility, Availability and Affordability you have been carrying out the healing mission of the Church entrusted to us by Christ in a most heroic manner in our land where there are still many who are struggling for basic healthcare and quality of life. Your individual and collective efforts have made hundreds and thousands of people experience the healing presence of God in their lives and live their lives to in fullness and with dignity. We are so proud of you dear Sister Doctors for your courageous, selfless, dedicated and compassionate care of the most vulnerable, weak and needy people of our country.

May this coming together at the Annual General Body Meeting strengthen your collective determination and prophetic witnessing of the healing love of Jesus in a time when the healthcare ministry in India is going through multiple challenges and threats. May the Lord who has called you and commissioned you to be messengers of healing continue to be with you in your efforts to bring healing and wholeness to the lives of many you touch daily.

My best wishes and prayers to Sr. Dr. Beena and the Board members for guiding this forum to be an effective instrument of the healing arm of the Church in India.

Blessings and Prayers,

**Fr. Mathew Perumpil, MI**
*Secretary,*
*CBCI Office of Health Care*
***St. Johns National Academy of Health Sciences***

## MESSAGE FROM FR PAUL PARATHAZHAM

I am delighted to learn that **Sister Doctors Forum of India (SDFI)** is going to have its 23rd National Conference from 21st – 23rd April 2017 in Mumbai.

Sister Doctors Forum of India is a role model and a great inspiration for our MBBS graduates for their compassionate service in the field of medicine to the underprivileged section of our society as most of the Sister Doctors work in the remote rural areas of the country where healthcare facilities are minimal and qualified professionals are few.

SDFI shares the mission and vision of St. John's National Academy of Health Sciences to render healthcare service to the poor, needy and the marginalised of the country. We, at St. John's stand with you in unwavering solidarity and loving support for this cause.

As the SDFI assembles to discuss and deliberate on the way forward amidst the growing challenges in the healthcare sector of our country, I wish the Conference every success.

**Rev. Dr. Paul Parathazham**
*Director*
***St. John's National Academy of Health Sciences***
***Bangalore***

## MESSAGE FROM DR PRAVEEN RODRIGUES

Thank you at the outset for all the work that you and your team at SDFI undertake at the grass root level actually putting into practice the guiding principles that St. John's Medical College was founded on 50+ years ago.

The Alumni Association has always been proud of its Sister Doctors who do sterling work reaching the unreached and working in some of the truly under served areas of our great nation irrespective of caste creed or socio-economic status. This is also in sync with our PM Modi's vision for India. We, on our part, will do all we can to help support all your endeavours in whatever way we can. Towards realizing this end, we have earnestly set in motion a drive for funds having set up a SJMCAA Corpus Fund that has a two-fold objective…. Rural Outreach and Scholarships. The principal of this fund will not be touched and it is envisaged that only the interest will drive all our projects.

Towards meeting our objectives and goals, we have applied in Feb. 2015 to the Government of India for a FCRA status and are still trying to convince them to give it to us. We sincerely hope that when they see our work and understand that all our office bearers work gratis for the truly deserving inspite of our other commitments, they will grant us this sooner than later. We however do have a life time 80G exemption and are particular about our record keeping.

In recognition of the work of our Alumni and especially the sister doctors in the field, we have started the Mary Glowrey Award a couple of years now. We hope this will be taken more seriously.

We will also appreciate your help to identify really needy places – eg remote areas with no funding from other sources that the SJMCAA can help with equipment and/or personnel.

Special camps (especially those within 200 km of Bangalore) can be organized under our aegis…for eg. cancer detection camps where Kidwai doctors will come and screen for oral, cervical and breast cancers at their cost on Saturdays through the India Cancer Society. We would also hope to organize more CME for all of you in the field this can be in the form of online modules, starting social media groups eg. Whatsapp with our AA faculty from any part of the world rendering their expert opinions and are happy to host CME being held at the Alma Mater or at regional centres where we can help organize and/or mobilize Alumni in that region to come across to your chosen venue.

Thank you also for your invitation to be present at your upcoming annual SDFI meet in April. On behalf of our Executive Committee and all Alumni worldwide, we take this opportunity to wish the SDFI every success and hope you go on to bigger and better things.

The nation lauds you for your sacrifices and efforts. The SJMCAA will always stand by you and look forward to a more meaningful association going forward.

Warm regards,
**Dr Praveen Rodrigues MD**
*President SJMCAA*

## SR. DR. LIZA IGNATIUS FSLG

*National Secretary SDFI*

**INTRODUCTION**

Sister Doctors Forum of India is registered as a Trust with Reg. No. 202 Sub Registrar New Delhi on 4th. February, 2009, registered under Section 12 A of the Income Tax Act, 1961 w.e.f. Assessment Year 2008-09, Ref: No. DIT (E) /2009-10/313 DEL - SR 20036 - 21062009 dt. 17/06/2009, Registered under Section 80 G of the Income Tax Act, 1961 Order no. DIT (E) 2009-10 / 662 DEL - SE20182 21062009 dt. 17/06/2009, PAN No. AAITS1322B. The Board of Management and control of the Trust and trust properties shall vest in the Board of Trustees. The Board of Trustees shall comprise of not less than four and not more than eleven trustees including executive members and regional secretaries. SDFI Registered: Official Address: 4435-36, Makhanlal Street, 1st Floor, NIIT Centre, 7 Ansari Road, Daryaganj, New Delhi – 110 002. However the activities of the Trust are spread all over India.

Sister Doctors working all over India, for the rural people without any discrimination of Caste, Creed or Religion, cater to the health needs of thousands of people. Besides the routine work in the hospital, giving curative services as gynecologists / Physicians / Pediatricians / Psychiatrists / Radiologists and Surgeons, they reach out to people bringing health and wholeness by preventive and promotive programmes. They also enter into human reality in times of Natural or Man-made calamities. Here below me list a few of such services to humanity, as members of the Sister Doctors Forum.

### ACTIVITIES OF THE YEAR 2016 -2017

During the General Body Meeting conducted in Bhopal, **29th, 30th and 31st January, 2016**, the sister doctors planned their national and regional level activities for the year 2016 -17. The main activities during 2016 to 2017 were centered on the theme "***Growing Old Gracefully and fruitfully".***

**ACTIVITIES IN NATIONAL LEVEL**

Regular Board Meetings, Annual General Body Meetings (AGBM), Continued Medical Education Programmes (CME), Capacity Building Courses.

***Board Meetings***

The First Board Meeting of the trust was held at **St. John's Medical College, Bangalore, Karnataka** on 10th & 11th July 2016. The Board of Trustees was present along with the regional unit Presidents. The Executive board meeting was held at **Holy Family Hospital, Bandra, and Mumbai** on 5th December, 2016.

**ACTIVITIES IN DIFFERENT REGIONS**

Activities in different regions consist of a Regional get-together for sharing experiences and knowledge, Continued

Medical Education Programmes and various types of outreach programmes, Awareness Programs were conducted in the centers in which the Sister Doctors are placed.

1. ***Central Region:*** The Sister Doctors of the central Region which consists of Madhya Pradesh, Chhattisgarh, Orissa, West Bengal, Jharkhand, Bihar, Sikkim, Meghalaya, Assam, Arunachal Pradesh, Nagaland, Manipur, and Mizoram & Tripura are working in collaboration with Government and Non-Governmental organizations. Training for HIV/AIDS care and treatment was conducted for Nursing Staff in different hospitals.

***2. Northern Region:*** The Northern Region consists of Rajasthan, UP, Delhi, Haryana, Punjab, Uttaranchal, Himachal Pradesh & Jammu & Kashmir.

| Sr. No | Activities | Beneficiaries | Area / Place of the Activities |
|---|---|---|---|
| 1 | TB, Anemia-checkup & awareness creation program | Students, Parents, Villagers Women & Couples. | Sardhana, Ashok Vihar Phase, |
| 2 | Campaign on "Save the Girl Child" programme | Students | Sardhana |

***3. Western Region:*** The Western Region consists of Gujarat, Maharastra & Goa;
Sister Doctors of the Western region conducted awareness camps in different villages of Maharashtra, Goa and Gujarat. Awareness programmes of health for children and adolescents were conducted in different schools.

| Sr. No | Activities | Beneficiaries | Area / Place of the Activities |
|---|---|---|---|
| 1 | Anemia Camps and Awareness Programmes & Health Awareness in Schools | School Students, Children, Women, Villagers | Kusumkot, Panvel, Mapusa Kalyan |
| 2 | Campaign on "Save the Girl Child" programme SHGs, | School Students, Nursing Students, Teachers, Parishes, Colleges, Mahila Mandals, Villagers | Amaravathi, Panvel |
| 3 | Outreach programme | | |

***4. Andhra Pradesh Region***

| Sr. No | Activities | Beneficiaries | Area / Place of the Activities |
|---|---|---|---|
| 1 | HIV/AIDS & TB Prevention & Treatment | Infected and affected patients, Children. | Santhapet, Konkepudi |
| 2 | Anemia Detection and Awareness Camps | Children, School Students, Women, villagers | Guntur, Vinukonda, Yellareddy, Santhapet. |
| 3 | School Programmes | Students | Guntur, Santhapet |

***5. Karnataka Region:*** Covered many schools and colleges with medical camp as well as capacity building programme for children and youth. They made some groups among the students and sent them to the villages.

| Sr. No | Activities | Beneficiaries | Area / Place of the Activities |
|---|---|---|---|
| 1 | Schools Health Awareness | Students and Teachers | Ullal, Malur |
| 2 | Palliative Care Treatment | Terminally ill Patients, Old, Poor | Malur |
| 3 | Villages Health Awareness | Youth and Women | Ullal, Malur, HD Kote |
| 4 | Campaign on "Save the Girl Child" | School Students, Nursing Students, Teachers, Parishes,Colleges, SHGs, Mahila Mandals | Ullal, Malur, |

***6. Kerala Region:*** The main activities of the Sister Doctors besides their routine professional services are given in the table below:-

| Sr. No | Activities | Beneficiaries | Area / Place of the Activities |
|---|---|---|---|
| 1 | Pediatric Camps | Children | Kalpetta |
| 2 | Medical Camps | Villagers | Kalpetta, Manackanad |
| 3 | School Programs | Students | Changanacherry, Kalpetta, Manackanad. |

***7. Tamil Nadu Region:*** A few of their activities of this year is given in the table below.

| Sr. No | Activities | Beneficiaries | Area / Place of the Activities |
|---|---|---|---|
| 1 | Anemia Camps and Awareness Programmes | Children, School Students, Women, Villagers | Avinashi, Coimbatore, Aathur, Chennai, Madurai |
| 2 | HIV Awareness Programme | Nursing Students, Villages, Schools | Avinashi, Uvari |
| 3 | Medical Camps & Outreach Programmes, Care of HIV/AIDS,RNTCP | School children, (Balwadi, Primary School) Villagers. | Avinashi-Coimbatore, Batlagundu |

**Conclusion:** This report is just a glimpse into the activities of Sister Doctors Forum of India. No words can capture the entire contribution of its members spread over the length and breadth of India. Joined together as a Forum we, in solidarity and fellowship, reach out to the sick and the suffering with fullness of life keeping abreast of the time with the rapidly progressing medical science. Every healing service rendered by each Sister Doctor in the Forum, in their own centers with compassion, competence and Commitment is beyond description and the contribution to society is countless.

## NORTHERN REGION

Meerut, Sardhana, Uttar Pradesh,
August 14-15, 2016

The Annual Regional Meeting of SDFI Northern region was held at the Shrine of our Lady of Graces, Sardhana on August 15, 2016. Fourteen Sister Doctors from U.P, U.K, Punjab, Jammu and Delhi were present for this meeting. We were also privileged to have two resource persons Rt. Rev. Dr. Francis Kalist, Bishop of Meerut and Dr. Bobby Joseph, Head of Community Medicine and alumni of St. John's Medical College, Bangalore, for this meeting.

The meeting began at 10am with a short prayer and a hymn by Sr. Dr. Immaculate, H.C. to Our Lady, honouring her since it was the feast of the Assumption. Sr. Dr. Rose Mary who is the President of the Northern Region welcomed all the participants. Sr. Dr. Lisa, FSLG, introduced Rt. Rev. Bp Francis Kalist, Bishop of Meerut Diocese the resource person for the morning session.

The Bishop spoke on the theme **Sister Doctors – as agents of mercy** as he spoke to us during the Year of Mercy. He beautifully explained that in this world where hatred and cruelty is increasing, hatred in families is growing. Our Pope Francis has rightly declared this a Year of Mercy. In the scriptures mercy dominates. Love in action is mercy. This is well explained in the parable of the good Samaritan. The sensitivity and generosity of the good Samaritan is outstanding. We are called, not only to do our duties, but to go beyond and do acts of mercy, by giving our time to others. Sensitivity will make us get into the shoes of persons who are hungry not only for food but for love and dignity. If we posses these two core virtues which are the basics for being merciful we shall become merciful in our words and actions.

At 12 o'clock we went to the Shrine of Our Lady in procession by praying the Rosary. When we reached the Shrine Rt Rev Bp Francis Kalist led us to the Door of Mercy. We were indeed privileged to enter the Door of Mercy and celebrated the Holy Mass at the altar of the Shrine of Our Lady of Graces. After the Mass, Bishop Kalist explained to us about the Holy Image of Our Lady of Graces and the historical importance of the Shrine.

The post lunch session was conducted by Dr. Bobby Joseph who was introduced by Sr. Dr. Cynthia H.C. He had taken the session on maternal and child healthcare, guidelines and newer initiatives, through a power point presentation. Sr. Dr. Jyothie Serrao SAP thanked Dr. Bobby Joseph for his gracious presence and the support of the Alumni of St. Johns, to the Sister Doctors and for briefing us about the new guidelines. After this session each one shared their mission experiences in their hospitals, challenges they faced, problems they

encountered, and support they received from one another and from others. Dr. Bobby congratulated the Sisters for the sacrifices and wonderful work that they do in the remote areas of our country and advised us to document everything that we do and to keep the appropriate records at every centre for future reference.

Sr. Dr. Jyothie Serrao SAP, also thanked Frs. Pakianathan and Sasin Babu for the memento of Our lady of Sardhana, and for all the arrangements done by them for our meeting at Sardhana. All the Sisters thanked Sr. Dr. Rose Mary for all the efforts taken to conduct this meeting. At 5pm after the tea, all dispersed to their destinations with renewed vigour and zeal.

**Sr. Dr. Rose Mary CFMSS**
*President,*
Northern Region

**Sr. Dr. Jyothie Serrao SAP**
*Secretary,*
Northern Region

# REGIONAL REPORT 2016-2017

## CENTRAL REGION

Jabalpur, MP
October 9, 2016


The SDFI Central Region meeting was held on October 9, 2016 at Jabalpur, Madhya Pradesh. There were only five participants. The small number of participants was due to the difficulty our Sisters faced to travel long distances and the unavailability of substitute doctors at their clinics/hospitals.

"Management of Endocrine Emergencies" was the CME topic we chose. Dr. H.S. Patel, HOD of Medicine at Sukh Sagar Medical College, Jabalpur, was the resource person.

We started our CME and meeting with a short prayer service which Sister Alphy led. The CME and meeting started at 9am and ended at 3pm.

**Sr. Alphy OSF**
*President, Central Region*

## WESTERN REGION

Karuna Hospital, Borivli, Mumbai
October 9, 2016

The Annual regional meeting of the Western region of the Sister Doctors Forum of India was held on 19th October 2016 at Karuna Hospital, Borivli, Mumbai. Sister Doctors of our region took time from their busy schedule, travelled overnight and were present for this meeting.

The meeting began at 9.30am with a prayer service conducted by Sr. Dr. Rachita invoking the Holy Spirit on each of us Sister Doctors, and asking the Lord to bless us as He has chosen us to be His instrument of sisterly love, care and compassion to the patients who come to us.

Sr. Dr. Ashreena welcomed all the Sister Doctors for the annual regional meeting to Mumbai and to Karuna Hospital with a note of gratitude and acknowledgement for their contribution to the SDFI and to mankind.

The agenda for the meeting comprised of an input session on:

1. Hospital infection control by Dr. Avantika.
2. Nosocomial and ICU related hospital infections by Dr. Nandan.
3. Christian Healing Ministry, the Past, Present and the Future by Sr. Dr. Beena.

The meeting continued with the planning of the forthcoming 23rd National Conference-cum-AGBM to be held in Mumbai 2017.

The input on Hospital infection control by Dr. Avantika Microbiologist brought to light the importance of controlling hospital infection and the various means it could be done. She emphasized the guidelines and protocols laid down by WHO. She said hand washing is the key to controlling infection.

Dr. Nandan, enlightened us with various ICU related hospital infections like ventilator associated nosocomial infections, the causes along with the care and management of the patient. He enforced that regular checks be made from time to time on the hygiene of the ICU and the control of hospital infection. Universal precaution to be taken is the key to prevention.

Dr. Sr. Beena spoke to us on the Christian perspective of the healing ministry. She updated us on the Christian healing mission that played a vital role in the past. She put light on the current scenario of health care and the church's demand in bringing about compassion and mercy in the words of Pope Francis. In her talk, the future overview of the healing ministry according to Christ and His teaching was laid before us. In this challenging world, we are called to be the message of love and compassion to the suffering world and we sisters partake in a profound way to bring Christ to His people.

Sr. Dr. Ashreena informed the members that the next AGBM cum 23rd National Conference 2017 will be organized by the Western region. The members spent the rest of the time discussing about the date, place and the various activities to be organised. Dr. Sr. Beena briefed the members about the entire programme and chaired the meeting.

The Local Organizing Committee was formed and the various programmes to be held were discussed. Sr. Dr. Ashreena requested all the Sisters to contribute in some way to make the event a success.

The meeting concluded with a thanksgiving prayer and Sr. Dr. Beena thanked Sr. Dr. Ashreena for organizing the regional meeting and assured her the support for organizing the next AGBM and the 23rd National Conference to be held in Mumbai, St Pius X College, Goregaon.

**Sr. Dr. Ashreena Miranda**
*President*
***Western Region***

# REGIONAL REPORT 2016-2017

## ANDHRA PRADESH & TELANGANA REGION

Divya Deepti Bhavan, Retreat House, Warangal

August 21, 2016

On 21st August 2016, the Regional Meet of SDFI APT region took place in Divya Deepti Bhavan, the retreat house of catechist sisters of St. Ann's (CSSA). There were 15 Sister Doctors present. Among them, one Naturopathic and one Homeopathic Sister doctors. The other Sister Doctors were Allopathic doctors. The day started with the Holy Eucharist celebrated by Most Rev. Dr. Udumala Bala Bishop of Warangal, Chairman for the Telugu Catholic Bishops Conference for Religious.

Holy Mass started with a candle light procession led by the Main celebrant His Lordship Most Rev. Dr. Udumala Bala and many Religious from the Diocese. Sr. Dr. Annie Antony JMJ, the President of AP and Telengana SDFI welcomed the gathering. The Bishop in his homily highlighted the theme "Sister Doctors as Agents of Mercy". He exhorted us saying that Charity is the foundation of the healing ministry. In our entire healing ministry, charity is not optional. It is a must. But Mercy is beyond charity. Even when

we are hurt, treated badly, abused we have to show mercy. The example of the Good Samaritan was shown as a model to follow. The Good Samaritan went out of his way to show Mercy to the wounded man and took care of him.

The Brothers from the Missionaries of the Poor with their melodious singing made the Holy Mass very devotional and festal for the days Liturgy. After the Eucharist, we felicitated Most. Rev. Dr. Bishop Udumala Bala with a shawl, bouquet and memento.

Sr. Dr. Innamma CSSA, the host for this term thanked the Bishop, brothers and all the Sisters who arranged everything and for the cooperation of all present.

The CME session started at 11am by Dr. Nikit DM in Neonatology on :

1. Controversies in the use of corticosteroids in the antenatal period.

2. Neonatal problems and management.

Dr. Sr. Francis thanked Dr. Nikit and he was presented with a bouquet and memento.

Dr. Bobby Joseph HOD in community medicine from St. John's Medical College, Bangalore came to evaluate our activities at the regional level. He insisted that we enumerate the activities we are doing, the need to document and send the report. He asked, besides the anemia control, reproductive health and 'save the girl child' program what are the other activities members want to take up? Some of them suggested control of Diabetes mellitus, Hypertension and early detection of cancer especially cervical cancer.

Dr. Bobby Joseph was thanked and given a bouquet and memento.

1. Directory update, life membership – all are requested to take Life Membership.
2. Election of new President Sr. Dr. Francis Annam JMJ, was elected as the new President.
3. New activities to be taken up namely BP and Diabetic control camps in the parish on Sundays when it is possible.

***Suggestions:***

1. To have meetings from 8am to 4pm and have more CME sessions and have one session on Yoga and Naturopathy.
2. Next year's Regional Meet to be held in Hyderabad at CSSA Provincialate. Sr. Dr. Innamma agreed to make arrangements.

At the end of the session we thanked Sr. Dr. Innamma and Sisters of CSSA for the arrangements, of meeting, food and accommodation. Dr. Sr. Annie was also thanked for her services since the past year as President.

An outing was arranged to see the 1000 pillar temple at Hanumakonda. All relaxed and enjoyed the trip and returned after a successful meeting at Warangal.

**Sr. Dr. Annie P.A. JMJ**
*President*
***Andhra Pradesh and Telangana***

## KARNATAKA REGION

Nirmala Social Welfare Centre, Ullal, Mangalore

September 17-18, 2016


The day began with joy and excitement, welcoming the 11 Sister Doctors from various parts of Karnataka region, The presence of the Sister Doctors was delightful and active.

The Meeting began at 9.45am with an audio visual prayer conducted by Fr. Peter Mascarenhas SMM, who was also the resource person of the day. This put us in right perspective to begin the meeting.

The President Sr. Dr. Lenita, welcomed the participants as well as the resource person Rev. Fr. Peter Mascarenhas SMM, who spoke, on the theme of Mercy and its relevance for Religious, much more for Sister Doctors, being the Year of Mercy, tracing the path of Pope Francis, on compassion and Mercy.

He emphasized 'Mercy' which is reflected in different themes like compassion, kindness, forgiveness, repentance etc. he said that –

"Compassion should be our passion, as well as a fashion – that is our lifestyle.

When we are compassionate, we are able to reach out to the needy, doing God's will. At 11am the group dispersed for a high tea. After which the Sisters were enthusiastically waiting, to go ahead with the business meeting and an interactive session.

At 12.15pm, we participated in a meaningful Eucharistic celebration, this was followed by lunch. The afternoon was set aside for an outing. At 2.30pm, all the members enthusiastically set out for a picnic to Kapu beach and to have a thrilling experience at the light house. On the way we visited the Infant Jesus shrine to have a touch of our compassionate Jesus and thereafter marched ahead to spend relaxing moments at Kapu beach. Climbing the tower of the light house and playing in the water were delightful and exciting moments.

At 5pm, the group returned to our abode, for dinner and rest.

On September 18, the second day, we began with a meaningful Eucharistic celebration at 6.15am followed by breakfast. At 9.30am, we were fortunate to have the input-brain storming session, by the resource person Dr. Rohan Chandra Gatti. He is an Oncology surgeon, who has to his credit the opening of the Onco Dept., at Fr. Mullers Medical College Mangalore which he

now heads. He spoke in detail on various types of Cancer and its detection in the early stage and different modalities of treatment.

After the Tea break at 11am the Sisters gathered once again, for an interactive session on the same topic. This was enlightening and the resource person spent nearly 2 hours answering the queries of the Sisters. It was a very informative session especially challenging us to work in rural area. The members had plenty of doubts cleared.

After the CME session there was a break after which there was a short sharing session, as there was limited time.

At 1pm the President thanked all the members, for their active participation and valuable presence. With lunch the meeting came to an end at 2pm.

**Sr. Dr. Lenita SCCG**
*President,*
***Karnataka Region***

# REGIONAL REPORT 2016-2017

## TAMIL NADU REGION

Prashanthivanam – A Retreat Centre at Pondicherry
July 23-24, 2016

Step into Pondicherry and you'll wonder if you're in India or France. The French colonized this place a long time ago but some of that allure still hovers in this Union Territory located 160kms south of Chennai, Tamil Nadu. The architecture is French, the road signs are in French (along with English and Tamil), a lot of people speak fluent French and most restaurants serve steak and wine!

In this beautiful town, the Sister Doctors of Tamil Nadu gathered together at Prashanthivanam, a retreat house of Cluny Sisters. We were around 23 Sister Doctors to keep the spirit alive in this region. The

experience of meeting each other and of sharing, was a happy one. The day began with a beautiful prayer followed by the session by Dr. Sr. Marie Therese on the "HEALING MINISTRY IN THE YEAR OF MERCY" in which she stressed the importance of our spiritual life and communion with God as the only reason for all that we do, and she shared her many personal experiences through the Word of God and about how God leads and guides us when we are rooted in the Word of God.

We had the pleasant visit of Dr. Bobby Joseph from the Community Medicine department, St. John's Medical College, Bangalore as the external evaluator of the project run by SDFI from Misereor. He was happy and pleased to be with us and explained the purpose of his visit was to evaluate the projects. We also had deep sharing moments of our expectations from the Alumni of St. John's and how they could become part of our mission in the rural areas. He also shared his knowledge on how to organize a cervical cancer screening programme at the Regional level and the available resources to support the endeavour. We also honoured our dear Sr. Emily Susai for receiving the 'Best Doctors' Award for the year 2016 from the State.

We then participated in a very meaningful Mass in the chapel and we prayed very specially for all Sister Doctors throughout India. This was followed by a sumptuous meal.

In the noon we had a CME session on 'RADIOLOGY IN OUR CLINICAL PRACTICE' by eminent resource persons Dr. Narayanan and Dr. Ravi Chandhran from the Pondicherry University. The sessions contributed greatly to our knowledge. We were taught the knack of using Radiology in the diagnosis and treatment of patients specially in our rural setup with minimum facilities. They simplified information about X-RAY, USG, CT SCAN, MRI etc.

After the CME, we had our Board Meeting and the main issue discussed here was the plan to be more active as Sister Doctors in our region by working together. We hope to divide our region into 5 zones to function more effectively. We still await this vision to become alive, after this idea has been proposed at the National Meet for their approval and support.

After the brain storming session, we had a relaxing time at Pondicherry beach.

The next day being Sunday, we had our Holy Mass in the Cathedral Church then proceeded on a short tour of Pondicherry after enjoying breakfast in the hotel. We had the joy of visiting Aurobindo Ashram.

The ashram was founded by Sri Aurobindo in 1926 when he decided to withdraw from public view and continue with his spiritual growth. The place is now visited by thousands of spiritual seekers from all over the world. The ashram gives a lot of importance to yoga as it helps in transforming body and mind.

After this we again went to the beach to spend some more time in the water.

After a refreshing time in the water we moved to Villianur, the pilgrim place of Our Lady. We spent some time there in prayer after which we gathered in a hotel to enjoy the special cuisine of Pondicherry. Thus the gathering came to an end and with content hearts and minds, we flew back with renewed strength to continue our mission.

Never design your character like a garden where anyone can walk. Design your character like the sky where everyone desires to reach.

**Sr. Dr. Martina SJC**
*President,*
***Tamil Nadu Region***

## KERALA REGION

S.H. Study House, Pala

June 18-19, 2016


The Annual General Body Meeting of SDFI Kerala Region, was held at S.H. Study House Pala on 18th and 19th June 2016. 63 Sister Doctors arrived at the centre by 12.30pm on June 18. After a delicious lunch arranged by the S.H. Sisters, all members set out for a visit to Vagamon. At Vagamon, we all visited the tomb of Francis Acharya and offered prayers. In this 'Year of Mercy', the SDFI Kerala Region had the opportunity to enter the Door of Mercy at this Chapel as well as at St. George Cathedral Church at Aruvithura. At about 8pm, we returned to the centre and after supper, we gathered together for the general session.

The session started with a silent prayer and was followed by self introduction of each member. Sr. Dr. Mary Jose gave a brief description about the Pro-Life programme in the Diocese of Mananthavady. She enlightened us regarding how this programme is executed in the Diocese and emphasized the role of Sister doctors in it. The venue for the next regional meeting will be decided at Kakkanad. A suggestion which the Kerala Region had put forward during the AGBM was that since the annual meetings of specializations are scheduled for January, the AGBM should not be conducted at that period. At around 10pm everybody dispersed for personal prayer and rest.

The second day started at 5.30am with graceful shared prayer conducted by Sr. Dr. Annie Cyriac SH, her enlightening thoughts and description of Jesus as a Physician, Dermatologist, Surgeon, and Gynaecologist on the basis of the Bible were enriching. The Holy Eucharist was celebrated by Rev. Dr. Dominic Vechoor, Vice Rector, Vadavathoor Seminary. In this Year of Mercy, Fr. Dominic appreciated and emphasized that Sister Doctors are the efficient witnesses of God's Mercy.

The inaugural session began at 9.00am. Sr Dr. Reeja Mathew FCC welcomed all the guests and the participants. In her Presidential address Sr. Dr. Betty Jose SH, gave a brief description about what SDFI is, its origin and growth and its present day activities. In our busy and committed life each one of us has to be revived and refreshed spiritually, mentally, and physically and that is the reason for conducting the periodical regional meetings. She concluded by seeking

God's grace to be witnesses of God's Mercy. Rev. Fr. Joseph Maleparambil (Vicar General, Diocese of Pala) in his inaugural address expressed his happiness to welcome all our Sister doctors to the Diocese of Pala. He acknowledged the Sister Doctors role as servants of mercy which is said in Laudate Si of Pope Francis. Each sister doctor is called to accomplish an important and unique mission in the church with our life of witness and merciful service. He narrated the life and experience of a dedicated doctor. There is no time or fixed schedule for anything in our life – for example breakfast may be at 3pm. The healing ministry of Jesus was emphasized in:

1. The complete and integrated identity of the individual.
2. The service of Mercy.
3. The experience of God Almighty's intervention.
4. Acknowledgement and strengthening of everybody's belief.

The foundation of our health care mission is God's love. St. Pope John Paul defines true health as the integrated healing given to an individual. He concluded his words and inaugurated the programme by appreciating the activities of Sister Doctors and by asking for God's Grace to be living examples of the Merciful Lord.

Rev. Sr. Ancilla SH (Vicar General, SH Congregation) in her pleasant and precise speech appreciated the role of Sister Doctors in the church. The hands of a doctor are the hands which God Almighty uses to touch human beings. I respect and kiss those hands. Each and every patient is waiting for your loving touch, you are working day and night without food and sleep. You are the angels in this world of pain and agony. Once a doctor, engineer and advocate had a dispute. The doctor said that God is a Doctor because he created the first woman through an operation. The engineer said that God is an engineer because only an engineer can design this universe so beautifully. The Advocate said that God is an advocate because only an Advocate can regularize and organize everything so systematically. God is the best doctor, engineer and an advocate. You should see Jesus in each and every patient you come across. God has entrusted you to protect life from the beginning to the end. Day and night you see wonders and work wonders. She concluded stating, that they work in the name of God without expecting any reward.

Rev. Sr. Merlin Areeparambil (Provincial Superior) in her address quoted Pope John Paul II's words on the occasion of World Health Day. "Dear doctors, human life is entrusted in your hands, you are the protectors of life". Pope Francis says Doctors are those who have dedicated lives for "mercy". This year's Varappuzha Arch Diocesan 'Mercy Award' winner Sr. Dr. Annie Sheela was congratulated and adorned with a Ponnada on this occasion. Rev. Sr. Dr. Maggie Margaret, who had left for her heavenly abode at the age of 42 was remembered and we offered prayers and homage. She was a member of SDFI and administrator of SH Hospital Paingulam. Rev Sr. Dr. Ruby Therese SABS was the MC of this Programme. Rev. Sr. Dr. Elsy Lukose SH, delivered the Vote of Thanks to all the distinguished guests.

After breakfast all gathered for a special orientation class organized and conducted by the Woman's Cell. Chief Inspector Madam Thulasi and associates as a part of Kerala Police Janamyaithry Suraksha programme and Nirbhaya project. They demonstrated 42 techniques helping women in self protection. It was a practical guide to reflect on and so educate others in this modern life, where there is no safety of women. Sr. Dr. Alphonse Kuruvithadam, SABS expressed the Vote of thanks and words of appreciation regarding this programme.

In the post lunch session Dr. Bobby Jose – external evaluator had come for the regional meeting inspection. After that Sr. Dr. Mary Jose introduced Sr. Dr. Mary Marcellus to deliver an informational class on Management of Gynaecological problems in Adolescents. Sr. Dr. Ancilet DM, invited Sr. Dr. Annie Sheela CTC for a brief class on Lipid Management. Both the classes were very informative. All dispersed to their communities with renewed vigour and enthusiasm after the Vote of thanks by Sr. Dr. Reeja Mathew FCC. She thanked God Almighty for giving two pleasant sunny days during this rainy June and the lovely climate till all SDFI members returned home safely. Above all we thanked our merciful God for the abundant blessings showered upon us and we expressed our gratitude to SH Congregation Pala Province, who had arranged the wonderful, comfortable venue for this programme.

**Sr. Dr. Betty Jose SH**
*President,*
***Kerala Region***

*Keynote Address*

# PHYSICIAN & PATIENT HUMAN RELATIONSHIP

*– Bishop Percival Fernandez*

When I was doing my doctorate in health management, and as the Director of St. John's National Academy of Health Sciences in Bengaluru, I met Administrators, Doctors, Patients and Supportive Staff of over 75 Hospitals all over India.

One of the questions I asked them was whether Human Relationship is essential in taking care of patients in a hospital. More than 80% of those whom I contacted expressed their agreement to its importance in one way or another. The remaining 20% also felt the same but they were not sure of what such a relationship really meant. But what was astonishing was that as regards all those who agreed to the importance of good human relationship in the health care sector, their understanding of good human relationship was "to be able to get on with the administration, doctors, nurses and the supportive staff'.

Before we study this important reality in patient-care, let me go back to the research already conducted in the field of human personality and behaviour.

Although it is not unknown today, the period when motivation of people to work was fear of punishment (financial, social or even physical) is dated prior to the industrial revolution. With the industrial revolution came a social revolution. The size of operations resulted in impersonalization and depersonalization of workers and the concept of Social Darvinism sprang up, arguing that "no person held responsibility for other people and that naturally superior people were destined to rise in society, while inferior ones would eventually be selected out of it."

The end result of such thinking was what is termed in modern management books as "Traditional Model of Motivation". Within decades of the emergence of this theory, efforts were made to find out why the traditional model of motivation was inadequate to motivate. Research in this direction pointed the way to what was to become the "Human Relations School".

These psychologists argued that what was needed when dealing with the worker, his work and his behaviour, was to consider the "Whole Person" at work.

There have been several outstanding attempts made to understand human individuals and their behavioural patterns, and to develop the understanding of *human person,* to allow anticipation of his/her behaviour in a variety of situations. Volumes have been written, based on research – and very often contradictory findings have only confirmed the suspicions that a Human Person still remains an enigma to be further probed into, as far as his/her psychology and behavioural patterns are concerned. My study in over 75 Hospitals I covered confirms this. The situation is better understood if we recount briefly some of the earlier finding on the nature of human beings.

While some psychologists were convinced that a human person was a HIGHLY RATIONAL ORGANISM, systematically collecting relevant data to handle a particular situation, analyzing that data carefully, evaluating alternatives, and finally undertaking an entirely rational course of action.

Psychologists of the caliber of E. W. Edwards have put forward informative research in this field. Other scholars firmly believed in EMOTIONAL HUMANS. These Scholars saw human beings as controlled heavily by their emotions. According to them, emotions play such a role in human behaviour that many of a person's actions were not only not under his/her voluntary control, but may not even be accessible to his/her consciousness. Among them, the Freudian thinkers assume that many of the important determinants of one's adult behaviour are unconscious, and often are results of unresolved conflicts and crises of childhood. Such Scholars, therefore, rightly feel that to understand relations and behaviour in organizations, it is necessary to delve into early and perhaps repressed happenings of childhood.

A third group of Scholars maintain that human beings can be well described by their behaviour patterns itself. They feel that even in the most complicated setting,

no theories of consciously controlled behaviour are needed: John B. Watson, the champion of this theory illustrates his thinking in this well known quote: "Give me a dozen healthy infants, well-formed, and my own special world to bring them up in, and I will guarantee to take any one at random and train him/her to become any type of specialist I might select: doctor, lawyer, artist, merchant-chief, and yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and the race of his ancestors."

These Scholars believe that all behaviour is environmentally controlled another supporter of this theory, B.F. Skinner, shows that everything that a human being does, can at least in principle be analyzed and understood in behavioural terms.

Directly opposed to the third group of Scholars is the fourth group, which maintains stoutly that humans are so complicated and their true potentialities are so thinly revealed in their day-to-day activities, that a scientific understanding of them and what determines their behaviour cannot be obtained from behavioural observations. This phenomenological view holds, that to understand the behaviour of any person we must somehow get 'inside' the head of the person, because that is where the determinants of his/her behaviour reside.

The fifth group of Scholars maintain opposite-pole theories regarding human behaviour! While one group brands humans as ECONOMIC, the other consider humans as SELF-ACTUALIZING. The former group believes that "man is a rational creature who uses his reason primarily to calculate exactly how much satisfaction he may obtain from the smallest amount of effort, or when necessary, how much discomfort he can avoid."

The other group of Scholars vigorously maintain that man cannot be adequately described solely in terms of economic or psychological considerations. Humans, they say, strive toward higher ideals: self-fulfillment and self-actualization. This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming.

What we see from the five different views of Good Human Relationship of Scholars in this field, are conflicting views, ideas and theories of human nature related to behaviour. This is evidence of the complexity of a human person in his/her relationship with others.

I am not going to further burden you with more research work done by Scholars of eminence like F.W. Taylor and F.J. Roethlisberger of Harvard University, where Taylor increased production by rationalizing it, and Mayo and his followers sought to increase production by humanizing it. While all this serious study has been done by Scholars on Good Human Relationship, we, who are working in the Health Care sector should remember that HUMAN RELATIONS remains an important factor not only within and between organizations, but in every walk of life where there is interaction between two or more persons. And this is true in a special way in the health care sector which aims to lessen pain and aims at good health of mind and body of persons created in the image and likeness of God Himself: The Masterpiece of God's creation.

Before I proceed with my own findings and the definition I proposed for Good Human Relations, let me share with you one of the interesting finds of Douglas McGregor who names his discovery Theory X and Theory Y first published in 1957.

The X Theory supposes that the world is full of lazy people and managing them is largely a matter of constant vigilance, catering to their psychological and security needs with perquisites and keeping handy, in case of need, the implied threat of unemployment. Whereas Y Theory holds that an average person does not inherently dislike work; has a lot of potential and exercises self-direction and self-control. They have imagination, ingenuity and creativity that can be applied to any situation. What McGregor discovered is that Leaders have either Theory X mindset or Theory Y mindset, and hence their dealings with subordinates depend so much on their X or Y mindset!

After having enumerated some of the useful theories relating to Good Human Relations, I must say, that while I agree that all these theories have a validity of their own and help in developing Good Human Relations in a Physician who has to constantly deal with Management of Hospitals, Nurses, Supportive Staff, Patients and their relatives, I have developed my own theory, which I placed before my Professors in my Doctoral Defense.

While most of the Management Books, when dealing with the subject of Good Human Relationship, express the concept as "The ability of an individual to get on with people", I feel that such a concept could be deceptive, because 'getting on with people' could

easily be an eye-wash, hypocritical behavior, not REAL. With this definition I would be the best in this field if I welcomed a person whom I detest, offer him/her a cup of coffee and chat with him/her for a while, and then when he/she left my office, felt that I got rid of that person without hurting him/her, and that I was very human in my interaction. But deep within me I am happy I got rid of him/her! Here I have been a real hypocrite!

Hence, the concept of 'Good Human Relationship', I felt, would be more acceptable and reasonable and would not in anyway give way to hypocritical behaviour, when understood as "The ability of one person to recognize the dignity of another person, and deal with that person with this firm conviction."

*[An example here would be good for the listeners to understand this concept]*

For us Christians this concept of Good Human Relationship is beautifully revealed in two of Jesus' parables: The Good Samaritan and The Prodigal Son. The Good Samaritan related himself to the wounded person, because he recognized human dignity in him. The Prodigal Father recognized the dignity of a human person in his son who by going away with his share of the property. hurt his Father, but the Father continued to respect the dignity of his son who practically had disowned him!!

For a Catholic Physician and to all other Physicians too "Good Human Relationship" with the Management, Nurses, Supportive Staff, Patients and their Relatives, understood in the sense I have just explained, namely, recognizing the dignity of each of those who deal with as masterpieces of God's creation, is of paramount importance. This not only to bring joy and satisfaction to their own ministry of healing but to bring faster recovery in the patient and the feeling of all those whom the physician deals with, that the physician they deal with is a wonderful person to deal with, that the physician is so much Christ-like! As St. Mother Theresa put it in simple words, the physician will then deal with his/her patient as if he/she was Jesus himself!

Let me conclude with the one factor that is very important for a Physician to be effective: The ability to LISTEN. Listen to the management; listen to the Nurses; listen to the Supportive Staff; listen to the patients and listen to the patients' relatives. Good listening is considered by most Behavioural Scientists as one of the best ways of communicating! Several theories have been proposed by Behavioural Scientists in what 'LISTENING' is all about, but the theory I found most useful and practical is the "Ladder Method of Listening".

**L** in the Ladder stands for LOOK: When listening to a patient or any one else LOOK at his/her face.

**A** in the Ladder stands for ASK: Ask questions, repeating some of the words the patient or anyone else used when speaking to you.

**T** he two Ds in the Ladder stand for Don't change the topic, and Don't interrupt.

**E** in the Ladder stands for Emotions. Avoid your personal emotions, if any, regarding the person talking to you, AND

**R** in the Ladder stands for Responsive. Be Responsive to the person speaking to you. Say things that will make the person satisfied after having spoken to you.

***Let me conclude with an anecdote:***

The great Violinist, Nicolo Paganini, willed his marvelous violin to Genoa – the city of his birth – but only on the condition that the instrument never be played. It was an unfortunate condition, for it is a peculiarity of wood that as long as it is used and handled, it shows little wear. As soon as it is discarded, it begins to decay. The exquisite, mellow-toned violin has become work – eaten in its beautiful case. Valueless, except as a relic. The mouldering instrument is a reminder that a life withdrawn from all service to others loses in meaning.

My dear Dr. Sisters, your Service to God's people, particularly to the disadvantaged among them is the God-given GIFT to you. Please continue to USE it considering everyone you meet and deal with as Masterpieces of God's creation, and possibly, people, who may be even better than you are in God's sight. You will then be genuine reflections of Jesus Himself for others and to yourself feel the joy of making your Healing Ministry worthwhile – !

Thank you and God bless you!

# MANAGEMENT OF CARDIAC EMERGENCIES IN A RURAL SETUP

*— Dr. Robin Pinto, MBBS, MD, DM (Cardiology)*

### *Introduction*

Cardiovascular emergencies are a life-threatening disorders that must be recognized immediately to avoid delay in treatment and to minimize morbidity and mortality. Patients may present with severe hypertension, chest pain, dysrhythmia, or cardiopulmonary arrest. In this chapter, we review the clinician's approach to these disorders and their treatments and provide links to other informative resources.

### *Cardiopulmonary arrest Etiology*

Cardiopulmonary arrest is a sudden and unexpected loss of perfusing pulsatile blood flow attributable to cessation of cardiac mechanical activity. It occurs as a result of a multitude of cardiovascular, metabolic, infectious, neurologic, inflammatory, and traumatic diseases.

These diseases can be generally classified into 5 H's and 5 T's (Hypovolemia, Hypoxemia, Hydrogen ion (acidosis), Hypo- or Hyperkalemia, Hypothermia, Tension pneumothorax, Tamponade, Toxins, and Thrombosis – both pulmonary and cardiac). The endpoint of these disorders is commonly pulseless ventricular tachycardia (VT) or ventricular fibrillation (VF), pulseless electrical activity, or asystole.

### *Diagnosis and therapy*

The American Heart Association and European Society of Cardiology have published revised resuscitation guidelines. The new guidelines still include the major steps below:

1. Activate EMS or the designated code team immediately.
2. Perform basic life support (CPR).
3. Evaluate heart rhythm and perform early defibrillation if indicated.
4. Deliver advanced cardiac life support, such as intubation, establishment of intravenous (IV) access, and transfer to a medical center or intensive care unit.

The new changes are as follows:

***1. Changing the Airway*** (A) – Breathing (B) – Circulation (C) sequence to C-A-B. This change was made to emphasize the importance of rapid initiation of chest compressions because in the old guidelines, significant time is potentially wasted performing airway evaluation. Airway evaluation and initiation of mouth-to-mouth breathing may be a complex, time-consuming process for the layperson, and may delay chest compressions. The phrase "Look, listen and feel" has also been removed from the algorithm to prevent time delays.

2. More emphasis on the quality of CPR performed, including the rate and depth of compressions, allowing complete chest recoil, and minimizing interruptions in compressions. Less emphasis on pulse checks.
3. Highlighting the importance of professional healthcare rescue teams performing multiple tasks during CPR such as establishing an airway or delivering advanced cardiac life support drugs.

### *2. Pulseless VT or VF*

1. Start chest compressions as early as cardio-pulmonary arrest is identified. Place airway device as soon as possible and confirm oxygenation and ventilation. Establish IV access, identify rhythm, and administer drugs appropriate for rhythm and condition. Search for and treat identified reversible causes (5 H's and 5 T's), with focus on basic CPR and early defibrillation.
2. On arrival to an unwitnessed cardiac arrest or downtime longer than 4 minutes, five cycles (~2 min) of CPR (each cycle is 30 compressions at a rate of ~100 compressions per minute) are to be initiated before evaluation of rhythm. If the cardiac arrest is witnessed or downtime is shorter than 4 minutes, one shock may be administered immediately if the patient is in VF or pulseless VT followed by five cycles of CPR.
3. If the patient is in VF or pulseless VT, shock the patient once using 200 J on biphasic (on equivalent monophasic, 360 J).
4. Resume CPR immediately after attempted defib-rillation, beginning with chest compressions. Rescuers should not interrupt chest compression

to check circulation (e.g., evaluate rhythm or pulse) until five cycles or 2 minutes of CPR have been completed.

5. If there is persistent or recurrent VT or VF despite several shocks and cycles of CPR, perform a secondary ABC survey with a focus on more advanced assessments and pharmacologic therapy. Pharmacologic therapy should include epinephrine (1 mg IV push, repeated every 3-5 min) or vasopressin (a single dose of 40 U IV, one time only).
6. Consider using antiarrhythmics for persistent or recurrent pulseless VT or VF. These include amiodarone, lidocaine, magnesium, and procainamide
7. Resume CPR and attempts to defibrillate
8. If spontaneous circulation returns, start immediate post-cardiac arrest care. This includes optimization of oxygenation and ventilation with emphasis on avoiding hyperventilation, treating hypotension by starting vasopressor infusion or inserting intra-aortic balloon pump, assessing neurologic status and starting induced hypothermia if indicated and assessing need for coronary reperfusion if high suspicion for acute coronary syndrome.

***3. Pulseless electrical activity or asystole***

1. Assess the patient and begin chest compressions immediately.
2. Administer epinephrine (1 mg IV push repeated every 3-5 min). Consider transcutaneous pacing if asystole.
3. Conduct a secondary ABC survey and consider reversible causes (5 H's and 5 T's).
4. Resume immediate post-cardiac arrest care if there is a return of spontaneous circulation as above.

***4. Bradycardia***

1. Heart rate typically $<50$ beats per minute.
2. Identify and treat underlying cause if patient is stable (5 H's and 5 T's).
3. Check for serious signs of low cardiac output due to bradycardia such as hypotension, altered mental status, or acute heart failure.
4. If serious signs or symptoms are present, begin the following intervention sequence:
   a. Atropine, 0.5 mg, up to a total of 3 mg IV
   b. Transcutaneous pacing, if available
   c. Dopamine, 5 to 20 $\mu$g/kg/min
   d. Epinephrine, 2 to 10 $\mu$/min
   e. Isoproterenol, 2 to 10 $\mu$/min
   f. Consider glucagon for beta-blocker toxicity, calcium infusion for calcium channel blocker toxicity.
5. If no serious signs or symptoms are present, evaluate for a type II second-degree atrioventricular block or third-degree atrioventricular block.
6. If neither of these types of heart block is present, observe.
7. If one of these types of heart block is present, prepare for transvenous pacing.
8. Resume immediate post-cardiac arrest care if there is a return of spontaneous circulation as above.

***5. Hypertensive emergency***

A hypertensive emergency is an acute, severe elevation in blood pressure accompanied by end-organ compromise. It is usually associated with a systolic blood pressure (SBP) equal to or higher than 180 mm Hg and/or a diastolic blood pressure (DBP) equal to or higher than 120 mm Hg.

End-organ compromise includes acute renal failure due to nephrosclerosis, ocular involvement with retinal exudates, hemorrhages, or papilledema, hypertensive encephalopathy, acute stroke or intracranial hemorrhage, acute myocardial infarction, aortic dissection, and eclampsia.

Hypertensive encephalopathy signals the presence of cerebral edema and loss of vascular integrity. If left untreated, hypertensive encephalopathy may progress to seizure and coma.

Aortic dissection is associated with severe elevations in systemic blood pressure and wall stress, requiring immediate lowering of the blood pressure and emergent surgery for type A dissection to reduce morbidity and mortality.

Eclampsia, the second most common cause of maternal death, occurs from the second trimester to the peripartum period. It is characterized by the presence of seizures, coma, or both, in the setting of preeclampsia. Delivery remains its only cure.

***6. Acute pulmonary edema***
***Definition***

Acute pulmonary edema is an emergency that necessitates admission to the hospital. It has two major forms, cardiogenic and noncardiogenic. We focus on cardiogenic pulmonary edema, which generally is more reversible than the noncardiogenic form.

Cardiogenic pulmonary edema results from an absolute increase in left atrial pressure, with resultant increases in pulmonary capillary and venous pressures. In the setting of normal capillary permeability, this increased pressure causes extravasation of fluid into the alveoli and overwhelms the ability of the pulmonary lymphatics to drain the fluid, thus impairing gas exchange in the lung.

***Diagnosis***

Pulmonary edema is diagnosed by the presence of various signs and symptoms, including tachypnea, tachycardia, crackles (reflecting alveolar edema), hypoxia (secondary to alveolar edema), and the S3 or S4 heart sounds, individually or in combination. Additionally, if hypertension is present, it may represent diastolic dysfunction, decreased left ventricular compliance, decreased cardiac output, and increased systemic vascular resistance. The presence of increased jugular venous pressure indicates increased right ventricular filling pressure secondary to right ventricular or left ventricular dysfunction. Finally, the presence of peripheral edema indicates a certain degree of chronicity to the patient's condition.

Laboratory data associated with pulmonary edema include hypoxemia on arterial blood sampling and a chest radiograph showing bilateral perihilar edema and cephalization of pulmonary vascular marking. Cardiomegaly, pleural effusion, or both may be present. Two-dimensional transthoracic echocardiography is usually helpful in the acute setting to assess biventricular size and function, to identify valvular stenosis or regurgitation, and to determine the presence or absence of pericardial pathology.

The ECG may reflect ongoing ischemia, injury, tachycardia, and atrial or ventricular hypertrophy. In many cases, differentiating cardiogenic and noncardiogenic pulmonary edema can be challenging and requires the insertion of a pulmonary artery catheter to measure the pulmonary capillary wedge pressure.

***Treatment***

Mainstays of immediate therapy include improving oxygen delivery to end organs, decreasing myocardial oxygen consumption, increasing venous capacitance, decreasing preload and afterload (with careful attention to MAP), and avoiding hemodynamic compromise. All patients should receive supplemental oxygen to maximize hemoglobin oxygen saturation. Administration of continuous positive airway pressure can increase gas exchange, and may perhaps decrease preload via increased intrathoracic pressure.In our experience, however, repeated attempts to improve oxygenation with noninvasive positive pressure ventilation often prove inadequate. In such cases, restoration of oxygenation is best achieved via prompt endotracheal intubation and initiation of mechanical ventilation.

***Pharmacologic therapy***

The pharmacologic agents most commonly used in the treatment of acute pulmonary edema are nitroglycerin, SNP, and diuretics.

Nitroglycerin acts immediately to decrease preload and afterload.It should be used for the management of patients with pulmonary edema who are not hypotensive. Sublingual administration allows rapid delivery, which is often required to decrease preload. IV administration of nitroglycerin also should be used in the nonhypotensive patient and, based on symptoms, titrated to a MAP of approximately 70 to 75 mm Hg.

SNP is an effective vasodilator that is often required for the treatment of the hypertensive patient with pulmonary edema. Due to the rapid and potent effects of SNP, its use requires continuous invasive monitoring of arterial blood pressure. The issues of methemoglobinemia, cyanide, and thiocyanate toxicity rarely become significant, but since patients receiving continuous infusions will often develop tachyphylaxis – a progressive resistance to the drug's effects – frequent blood testing is necessary.

SNP should be used with caution in the setting of hepatic dysfunction, since the liver is responsible for transformation of the cyanide radical into thiocyanate. Patients with renal dysfunction will tend to accumulate thiocyanate more rapidly than those with normal kidney function, since thiocyanate is excreted in the urine. Finally, through its effects on coronary arteriolar resistance vessels, SNP can potentially cause coronary "steal," drawing blood flow away from ischemic myocardium. We generally co-administer nitroglycerin along with SNP to dilate conductance vessels and lessen this theoretical risk.

IV diuretics are most helpful for the treatment of volume overload in chronic congestive heart failure. Their vasodilative and diuretic properties also are useful in the management of pulmonary edema. Diuretics should be used with caution in the euvolemic patient to avoid compromising cardiac output and oxygen delivery.

IV morphine can be used in certain select patients to decrease their "air hunger," anxiety, and sympathetic tone, which can in turn help reduce their afterload.

### *Aortic Dissection*

Aortic dissection is a tear of the aortic intima that allows the shear forces of blood flow to dissect the intima from the media and, in some cases, penetrate the diseased media with resultant rupture and hemorrhage.

Most patients present with acute chest pain that peaks in intensity at onset, and is often self-described as "tearing" or "ripping" in nature. Uncommonly, patients present with congestive heart failure from accompanying acute aortic valve insufficiency, tamponade, or both. Also seen are cerebrovascular accidents due to involvement of the carotid artery or vertebrobasilar system, syncope from tamponade, or cardiac arrest.

It is essential to recognize several key signs in the imaging of aortic dissection, because they dramatically affect treatment and outcome:

Involvement of the ascending aorta.

Location of dissection flap, intimal tear and the major vessels involved.

Presence of pericardial effusion or cardiac tamponade.

Involvement of coronary ostia.

The sensitivity of computed tomography angiography (CTA) for detecting aortic dissection is approximately 83% to 100%, and its specificity ranges from 87% to 100%, depending on the study

### *Treatment*
### *Surgery*

Surgical therapy is the best option for acute aortic dissection involving the ascending aorta. Studies have shown that delaying surgical intervention, even to carry out left heart catheterization, aortography, or both, results in worse outcome.Mortality increases by 1% per hour while waiting for surgery. Surgical repair in patients with type B dissection is generally reserved for those with end-organ compromise or those who do not respond to medical therapy.

### *Medical Therapy*

Medical therapy should be initiated in all patients with acute dissection. Reductions of shear force and blood pressure should be the primary goals. Beta-blockers should be given intravenously and titrated to the desired effect.

In the hypotensive patient, diagnoses of pericardial tamponade, aortic rupture, aortic insufficiency, myocardial infarction, or a combination of these should be suspected and tested for. Volume replacement and early surgical intervention should be pursued.

Pericardiocentesis should be avoided if tamponade is present, because immediate surgical intervention is the therapy of choice. If hypotension persists, norepinephrine and phenylephrine are the vasopressors of choice because of their limited effects on increasing cardiac contractility. Endovascular stenting, a rapidly growing field, remains investigational in this acute setting and is sometimes used in very high-risk surgical patients with type B aortic dissections or aneurysms.

### *Summary*

Cardiovascular emergencies are common in the practice of medicine and quick action is necessary.

Cardiopulmonary arrest has several possible causes, all of which require prompt resuscitative efforts. The American Heart Association guidelines have proposed changes that make chest compressions a priority before assessment of airway and breathing, in order to minimize time delays. All healthcare professionals need to be aware of these changes.

Hypertensive emergency causes end-organ damage and warrants admission for intensive monitoring, including continuous arterial blood pressure measurement, and treatment.

Aortic dissection categorized as Stanford type A requires emergent surgery, whereas type B is generally managed medically unless end-organ damage can be demonstrated.

Acute pulmonary edema should be treated by improving oxygen delivery to end organs, decreasing myocardial oxygen consumption, and safely decreasing preload and afterload.

# HOW TO SAVE A NEW BORN IN A LOW COST SETTINGS

*– Dr. Armida Fernandez, MD, DCH (Paed.)*

A neonate experiences rapid change of physiology at birth and during the initial few days of life. This is the period when many infants would fall sick and may even die. Care at birth and during first few days of life is therefore very important and can lay a good foundation for the neonatal period and beyond.

This article is intended to provide evidence-based guidelines for care of a normal neonate at birth and beyond.

A normal neonate for the purpose of this protocol has been defined as follows:

* Birth weight greater than 2500 g
* Gestation greater than 37 wk
* Birth weight between $10^{th}$ to $90^{th}$ percentiles
* No need for resuscitation at birth
* Normal Apgar scores
* No postnatal illness such as respiratory distress, sepsis, hypoglycemia or polycythemia, congenital malformation.
* Absence of maternal illness or intrapartum event that may put the neonate at a risk of illness (eg. Gestational diabetes, antepartum haemorrhage.

This protocol does not cover the following neonates:

* Preterm
* Low birth weight
* Sick
* Small or large for dates (birth weight $< 10^{th}$ or $> 90^{th}$ percentiles for gestation)

***Care of baby at birth and within first hour(s) of birth***

* **Skilled birth attendance:** One health provider (physician or nurse) trained in neonatal resuscitation must be physically available at the time of birth of all infants irrespective of risk status (high or low). It is emphasized that this person must actually be present in the delivery room before the birth of the baby. It is not good enough to have someone on call. The resuscitation corner must be physically located in the delivery room itself. Details of resuscitation is provided elsewhere. If delivery anticipated to be high risk, more advanced neonatal resuscitation may be required.
* It is important to call out the time of birth loudly – this helps in accurate recording of the time and alerts other personnel in case any help is needed. In these cases, 2 persons should be present to manage the baby.
* **Universal precaution:** Health providers must exercise universal precaution in all cases while caring for infants at birth as per their hospital policy. This should include wearing proper gowns, gloves, boots and goggles.
* **Asepsis at birth:** it is important to prevent infection at birth by observing five cleans – (1) clean hands after appropriate hand-hygiene and wearing sterile gloves (2) clean surface – use a clean and sterile towel to dry and cover the baby (3) cut the umbilical cord with a clean and sterile blade/scissor (4) use a clean tie for the cord (5) do not apply anything to the cord.
* **Prevention and management of hypo-thermia:** hypothermia at birth is common and has a detrimental effect on the health of the infant. Hypothermia should be prevented by paying special attention to temperature maintenance in the baby. The delivery room should be warm (atleast $25^0$C) and free from a draft of air. The infant should be received in a pre-warmed sterile linen sheet. The infant should be dried thoroughly including the head and face areas. The wet linen should not be allowed to remain in contact with the infant. The infant should be placed in skin-to-skin (STS) contact with the mother immediately after birth. In addition to maintaining normal temperature of the infant, STS promotes early breastfeeding and decreases the pain and bleeding in the mother. The infant should be made to wear the caps and socks.
* **Cutting of umbilical cord:** Umbilical cord cutting must be delayed for about 2 minutes in order to allow the transfer of an additional amount of blood from the placenta to the infant. A meta-analysis including 15 trials, comparing early versus delayed cord clamping in nearly 2000 neonates showed that delayed cord clamping has been associated

with benefits from 2 to 6 months, viz. improved hematologic status (hematocrit), iron status (ferritin/ stored iron) and a clinical anemia. Even though, there was an increase in polycythemia among infants in whom late clamping was done, this appeared to be benign.

* **Clamping of the cord:** The umbilical cord should be clamped 2-3 cms away from the abdomen using a commercially available clamp, a clean and autoclaved thread or a sterile rubber band. The rubber band could be a better option than a thread, as once the cord starts shriveling; the rubber band would still maintain its grip while the thread might loosen up. Inspect the cord every 15-30 minutes for initial few hours after birth for early detection of any oozing from the cord.
* **Cleaning of baby:** the infant should be cleaned at birth with a clean and sterile cloth in order to remove blood clots or meconium on the body, if any. The white greasy material on the skin, the vernix, protects skin of the infant and helps maintain temperature. One should not attempt to remove vernix from the body by any means, as it can result in trauma to skin and increases chance of infections. It gets absorbed on its own after sometime.
* **Placement of identity band:** Each infant must have an identity band containing the name of the mother, the hospital registration number, the gender and birth weight of the infant. The foot prints for identification makes it messy, the quality of prints are generally of poor quality and therefore the same should be avoided.
* **Communication with the family:** The health provider attending the birth of the infant must communicate with the mother and other family members regarding time and weight at birth, gender and well being of the infant. The infant should be shown to the family with particular attention given to the fact that family members get to know the gender and the identity tag on the infant. This would avoid any confusion regarding identity of the infant.
* **Bedding in:** There is no indication of separating a normal infant (normal delivery or caesarean section) from the mother for routine observation in the nursery. During the initial couple of hours after birth, infants are awake and very active and this opportunity should be utilized for bonding and initiation of breastfeeding. Separation of a normal infant from the mother even for a couple of hours for 'observation' has a significant adverse impact on successful breastfeeding.
* **Recording of weight:** All the infants should be weighed at birth or within 24 hr on a scale with at least 50 gm sensitivity. The weighing scale is periodically calibrated. Weight recording requires a considerable skill and therefore the health providers must be adequately trained to do so. The same weighing scale should be used for serial monitoring of weight of the infant, if required. Place either a single-use paper towel or a sterile cloth towel on the weighing scale beneath the infant.
* **Assignment of Apgar score —** Apgar score has a limited value for initial stabilization and prediction of subsequent neuro-sensory outcomes. However, it does predict mortality in short term and helps defining the need for nursery admission. Therefore Apgar should be recorded at 1, 5 and 10 minutes. Extended Apgar scores at 15 and 20 minutes should be recorded if initial scores are below 7.
* **Examination at birth:** The infant should be examined thoroughly for cardio-respiratory stability, malformation or trauma and determination of gestation. There is no need for routine passage of catheter in the stomach for detection of esophageal atresia, in the nostrils for detection of choanal atresia or into the rectum for detection of anorectal malformation. Body temperature of the infant must be recorded by axillary route using an electronic thermometer. If a mercury thermometer is used, use it for three minutes. Use of rectal thermometer is associated with risk of trauma and infection and therefore must be avoided.
* **Vitamin K:** Neonates are at risk to vitamin K deficiency in view of low transplacental transfer and poor breast milk content. Vitamin K deficiency can result in severe bleeding during early infancy. Vitamin K in dose of 0.5 to 1 mg to term and 0.5 mg to preterm infants must be routinely administered intramuscularly to all neonates to prevent vitamin K deficiency bleeding. Two large randomized trials, compared a single dose of intramuscular vitamin K with placebo/ nothing and assessed effect on

clinical bleeding. One dose of vitamin K reduced clinical bleeding at 1-7 days, including bleeding after circumcision, and improved biochemical indices of coagulation status. The lower doses of vitamin K have been studied by one RCT, which reported doses of 0.5 mg to be as affective as 1 mg. Vitamin K1 preparation is preferable to K3 preparation. There was only one study comparing the efficacy of vitamin K1 versus vitamin K3, which found comparable PIVKA II levels with both preparations. The study also found no increased hemolysis in the vitamin K3 group in the doses used for prophylaxis. However in view of unavailability and cost, K3 preparation is a reasonable alternative to K1. Oral preparation is unavailable in India and require multiple dosing to prevent late onset vitamin K deficiency bleeding.

* **Prevention of tetanus:** If the mother has not received adequate tetanus immunization during pregnancy, the infant should be given a tetanus toxoid dose and concurrent tetanus immunoglobulin 250 IU intramuscularly to prevent tetanus neonatorum.
* **Stomach wash:** There is no role of routine stomach wash after birth to prevent any kind of gastritis. If the infant is born through meconium stained liquor, the stomach can be aspirated to remove the stomach content to prevent vomiting in early neonatal period.

***Care after birth during initial few days of life***

* **Cord care:** the umbilical cord must be kept dry and open. The nappy should be folded just below the umbilical stump.
* **Exclusive breastfeeding (EBF):** EBF is the most important public health intervention for preventing a large number of newborn and U-5 deaths. It is estimated that at 100% coverage, it can save more than half of total newborn and 13% of U-5 deaths globally. Successful breastfeeding requires a systematic approach to initiate, support and maintain breastfeeding. This amounts to educating mothers and families about the benefits during antenatal period, supporting the mother for initiation of breastfeeding soon after birth, managing appropriately various breastfeeding conditions during early postpartum period and psychological support to the mother. Provision of a dedicated lactation counselor significantly increases the chances of successful breastfeeding.
* **Oil massage:** Oil massage is a low cost traditional practice well ingrained in Indian culture. There are 2 Indian studies that focused on the oil massage in the term babies and their benefits in terms of health, growth and skin condition. Both the studies have shown oil massage, promoted weight gain in healthy neonates. However, a paucity of data still exists as to which oil should be used for this purpose. Care should be taken not to use oils with additives or oils with irritants.
* **Vitamin D supplementation:** Vitamin D deficiency seems to have acquired epidemic proportions in infants, children and adults. In view of poor vitamin D content in breast milk and limited opportunity to sun exposure in infants, vitamin D deficiency is common in healthy breastfed infants. Various studies and survey in both developed and developing countries have reported 50 to 100% of the normal breastfed neonates to be deficient. Moreover, the mothers in developing countries like India are also deficient adding to the problem. There are 2 high quality randomized controlled trial which evaluated the effect of routine vitamin D supplementation in a dose of 400 IU/day to exclusively breastfed neonates starting in the first month of life. There was a significant (100%) reduction in the biochemical deficiency of vitamin D in both the studies. The results of the same can be logically extrapolated to our setting as the problem is more alarming. Hence, as recommended by the other academies (American Academy of Pediatrics 2008). It is recommended to supplement 400 IU/day of Vitamin D to all infants irrespective to type of feeding.

**Examination for jaundice:** All the infants must be examined for the development and severity of jaundice twice a day for first few days of life. Visual assessment in daylight is the preferred method. Transcutaneous assessment of jaundice using newer generation devices is helpful and may reduce the need for blood sampling. However initial and running cost constitute an important barrier.

The American Academy of Pediatrics recommends routine measurement of serum total bilirubin on a blood sample or by transcutaneous bilirunimotry in all neonates. However there is no data on cost-benefit of this approach. In view of the feasibility and cost involved, the same can not be recommended in Indian settings.

*** Vaccination:** All the normal newborns must be offered the birth immunization (Hep B, OPV & BCG) before discharge, as per their State policy. Hepatitis B immunization at birth can prevent perinatal transmission of hepatitis B infection in majority of cases.

* **Bathing:** Routine bathing in the hospital should be avoided in view of unavailability of safe water and risk of hypothermia. The infant can be sponged as required. Infant can be bathed at birth taking care of risk of hypothermia.

**** Sleep Position:***

- No Indian study has looked into the sleep position of the healthy normal neonates and its relation to sudden infant death syndrome (SIDS). The American Academy of Pediatrics, in its systematic review-cum-policy statement (1992) identified 7 studies comparing "usual sleeping position" of infants who died of SIDS and controls. Six reported a significant correlation of prone position with SIDS. Though many were associated with some flaw in study design, when considered together, these studies present substantial evidence of an association of prone position and SIDS, independent of other variables. However, no published report has suggested the converse – i.e., a reduced incidence of SIDS with the supine position. No studies were conducted in the hospital or facility setting.
- All healthy neonates who are born at term and have no medical complications should preferably be placed down for sleep on their back.

* **Kajal application:** Application of the kajal or soorma is very common in the rural community (70%). This is usually applied by the mother with the ring or the middle finger and is a source of infection. There are rare reports of lead poisoning. Hence, routine kajal application should be discouraged.

* **Discharge:** Whenever possible the baby should undergo an observation period of 48 to 72 hours in the health facilitiy (for establishment of breast feeding and observation for any morbidity including jaundice. The following criteria should be met in all the babies prior to discharge planning:

- The routine formal examination of the newborn has been performed and documented.
- The newborn has received the immunization as per schedule
- The mother is confident and trained to take care of the neonate
- The new born is not having a significant jaundice or any other illness requiring close observation by a health provider.
- The new born is breastfeeding adequately. The adequacy of feeds can be determined by:
  - Passage of urine 6 to 8 times every 24 hours.
  - Baby sleeping well for 2 to 3 hours after feeds.
  - There is no excessive weight loss (normally babies do not lose more than 8 to 10% in initial 3 to 4 days).
- The mother has been counseled regarding routine newborn care and her queries are answered.
- Follow-up advice should be communicated to the mother of the baby. Babies, particularly born to primigravida mothers should be called for follow-up visit at 48 hours of discharge if discharged before 48 hours. The breastfeeding and the jaundice in these babies should be evaluated.
  - * Ideally the infant should be discharged after 48-72 hours after birth once breastfeeding has been well established; the infant has been immunized and free from any illness including significant jaundice. Adequacy of breastfeeding must be assessed in all infants and the same would be indicated by the passage of urine at 6 times/24 hr., onset of transitional stools, baby sleeping well for 2-3 hours after feeding. If there is any concern about adequacy of breastfeeding, the infant can be weighed on the same weighing scale that was used to weigh the infant at birth. Excessive weight loss (normal 8-10% of birth weight by 3-4 days of age) would indicate inadequate breastfeeding. Adequate support must be provided to the mother to enhance the lactation in the mother.

* All the infants should have a routine formal examination before discharge. The examination should be performed with the infant naked and in optimum light in the presence of the mother using a proforma (so as not to miss anything). The examination includes assessment of vital signs, heart murmurs, palpation of femoral pulses, and presence of jaundice and adequacy of breastfeeding. The mother should be provided opportunity to ask questions and clarify her doubts.
* Measure weight at discharge if feeding problems are present. Document if there is any excess weight loss. Normal weight loss 7-8% by 3-4 days of age.
* There are no Indian studies reporting the readmission rates, breastfeeding failures, and morbidity characteristics, with which the early discharged babies get re-admitted, A Cochrane has shown that the breastfeeding failure may be as high as 50% with re-admission rates nearing 2% if the babies are discharged early.
* In an Indian setting, this has to be investigated. However, If the infant has been discharged within 2-3 days after birth, a follow up visit should be scheduled after 2-3 days for assessing adequacy of breastfeeding and examination for jaundice.

**Advice on Discharge:**

1. Exclusive Breastfeeds: All mothers should be advised to exclusively breastfeed the babies till 6 months of age. All the advantages of breast milk, short term and long term should be discussed with the mother to facilitate a success.
2. Immunization: The schedule of immunization should be explained to the mother and the date of the next immunization should be mentioned on the discharge card.
3. The follow-up date for the babies discharged early (within 48 hours) for assessment of jaundice should be communicated to the parents.
4. The danger signs should be documented and the mother should be educated to recognize the same and report early when they are recognized.
    * Difficulty in feeding
    * Convulsions
    * Lethargy (movement only when stimulated)
    * Fast breathing (RR > 60/min)
    * Severe in drawing of the chest.
    * Temperature of more than 37.5 degrees C or below 35.5 degrees C

* **Metabolic screening:** Routine metabolic screen can help timely detection of a variety of metabolic disorders. It involves significant cost, coordination between clinical team and metabolic screening lab, tracking of infants after discharge and requires availability and affordability of treatment of diagnosed disorder. The candidate diseases for routine metabolic screening in India include congenital hypothyroidism, G6PD deficiency and possibly congenital adrenal hyperplasia. Currently there is no data on epidemiology of various metabolic disorders and cost-benefits and feasibility of routine metabolic screen in India. An ongoing multicentric study of ICMR is likely to answer some of these questions. Based on the available data, it is not justified to start routine metabolic screening in India.

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# ACUTE TRAUMA CARE IN ORTHOPAEDICS

*— Dr. Dylan Goveas, MS (Ortho)*

***Introduction:***

More than 60 percent of injuries involve the musculoskeletal system, and more than half of hospitalized trauma patients have at least one musculoskeletal injury that could be life threatening, limb threatening, or result in significant functional impairment. These orthopaedic injuries are often associated with significant health care costs, decreased productivity in the workplace, and, in some cases, long-term disability. The optimal

Management of trauma patients with orthopaedic injuries requires significant physician and institutional commitment

***Basics:***

As soon as the patient self presents or is brought by relatives the following information is expected:

■ Age. ■ Gender. ■ Mechanism and type of injury. ■ Heart rate. ■ Blood pressure.

■ Glasgow Coma Scale (GCS). ■ Respiratory rate. ■ Oxygen saturation. ■ Any treatment given.

Before the patient arrives, all members of the trauma team should take steps to reduce the risk of occupational exposure to blood borne diseases such as HIV and hepatitis viruses. This means that, in addition to anti hepatitis immunisation for all trauma team staff, all blood and body fluids should be assumed to be a potential risk. Therefore, gloves, aprons/protective gowns and goggles should be worn by each team member during the assessment and treatment of the trauma patient.

***Primary Survey:***

The objectives of the primary survey, that is, the initial assessment and resuscitation phase, are to identify and correct any life-threatening injuries quickly and efficiently. This will be achieved by following systematic assessment and management of

■ Airway with cervical spine control

■ Breathing and ventilation.

■ Circulation and haemorrhage control.

■ Disability and dysfunction.

■ Exposure and environment control

In addition to this, it should be remembered that, at this stage, actions by the team may have a potential impact on the patient's later survival

Poor infection control procedures at this stage may lead to the patient developing a potentially life-threatening sepsis. The trauma team must be aware that initial interventions may affect the whole patient journey.

If the patient is conscious and oriented on arrival, psychological support, including an explanation of what is going to happen, is essential. In addition to the rapid assessment of A, B, C, D, E, a brief history should be obtained using the AMPLE mnemonic: A = allergies M = medications P = past medical history L = last food/drink E = events leading to the injury

***Airway with cervical spine control:***

The airway must be assessed and maintained while the cervical spine is immobilised. It should be assumed that any patient who has suffered a blunt trauma injury may have a cervical spine injury. Therefore, manual in-line immobilisation or full immobilisation using a semi-rigid collar, head blocks and tape is essential. The only exception to this is the combative or restless patient where forceful immobilisation may result in further spinal damage.

A sequential approach to airway assessment is needed:

**Talk**: Initially the patient should be spoken to, to elicit a response. If the patient can talk it demonstrates that he or she has a patent airway

**Look:** The doctor should open the patient's mouth, looking for foreign objects that may be restricting a verbal response

**Breathing and ventilation:** All trauma patients should be given 100 per cent oxygen (15 litres via an oxygen mask with a reservoir bag) because of the risk of hypoxia caused by chest injury or hypovolaemia. A careful assessment of the chest should be made to detect any potential or actual life-threatening thoracic problems that may need urgent intervention by medical staff, such as insertion of a chest drain for a pneumothorax

The doctor should assess:

- **Respiratory rate** – rapid respirations indicate that a patient who is shocked or in pain. Extremely slow or absent respirations may indicate the need to start artificial ventilation using a bag, valve mask device.
- **Respiratory depth** – shallow breaths may be indicative of an injury that is causing pain or a restriction in lung or chest movement**.**
- **Respiratory symmetry** – breathing that is unequal or asymmetrical may indicate bony rib injury or an underlying pneumothorax**.**
- **Observe the chest** – for any wounds, bruises or other signs of injury.

***Circulation with haemorrhage control****:*

The priority here is the assessment of the patient's circulation and control of haemorrhage.

The doctor should assess:

- **Heart rate** – this is an early indicator of the shocked patient. A pulse of more than 100 beats per minute in an adult (or an equivalent tachycardia in a child
- **Blood pressure** a low blood pressure, for example, a systolic blood pressure of less than 100 mmHg in an adult patient, should be viewed as significant until hypovolemic shock can be ruled out or treated.
- **Capillary refill time** – delayed capillary refill time of more than two seconds is indicative of hypovolemic shock in the trauma patient.
- **Level of consciousness** – the patient who is anxious, confused or drowsy may be hypoxic and/ or hypovolemic.
- **Disability**: The level of consciousness in a head injured patient should be formally re-assessed using the GCS. If an altered neurological state is identified with a GCS of less than 15, this may be indicative of brain injury.
- **Exposure and environmental control**: The patient should be fully undressed to allow a detailed examination. During the primary survey, examination of the anterior and posterior surfaces of the patient should be carried out to assess for life threatening conditions. To examine the back the patient needs to be log rolled.

## ORTHOPAEDIC INJURIES

After the initial examination as above, the local examination is carried out keeping in mind Inspection, Palpation, Movements and Measurements.

Once a clinical diagnosis is made, X rays are asked for besides the other investigations.

**X ray Views:**

Usually the requested X rays should have the joint above and joint below included.

The following are the X ray views for the upper and lower limbs.

**Upper Limbs:**

| | |
|---|---|
| Shoulder: | AP/ Axial |
| Humerus: | AP/ Lat |
| Elbow: | AP/ Lat |
| Forearm: | AP/ Lat |
| Hand: | AP / Oblique |

**Lower Limbs:**

Hip: Pelvis with Both Hips AP with 15 degree internal rotation and the respected hip Lateral

| | |
|---|---|
| Femur: | AP/ Lat |
| Knee: | AP/ Lat |
| Tibia: | AP/ Lat |
| Ankle: | AP/ Mortise / Lat |
| Foot: | AP/ Oblique |
| Calcaneum: | Lat/ Axial |

**Management of Common Closed Upper limb trauma before referral:**

After the initial assessment, clinical examination and x-rays the following can be done:

**1. Colles' Fracture:**

Look for radial artery pulsation and if possible a peripheral nerve examination.

When gross deformity is present, after the administration of analgesics, traction and counter

traction is given. With fracture reduction swelling gradually comes down. This is then followed by application of a POP splint from proximal to the proximal palmar crease to the elbow. Limb elevation is then advised.

**2. Forearm Fractures:**
Look for soft tissue tightness, Pulselessness, Paraesthesia and stretch pain in view of compartment syndrome. Apply a POP splint above the elbow starting from the MCP joints

3. **Elbow Fractures:**
As above

4. **Humerus fractures:**
U slab

5. **Shoulder fractures:**
Shoulder immobilizer

**6. Clavicle Fractures:**
Figure of 8 bandage

**Management of Common Closed Lower limb trauma before referral:**

**1. Phalangeal fractures:**

Strapping one toe with the other with a gauge in between for three weeks

**2. Foot fractures:**
Below knee slab

**3. Tibia fractures:**
Look for compartment syndrome and apply above knee POP splint

**4. Knee fractures:**
Look for compartment syndrome and apply above knee POP splint

**5. Femur fractures:**
Thomas Splint ideally or above knee POP splint

**6. Hip fractures:**
Skin Traction

## OPEN FRACTURES

- Open fractures occur when a fractured bone is exposed to contamination from the external environment through a disruption of the skin and subcutaneous tissues and are susceptible to infection
- Patients with open fractures should receive intravenous antimicrobials within one hour of presentation to reduce the risk of infection
- Patients with Gustilo type 1 or 2 open fractures should receive a first-generation cephalosporin (for example, cefazolin)
- Gram negative coverage should be considered in patients with Gustilo type 3 fractures for example, gentamicin
- Antibiotics should be administered for no longer than 24 hours after a surgical procedure.
- In cases of severe contamination, antibiotics may be continued for as long as 72 hours after a surgical procedure.
- Tetanus toxoid should be administered if the patient had an incomplete primary immunization, if it has been $>10$ years since his or her last booster dose, or if the immunization history is unknown or unclear.

Tetanus immunoglobulin should be administered if it has been $>10$ years since the patient's last booster dose or if he or she has a history of incomplete primary immunization.

- Patients with open fractures should be taken to the operating room for irrigation and debridement within 24 hours of initial presentation whenever possible. Patients with severe fractures associated with gross wound contamination should be brought to the operating room more quickly, and as soon as clinically feasible, based on the patient's condition and resources available.
- Whenever possible, skin defects overlying open fractures should be closed at the time of initial debridement.
- When a patient with an open fracture presents to the emergency department, a sterile dressing should be placed over the wound to minimize ongoing wound contamination. Patients with open fractures receive broad-spectrum intravenous antibiotics within one hour of presentation.
- Open fractures with a clean or moderately contaminated wound less than 10 cm in length without extensive soft-tissue damage, flaps, or avulsions (Gustilo type I and II), a first generation cephalosporin (cefazolin) is recommended.
- Open fractures associated with wounds greater than 10 cm in length, significant contamination, extensive soft tissue damage, or significantly comminuted

fractures (Gustilo type III), a first generation cephalosporin and another antimicrobial with gram-negative coverage (for example, gentamicin).

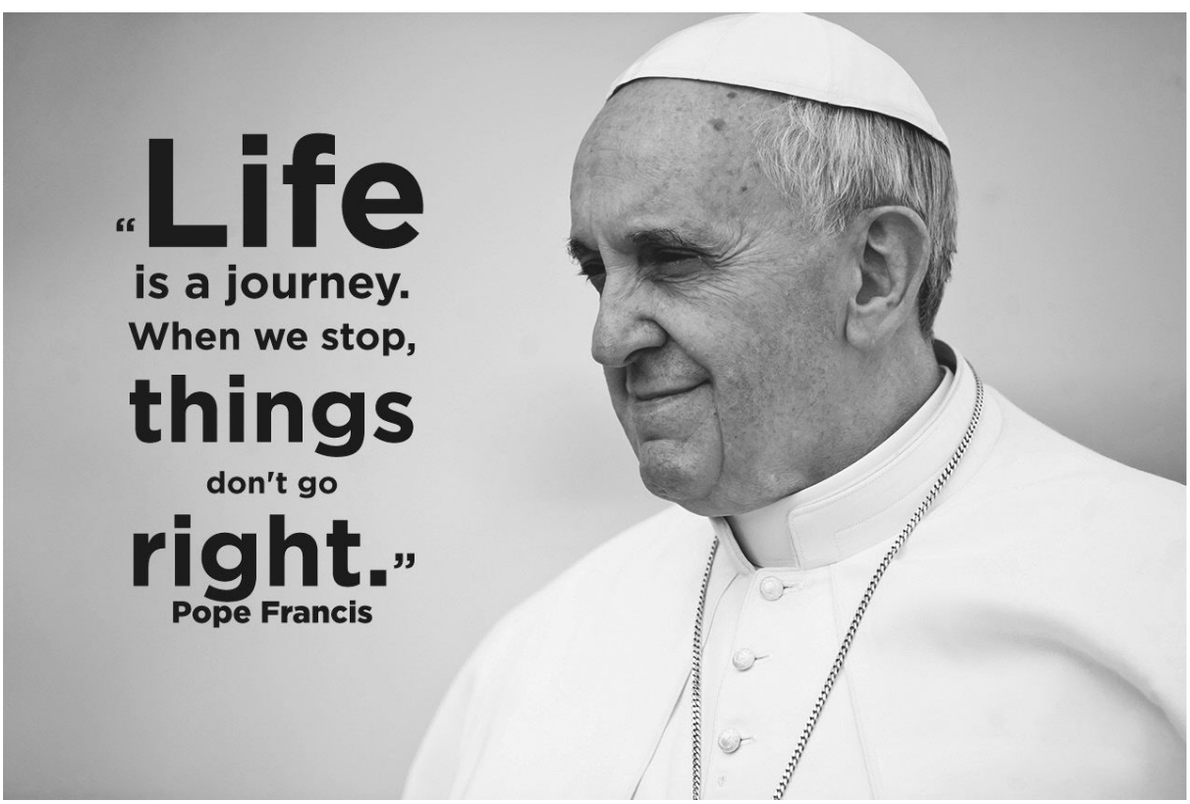
- A minimum of 24 hours of antibiotics should be administered from the start of the surgical procedure. Generally, antimicrobials are discontinued 24 hours after the procedure.
- Continuation for up to 72 hours may be appropriate for highly contaminated wounds. Antibiotics should not be administered beyond 72 hours unless a second operative intervention occurs within that time period.
- Historically, dogma has led orthopedists to treat open fractures with surgical irrigation and debridement within six hours of the injury or risk increased rates of infection.
- This practice has come to be known as the "six hour rule" in orthopedic surgery.

***Compartment Syndrome:***

- Compartment syndrome can result in irreversible tissue damage within six hours of impaired perfusion
- The most reliable early clinical findings of compartment syndrome are:
- Pain out of proportion
- Pain with passive stretch
- Paresthesia
- When a compartment syndrome is suspected, early fasciotomies should be performed using long, generous skin and fascial incisions to release all the compartments of the involved limb, and those incisions should be left open at the conclusion of the procedure.
- Compartment syndrome results in tissue ischemia that worsens with passing time and/or increasing intra compartmental pressure.
- It is also important to consider that damaged tissue is more vulnerable to increases in intra compartmental pressure

***Stages in fracture management:***

- Initial assessment & first aid
- X-ray assessment
- Fracture reduction
- Stabilization - Cast immobilization
  Internal fixation
  External fixation
- Rehabilitation



# MANAGEMENT OF SEPSIS

*– Dr. Lipeeka Parulekar, MD (Gen. Med)*

Sepsis, severe sepsis and septic shock are terms used to describe the body's systemic response to infection.

Severe sepsis is one of the most important causes of morbidity, increased length of hospitalization as well as death at healthcare setups. An infection that is getting worse and is not treated can lead to sepsis. Health care providers should take opportunities to prevent, identify and rapidly treat patients with sepsis. The mortality rate from sepsis is as high as between 15% and 30%.

The consensus committee of American experts developed a set of definitions in 1992.They proposed that even early systemic responses to infection, such as tachycardia, leukocytosis and fever are inflammatory and maybe used to define a systemic inflammatory response syndrome (SIRS). This definition has been arrived by applying a clinical and laboratory findings to a likely framework of pathogenesis.

Therefore SIRS is an abnormal generalized inflammatory reaction in organs remote from the initial insult.(1) When it occurs in patients with proven or suspected infection,SIRS is called sepsis. If sepsis is associated with hypotension or dysfunction of organs distant to the site of infection, it is known as Severe Sepsis. When sepsis is associated with hypotension and lactic acidosis or organ hypo perfusion and cannot be reversed by the administration of intravenous fluids it is Septic Shock.

Sepsis is a clinical syndrome caused by the body's immune and coagulation systems being switched on by the presence of an infection (bacteria, viruses or fungi).

**DEFINITIONS**

| **Term** | **Definition** | **Comment** |
|---|---|---|
| Infection | Presence of microorganism in a normally sterile site | |
| Bacteremia | Cultivable bacteria in the bloodstream | Maybe transient; inconsistent correlation with severe sepsis |
| Systemic inflammatory response syndrome | Temp > 38C/ < 36C<br>Heart rate > 96/m<br>RR > 20/min PaCo2 < 32mmHg<br>WBC > 12,000/ < 4000 cells/mm3 > 10% band form | |
| Sepsis | The systemic response to infection. SIRS is called sepsis if proven or clinically suspected infection. | With exception of leukopenia and hypothermia, these changes are among the body's normal systemic responses to infection. |
| Severe Sepsis | Sepsis associated with organ dysfunction, distant from the site of infection, hypoperfusion and hypotension | Associated with lactic acidosis, oliguria, altered mental status and acute lung injury. Hypotension should be reversible by the administration of fluids |
| Septic Shock | Sepsis with hypotension that despite fluid resuscitation requires pressor therapy | Septic Shock lasting > 1 hour and does not respond to pressor administration is referred to as Refractory septic shock |

PATHOGENESIS

The pathogenetic mechanism and physiologic changes associated with sepsis are exceedingly complex, but our understanding is evolving rapidly. The major pathophysiologic changes in patients with sepsis appears to be a disorder of tissue metabolism in which altered microcirculation and diffuse endothelial injury are the important factors .In addition there is an associated neuroendocrine derangement as tissue microcirculation is regulated via peripheral nerves and circulating hormones.

When bacterial pathogens invade previously healthy tissue, they initiate an extravascular tissue infection that activates local inflammation and may enhance systemic anti-inflammatory responses.The inability of local responses to kill the bacteria, triggers bacteremia and mediators of sepsis and septic shock.

On the other hand, microbes can invade healthy people and cause bacteremia without eliciting extravascular inflammation and therefore escape local innate immune defenses.If circulating antibody or complement are unable to contain them,these microbes can infect vascular endothelial cells or circulating blood cells and release endotoxins that stimulate inflammation within the blood and various organs.The circulating microbes provoke both shock and profound coagulopathy that can result in hemorrhage or arterial thrombosis,or both.Examples include N.meningitis and Rickettsia rickettsii.Therefore the absence of an early proinflammatory host defense is an important key to their pathogenesis.

These pathophysiologic changes play a central role in the management of sepsis. The early management of patients with severe sepsis and septic shock centers on the administration of antibiotics, IV fluids, and vasoactive agents, followed by source control. However, the specific approach to the resuscitation of patients with septic shock remains controversial.

***Clinical Features***

1) Fever, hypothermia, tachycardia, tachypnea.
2) *Acute Lung Injury:* Hyper-ventilation with respiratory alkalosiscan be an early manifestation of sepsis. A combination of arterial hypoxemia (PaO2/FiO2 < 300) and bilateral pulmonary infiltrates on the chest radiograph in the absence of pneumonia or heart failure is indicative of Acute Lung Injury. When hypoxemia is severe (PaO2/FiO2 < 200), it is termed Acute Respiratory Distress Syndrome.
3) *Renal Dysfunction:* Severe sepsis is often accompanied by azotemia and oliguria. Hypotension can be followed by oliguria and may resolve with fluid resuscitation.
4) *Hepatic dysfunction:* Sepsis may cause cholestatic jaundice characterized by elevations in conjugated and unconjugated bilirubin.There may be an elevation of the bilirubin, alkaline phosphatase, bilirubin and amino transferase levels.
5) Mild cognitive derangement with confusion and altered cerebral functions especially in the elderly may be early manifestations of severe sepsis.Focal seizures and cranial nerve palsies and signs of encephalopathy are associated with poor prognosis.
6) The systolic arterial blood pressure < 90 mmHg or a mean arterial BP < 60 mmHg or a fall of > 40 mmHg below the baseline is significant.
7) *Cutaneous Manifestations:* Wide range of skin lesions can occur with severe sepsis. Hematogenous seeding of the skin or underlying soft tissue which could be petechiae, pustules, ecthyma gangrenosum (necrotic blister), cellulitis, diffuse eruptions caused by blood borne toxins and hemorrhagic or necrotic eruptions.
8) Evidence of poor tissue perfusion determined by lactic acidosis, sudden fall in the urine output and dysfunction of one or more organs
9) Any onset of sudden tachypnea, presence of icterus, changes in the mental state due to hypoper fusion and metabolic changes or presence of purpura or bleeding point to early organ dysfunction and may precede hypotension.

***Laboratory Features***

Lecopenia or Leukocytosis

Coagulation may show Elevated Prothrombin Time, decreased platelet count, decreased fibrinogen increased Fibrinogen degradation products and increased prothrombin index which may be evidence of early disseminated intravascular coagulopathy. Thrombocytopenia may often occur without frank DIC

Sudden rise of serum glucose levels should also indicate impending sepsis, whereas hypoglycemia, raised serum bilirubin, rising serum amino transferases and alkaline phosphatases indicates hepatic dysfunction due to sepsis.

***Principles of Management***

1) Identify the focus of infection.

2) Start appropriate antibiotic after collection of blood for cultures.

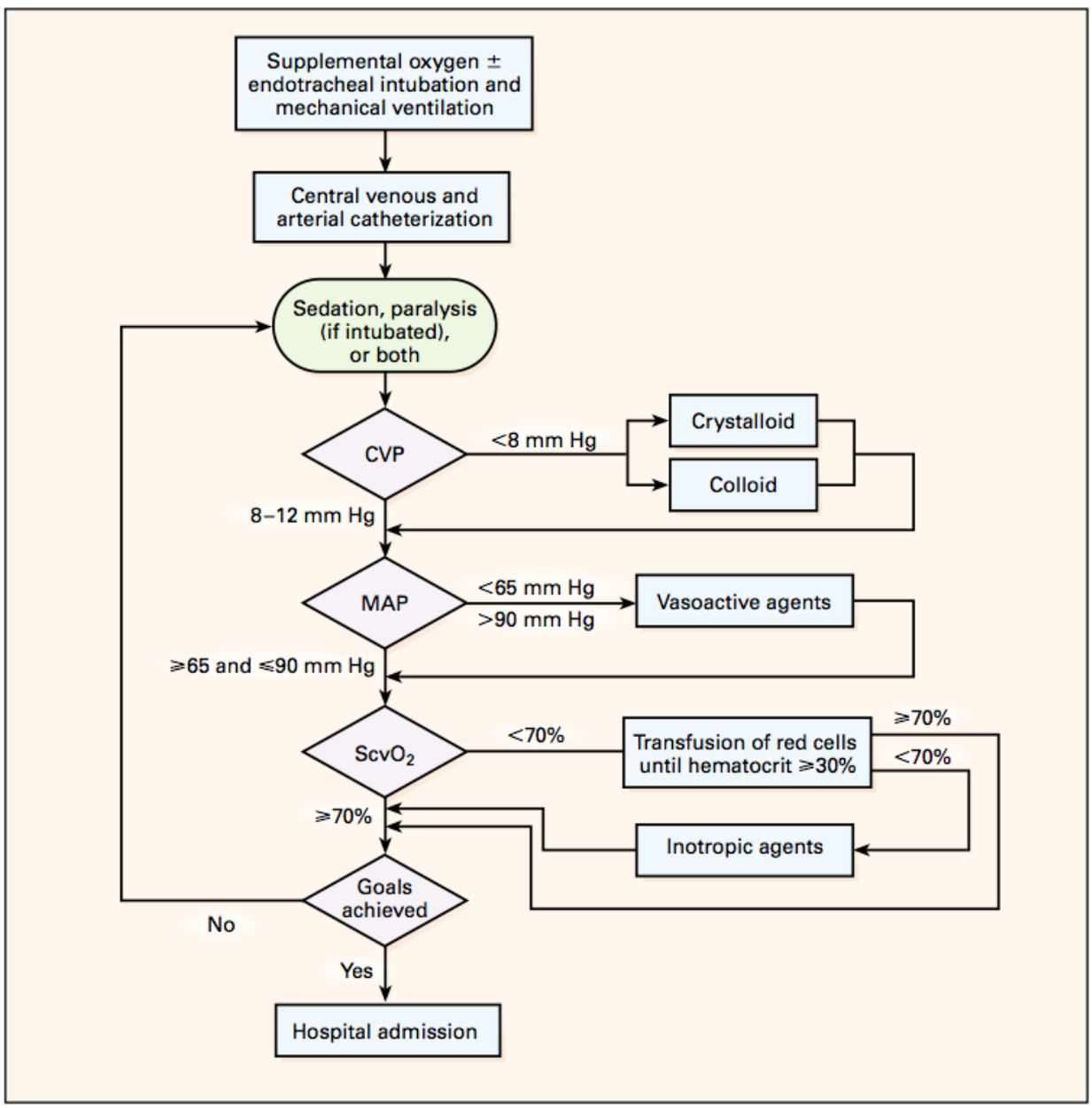
Invasive treatment of infection, eg. drainage of pus.

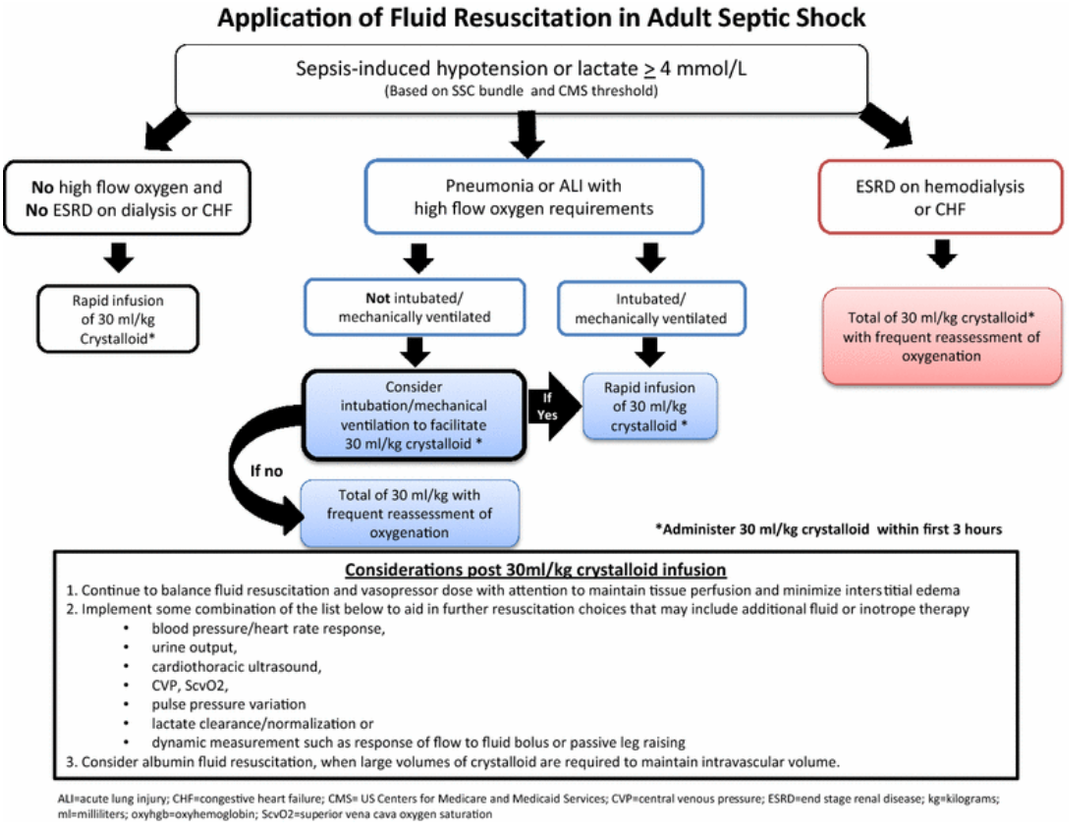
3) Restore altered hemodynamics
   a) Volume infusion. PCWP >15 mmHg
   b) Inotropic support eg. Noradrenaline, Dopamine, dobutamine
   c) Non Invasive or Mechanical Ventilation
4) Provide nutritional support either by enteral or parenteral route
5) Metabolic support eg: correction of acidosis, blood sugar levels, electrolytes
6) Prophylaxis for DVT and stress ulcers need to be given.

**2012 Recommendation for Initial Resuscitation**

During the first 6 hours of resuscitation, the goals of initial resuscitation should include all of the following as a part of a treatment protocol:

a) CVP 8–12 mm Hg
b) MAP ≥ 65 mm Hg
c) Urine output ≥ 0.5 mL/kg/hr
d) Scvo2 ≥ 70%






Fluid resuscitation is the mainstay of hemodynamic support in patients with septic shock. Crystalloid is generally preferred over colloid. A reasonable aim is maintenance of mean arterial pressure of 60 mmHg. In most patients 4-6 litres of fluid is required.

A Central venous catheter maybe useful for monitoring volume status,cardiac output, mixed venous oxygen saturation (Svo2). Svo2 can be used assess the adequacy of oxygen delivery. Values <70% suggest decreased systemic perfusion. Recent studies suggest that patients who received initial fluid, blood transfusion and pressor therapy as well as aggressively titrated to maintain a Svo2 >70% had significantly better survival than patients who received conventional resuscitation in an ICU.

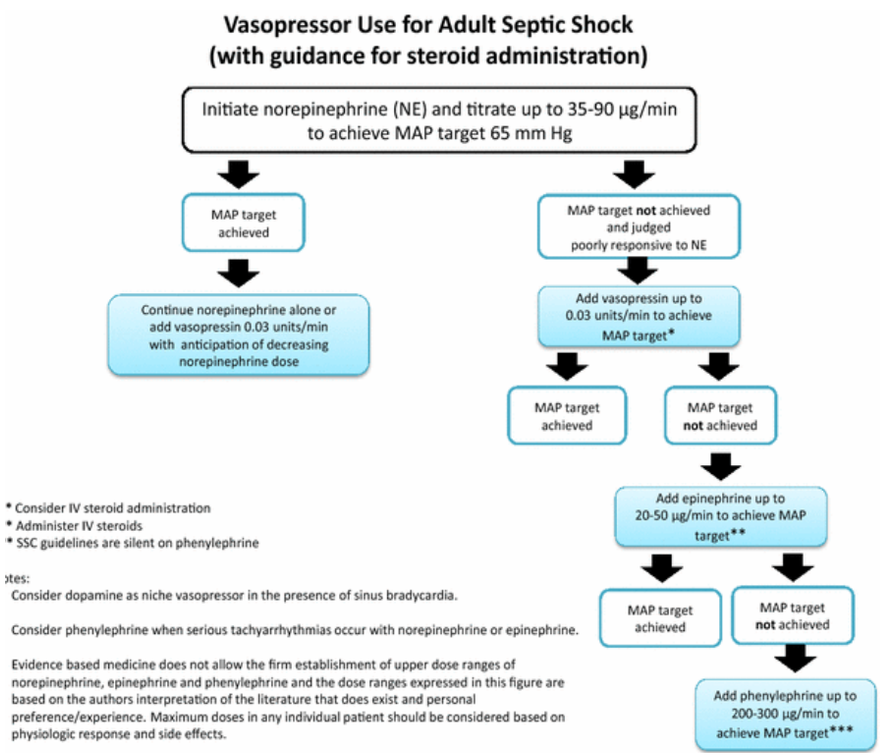



***Fig. 2:*** This figure explores the nuancing of initial administration of 30 ml/kg crystalloid for sepsis induced hypoperfusion based on patient characteristics. It also draws attention to reassessment tools following the initial fluid dose as an influence on further fluid administration or inotropic therapy.

Dopamine was considered as the drug of choice for restoring normotension in patients with septic shock. When used at low doses that is (<5mic/kg/min), it's interaction with dopaminergic receptors was thought to produce renal and splanchnic vasodilation. However, recent trials have found that low dose dopamine infusion did not have any advantage for improved survival or prevention of renal failure in critically ill patients.(4)

***Other Therapies***

Recent studies suggest a potential benefit of a trial of hydrocortisone (50-100mg) every 6 to 8 hourly intravenously in pressor dependent patients with septic shock. If there is a positive response (ability to maintain MAP of >65 mmHg without pressors) within the first 24 hours of the first dose of hydrocortisone, then it should be continued for 7 days.(5)

Avoiding hyperglycemia may prevent infection and sepsis in critically ill patients.

Nutritional and other supportive measures.

Enteral nutrition is supported by numerous studies. Prophylaxis for GI bleeding,deep vein thrombosis and decubitus ulcers should be a part of care in critically ill patients.

Prevention of Secondary Infections.

The risk of nosocomial pneumonia is highest in patients who have received mechanical ventilation for longer than one week. A semirecumbent position reduces the risk the risk for nosocomial pneumonia, especially in patients who receive enteral nutrition.

It is also important to maintain an adequate intracuff pressure to prevent aspiration pneumonia.

Regular handwashing as well as barrier precautions while examining patients colonized with resistant bacteria reduces the risk of acquiring as well as transmitting Hospital Acquired Infections.

***Prognosis***

Severe sepsis and septic shock are associated with high mortality.The outcome is significantly influenced by the patients underlying disease. Prognostic scores based on bedside evaluations such as APACHE II and the Sequential Organ Assessments (SOFA) are more appropriate in the usual ICU settings and should be made a part of the critical care setup protocols.(6)

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# SCIENCE BEHIND HAPPINESS

*– Sr. Dr. Liza Tom*
*Bharat Mata Hospital, Muri, Ranchi Dt, Jharkhand*

Do you know that if you complain about things frequently, you would actually be digging yourself an early grave? There is actual science to back up this, what is even more astonishing is the fact that you can actually shape your own reality with your thoughts. So, read on to find out about the science of happiness.

- **SYNAPSES THAT FIRE TOGETHER WIRE TOGETHER**

  Synapses are structures that are present throughout brain. They act as 'message relays' for thoughts, speech and movements. When a thought pops into our head, a synapse fires a chemical across a tiny gap to another synapse. In other words an electrical signal is built across a bridge in the brain. Every time this occurs, synapses grow closer together, meaning, distance between is reduced allowing them to pass on electrical signals quickly. The brain basically rewires its own circuits which means thoughts reshape our brain literally.

- **SHORT PATH WINS THE RACE**

  The synapses that bind most strongly in the brain actually form your default personality – from your intelligence, to your skills and aptitude at different tasks indifferent situations. Furthermore they determine what your most easily accessible thoughts are, which has a great bearing in your conversational skills. The more a thought is repeated in your head, the closer together you bring the synapses that pass it on. The thought that wins the race inside the brain is the one that has the least distance to travel between synapses.

- **ACCEPTANCE VS. REGRET, DRIFTS VS. DESIRE, LOVE VS. FEAR**

  Whenever the opportunity arises for us to think a reactive thought, we are generally faced with the following choices – Love vs. fear, Acceptance vs. Regret, Drift vs. Desire or Optimism vs. Pessimism. You can choose to love everything in life while relinquishing your need for control. If you approach everything in life from a perspective of love and do not try to control what you cannot then you have nothing to fear.

  According to Buddhist philosophy the universe is a place of suffering and chaos, any attempt to exert control over what goes on within it are nothing but futile. Practising acceptance of the natural flow of life and giving thanks for each experience will result in synapses that represent love having much higher chance of being triggered than those of negative things like grief, regret, pessimism, fear, etc.

- **MIRROR NEURONS**

  When we observe someone experiencing a specific emotion, our brain tests out the emotion we perceive in order to try and understand what the other person is going through. This is the basis of empathy, which though contains a whole world of good in it can also have negative effects. Think of a mob mentality – when collective anger influences others to act cruelly against a common enemy, you may reluctantly join them even if you are not convinced of acting negatively.

  Spend time with people who can elevate you – who are happy and full of love rather than with people who make you live in fear and pessimism.

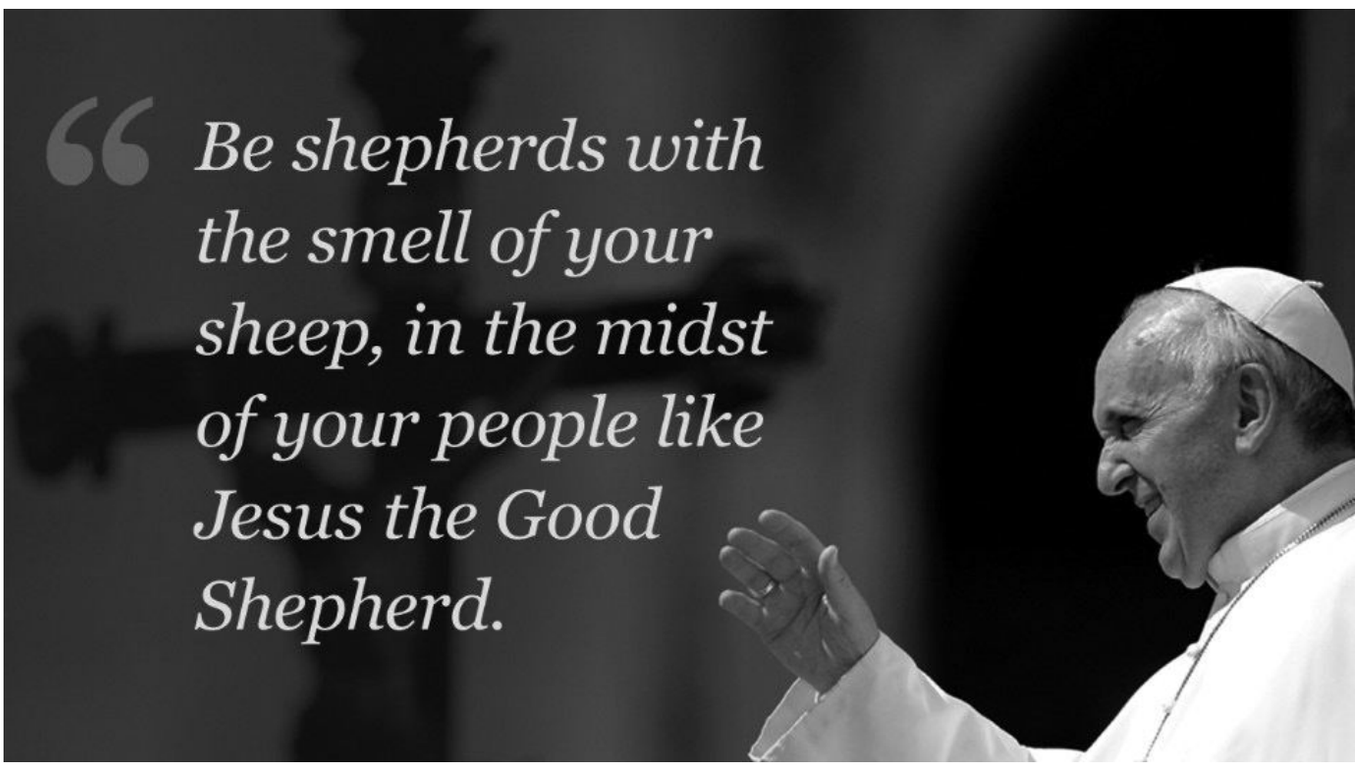
- **STRESS IS A KILLER**

  Negativity, regret, attachment to desires and pointless complaining about things that really don't matter will ultimately kill you. All these things would lead to stress. When your brain fires angry synapses, the immune system gets weakened putting you at a risk of a whole range of health problems. The human stress hormone is called cortisol. Elevated cortisol cause decline in learning and memory, decrease in immune function and bone density, increase in weight gain, rise in B.P., increase in cholesterol and higher susceptibility to heart diseases.

- **THE BOTTOM LINE**

  The Universe is a chaotic place and you happen to

live in it. Each and every moment you go through in life has the potential to shadow other moments, ranging from 'soul crushing grief' all the way to 'spirit soaring bliss'. The choice of where the majority of your future moments lie in that scale is really upto you. It is obvious that life will always present you with hardships such the passing away of a loved one, failure in academic/ professional life and so on but you don't have to live in regret always when you face them. When faced with tough situations, be accepting of it, say 'yes this was horrible' but what have I learned from it? How it is going to make me a better person? How can I take strength from this so that I can be closer to happiness the next moment? Be mindful of the lessons you learn from failures. Each day can be better than the one before it. Try something new every day. Live in love rather than fear and strive to make your life better. The more you do these things, the more you will see how beautiful life really is and ultimately the happier you will be.



# HERE COMES JESUS

*– Dr. Sr.Annie. I.K.*

**"When I came, you only took care of me" …**It was one of the cold winter day in December 2005. I was on duty that day as a PG registrar in the Community Health Department of Christian Medical College Vellore. It was almost 5.30 pm,when I noticed a 'familiar face' sitting near the casualty. His long hair falling below the shoulder, and the long beard reaching to the chest wall were wet, burnedand sticky…. He could hardly talk or walk. Entire body was covered with sores and mud. But his eyes spoke volumes…My first gaze at this 'familiar face' sent shock waves within. Is it not He, Jesus, scourged, wounded?

Soon, the leprosy health worker for Jawadu hills, informed me that Mr.Chinnapayyan (name changed), hailing from Jawadu hills, was brought by his brother, to be left alone in the hospital. Jawadu hills is about 60-65 kms from our base hospital, Community Health and Development Hospital.

Mr. Chinnapayyan was a leprosy patient, though recovered from leprosy, was stigmatised for life.He suffered burns a week ago, from the fire which was made to warm himself, using the dry leaves and the twigs,while he slept outdoors in the winter night. Due to sensory loss, he did not realize his body was getting burned from the spreading fire.No one would help him to come down the hills to reach the hospital. It took a week, to get help to come down the hills covering around 65km to reach the hospital…. The burns on his body were coated with mud and even small pebbles. Some areas were infected.

Soon I realized, its evening, no relatives for the patient, and he needs special care,a surgical debridement…How will I manage? Even to refer him with free care in the surgery department of Christian Medical College,requires a relative with him.Not knowing what to do, I approached my professor, who was also in charge of the Jawadu mission. He was also helpless and had no solution to my problem, but Iam sure, prompted by the Spirit, he told me, "Annie, if Jesus comes to you like this, what will you do, do that to this patient". It was a challenge….

I called upon Him… our help is in the name of the Lord. To my surprise, there was a visiting surgeon from US, who had come to our department for a short visit. This doctor who is specialised in Plastic Surgery was passing by our casualty. I lost no time, and he obliged me, and saw my patient. He said, "It is a bit risky to handle this patient in our rural health centre without a surgeon or an anaesthetist. However, he gave me the confidence and guidance, how I could handle him in this situation. And thus "Jesus in disguise" was in my hands…

We quickly formed a team of care givers. There were sweeper, a hospital attendant, a driver, nurses, my junior assistant the medical intern and me. While both of us – the intern and I, quickly settled all the other patients in the casualty, general ward and in the labour room, the other members in the team helped 'Jesus in disguise' in bathing, cleaning and feeding him. Then we started our work on this patient. We did debridement, part by part through the entire body. He co-operated with us almost 3 hours of clearing, 9pm to 12 midnight. We covered and tucked him well with bed sheets while we wheeled him on the trolley, into the general ward. Other patients should not identify him as a 'leprosy' patient. This worked till morning and then we had to move him to a leprosy rehabilitation ward, which was away from the hospital. Daily dressing was continued for about 2 weeks.

We know leprosy patients go home with non-healing ulcers, however, Chinnapaiyyan was completely healed in 2 weeks time.

Information was given to his home, for someone to come and pick him back home. However, it was a long wait for him. Almost a month later, he saw me passing by, while he was still waiting for his brother to take him back home. He came to me like a child and said, "When I came, you only took care of me"… I had to apologise, for I could not recognize him at the first moment, for he was a changed man. He had cut his hair, shaved himself and now he looked a human being…. His words keep ringing in my ears even today and has helped me specially 'to see Jesus in disguise' in the most vulnerable patients and to 'Break the Bread' at the bedside of these patients.

# AN EXPERIENCE OF 'REACHING THE UNREACHED'

*– Sr. Dr. Jyothsna, UMI*
MBBS, MD Pediatrics, Goalpara, Assam

I, Sr. Dr. Jyotsna work as pediatrician in a remote village Balukdubi in Goalpara district, Assam.

We started our mission in this part of the North East in July 2006. For patients Nirmala Hospital signifies – Hope, Healing and Happiness. We ensure care, compassion and provide high quality, cost effective medical services. It is with this personalised care and unique blend of medicine that we constantly strive to safeguard the health and well-being of the diverse communities that we serve.

The socio-economic condition of the people is very poor. They are uneducated and backward socially and economically. We have a mixed group of different tribes. Floods, Erosion and Ethnic violence are common threats in the society. 90% of the people live under poverty line. Their houses are made of bamboos with tin roofs and their main food is rice. People earn their living by daily wages, selling fire wood, rearing goats and pigs and cultivating paddy in the plains. During natural calamities like floods, many take shelter in relief camps and become victims of different epidemic out breaks

This area is endemic for Malaria and Typhoid. Most of the people suffer from Falciparum Malaria (The Cerebral type) and some of them go into a comatose stage and even die due to delay in early diagnosis and treatment. Other medical problems like various skin infections, Gastro Enteritis (GE) Respiratory tract infection (RTI), Hepatitis, Tuberculosis, Worm infestation, Anemia and Malnutrition are very common. There is no health seeking behaviour in the people. There is a lot of superstition and the use of traditional medicines is prevalent in remote areas. Self-medication and consultation at medical stores is a common practice in the village. Such practices create a situation where people wait till the patient becomes serious enough before reporting to the hospital. Due to improper treatment people get repeated attack of malaria and typhoid and become drug resistant. Consequently they become anemic and malnourished. The MDR(Multi Drug Resistance) therapy is very costly and the house hold income is one of the important determinants for health service utilization.

The people are economically very poor and illiterate. Better understanding of health seeking behavior of people especially when suffering from symptoms of malaria and Typhoid is important for effective management and control of the same. Early marriages and frequent abortions are common incidents and the maternal and infant mortality ratesare very high. Though medical facilities are available, due to lack of knowledge, motivation and poor transportation, many home deliveries take place and thus there is arise in maternal and infant mortality rate.

We conscientize the women and children through awareness programmes and provide lifesaving basic health care with an emphasis on maternal and child health.We conduct medical camps every month in various villages and a free "Well baby" clinic once a week. Many of the poor patients who cannot otherwise avail of medical facilities are benefitted much from it.Unprecedented flash floods caused havoc in the lower Assam district of Goalpara towards the end of September 2015. The catastrophe came with little warning leaving lakhs of people homeless, hundreds dead. Thousands of people were in relief camps. Many of the patients who came to us with the epidemic outbreak were treated free and given concessions.

Let us be agents of God's love and healing!

# UJJAIN KUMBH MELA, 2016

*(An Experience of Inter-religious Dialogue at the Grass-root Level)*

*– Dr. Sr. Alphy, OSF*
*MBBS, DNB ( Family Medicine)*

I am pleased to share with you my experience of Ujjain KumbhMela, 2016. Ujjain KumbhMela is a very huge Hindu religious festival held every 12 years in Ujjain, Madhya Pradesh. Ujjain KumbhMela 2016 was held from April 22 to May 21, 2016. During this month-long festival over 5 crore (50 million) people flocked to Ujjain to take a holy dip in the sacred river Kshipra. KumbhMela, the world's largest religious gathering, is held every third year at one of the four places by rotation: Haridwar, Allahabad, Nasik and Ujjain. Thus the KumbhMela is held at each of these four places every twelfth year. The pilgrims believe that the ritual dip in the sacred river during the KumbhMela will cleanse their sins and help them attain salvation.

There is a beautiful myth associated with KumbhMela. Gods (Devas) and demons (Asuras) churned the Ocean of Milk (Palazhi) to obtain the nectar of immortality (Amrita). When the pot (Kumbha) containing the nectar emerged, one of the gods ran away with it, as gods did not want to share it with the demons. As the God ran, a few drops of nectar fell at four places, including Ujjain. It took 12 years to complete the journey to heaven!

As the KumbhMela was a massive gathering of people, the civic administration counted on volunteer organizations for various services. The Diocese of Ujjain set up a field dispensary to help pilgrims with their medical needs. Some 25 Sisters from five religious congregations ran the dispensary, along with 120 nurses and assistants. Referral cases were taken care of at the diocesan Pushpa Hospital in Ujjain.

At the request of Bishop Sebastian Vadakel, bishop of Ujjain, I happily volunteered my service for two weeks. In spite of the scorching heat and exhaustion from over-work, it was a wonderful experience. I have experienced inter-religious dialogue at grass-roots level while caring for an average of 250 patients a day at the make shift dispensary during the KumbhMela festival. We have catered to Hindus from all over India, including villagers, ascetics, children and the elderly.

People were thankful to the Sisters for the assistance we gave them. Also, I could experience and appreciate inter-congregational collaboration as I worked with Sisters from different congregations. The Bishop and priests of the Diocese of Ujjain were very appreciative of our service. Though unofficially, I was proud to represent SDFI in rendering my medical ministry to the Ujjain KumbhMela pilgrims.

*Sr. Alphy examines a patient at Ujjain KumbhMela*

# PARTNERS IN THE HEALING MINISTRY

*– Sr. Dr. Sajitha John*

"The Mission of the Good Samaritan is Unending"
The one with a mission of LOVE, chosen from the world, is for the world but not of the world. The Healing Ministry makes us feel the presence of the loving and merciful God who has loved us by sending His only Son from heaven for our salvation. Thus, this healing apostolate, when carried out with all its tenderness and humanness, becomes an effective means to reach this wonderful message of God's love to the ends of the earth.
The medicine of LOVE is truly effective to heal the heart, body and soul broken by various causes. Thus it becomes important that everyone involved or called to be an agent of this ministry be:

A physician to the patient with a smile on his/her face
A good Samaritan to the wounded
An element of love to those deprived of love
A ray of hope to those without hope
An effective medicine to the sick
A wonderful remedy to those in disease
A soothing touch to the suffering
A spring of water to the thirsty
A source of food to the hungry
An amicable solution to those with problems
A shower of rain to those in a desert
A companion to the lonely
A friend to those in need of friendship
An assuring strength to the weary
A shelter to the homeless
A piece of cloth to the naked
A person of comfort to the burdened
An educator to the illiterate
A solace to those mourning.

A light from a light house to the lost ship
A crumb of bread to the starving belly
A blanket to shivering humanity
A counsellor to those in confusion
A shadow of forgiveness to the sinner
A warmth to numbed hands
and thus be JESUS' partner.

And so we see a Missionary's Medicine is a wonderful tool to reach the LOVE of GOD to the whole of humanity, by doing ordinary things in caring and loving ways.
And one must remain always: With an open mind and heart to be the effective instrument of the Divine Physician and be animated by His love, to be poured out to all those who approach him/ her for His healing touch, the beloved Son of the heavenly Father and the abode of the Holy Spirit.

Thus we become another Christ among the people. In a society, where there is "a mad pursuit of instant gratification," missionary doctors are noted for their selfless service to the Lord and to the patients as well. We are ever called to be Good Samaritans in this wounded world of today.

# HYSTEROSCOPY

*– Dr. Kevin Quadros*
*MBBS – MD OBGY*

It is a technique in which a telescope is introduced into the cervical canal and uterine cavity for visualization of the endocervical canal &uterine cavity. Fibroptically transmitted light provides illumination. The Video camera attached to the scope allows monitoring on a T.V screen with facility for magnification.

***Equipments Used:***

**A Hysteroscopic set which includes:**

1) Telescope Flexible/Rigid, Angle of view 0 30 70.
2) Uterine Distention System
3) Cannula: Diagnostic, Operative, Resectoscope.
4) Ancillary instruments: Scissors, Forceps, Loops.
5) D & C Set.
6) Video camera & monitor.

*Indications are: Diagnostic:*

1. Abnormal uterine bleeding
2. Infertility
3. Lost IUCD
4. Recurrent abortion
5. Suspected Ca endometrium
6. Intra-uterine space occupying lesion
7. Congenital anomaly

*OPERATIVE:*

1. Polypectomy
2. Myomectomy
3. Adheosiolysis
4. Metroplasty
5. Tubal stenting
6. Endometrial Ablation

*Contraindications: Medical*

1. Patient unfit for operation
2. Bleeding disorder
3. Fulminant infection
4. Pregnancy

*Surgical:*

1. Uterine perforation
2. Acute genital infection
3. Confirmed carcinoma.

*Complications:*

1. Anaesthesia related complications.
2. Instrumentation complications eg. perforation, false passage, difficult dilatation.
3. Distention media complications eg. TURP Syndrome
4. Operative complications eg. Cautery burns, Haemorrhage and Sepsis.

*Procedures done:*
*Hysteroscopically are:*

1) METROPLASTY: Synonymous with uteroplasty or hysteroplasty. Is plastic surgery or Reconstructive surgery on the interior of the uterus with the use of the hysteroscope. Visualisation and manipulation of the interior of the uterus was indeed a milestone in the treatment of Infertility and Recurrent Pregnancy Loss (RPL).
2) Transcervical resection of endometrium: TCRE affords reasonable longterm effectiveness in the treatment of dysfunctional uterine bleeding.Can also be useful for management of benign intracavitary pathology like submucous myomas or polyps
3) Adhesiolysis (Ashermans syndrome)
4) Cervical biopsy
5) Dilatation and curettage
6) Endometrial and uterine biopsy
7) Polypectomy and myomectomy
8) Removal of embedded IUD
9) Cannulation of fallopian tubes

*Procedure:*

Hysteroscopy has been done in the hospital, surgical centers and the office. It is best done when the endometrium is relatively thin, that is after a menstruation. Diagnostic can easily be done in an office or clinic setting on suitably selected patients. Local anesthesia can be used. Simple operative hysteroscopy can also be done in an office or clinic setting. Analgesics are not always necessary. A paracervical block may be used using a Lidocaine injection in the upper part of the cervix. The patient is in a lithotomic position during the procedure. Hysteroscopic intervention can

also be done under general anesthesia (endotracheal or laryngeal mask) or Monitored Anesthesia Care (MAC). Prophylactic antibiotics are not necessary.

*Cervical dilation:*

The diameter of the hysteroscope is generally too large to conveniently pass through the cervix directly, thereby necessitating cervical dilation to be performed prior to insertion. Cervical dilation can be performed by temporarily stretching the cervix with a series of dilators of increasing diameter. Misoprostol prior to hysteroscopy for cervical dilation appears to facilitate an easier and uncomplicated procedure only in pre-menopausal women.

*Insertion and inspection:*

The hysteroscope with its sheath is inserted transvaginally guided into the uterine cavity, the cavity insufflated, and an inspection is performed.

*Insufflation media*

The uterine cavity is a potential cavity and needs to be distended to allow for inspection. Thus during hysteroscopy either fluids or CO2 gas is introduced to expand the cavity. The choice is dependent on the procedure, the patient's condition, and the physician's preference. Fluids can be used for both diagnostic and operative procedures. However, CO2 gas does not allow the clearing of blood and endometrial debris during the procedure, which could make the imaging visualization difficult. Gas embolism may also arise as a complication. Since the success of the procedure is totally depending on the quality of the high-resolution video images in front of surgeon's eyes, CO2 gas is not commonly used as the distension medium.

Electrolytic solutions include normal saline and lactated Ringer's solution. Current recommendation is to use the electrolytic fluids in diagnostic cases, and in operative cases in which mechanical, laser, or bipolar energy is used. Since they conduct electricity, these fluids should not be used with monopolar electrosurgical devices. Non-electrolytic fluids eliminate problems with electrical conductivity, but can increase the risk of hyponatremia. These solutions include glucose, glycine, dextran (Hyskon), mannitol, sorbitol and a mannitol/sorbital mixture (Purisol). Water was once used routinely, however, problems with water intoxication and hemolysis discontinued its use by 1990. Each of these distention fluids is associated with unique physiological changes that should be considered when selecting a distention fluid. Glucose is contraindicated in patients with glucose intolerance. Sorbitol metabolizes to fructose in the liver and is contraindicated if a patient has fructose mal-absorption.

High-viscous Dextran also has potential complications which can be physiological and mechanical. It may crystallize on instruments and obstruct the valves and channels. Coagulation abnormalities and adult respiratory distress syndrome (ARDS) have been reported. Glycine metabolizes into ammonia and can cross the blood brain barrier, causing agitation, vomiting and coma. Mannitol 5% should be used instead of glycine or sorbitol when using monopolar electrosurgical devices. Mannitol 5% has a diuretic effect and can also cause hypotension and circulatory collapse. The mannitol/sorbitol mixture (Purisol) should be avoided in patients with fructose malabsorption.

When fluids are used to distend the cavity, care should be taken to record its use (inflow and outflow) to prevent fluid overload and intoxication of the patient.

*Interventional procedures*

If abnormalities are found, an operative hysteroscope with a channel to allow specialized instruments to enter the cavity is used to perform the surgery. Typical procedures include endometrial ablation, submucosal fibroid resection, and endometrial polypectomy. Hysteroscopy has also been used to apply the Nd:YAG Laser treatment to the inside of the uterus. Methods of tissue removal now include electrocautery bipolar loop resection, and morcellation.

# EMERGING ETHICAL ISSUES IN HEALTH CARE

*– Rev. Dr. Stephen Fernandez*

***Introduction***

The newspapers is daily flooded with many issues that challenge human dignity in the field of bio-medical ethics from womb to tomb. I will expose two such issues, one on cloning and the second one on surrogacy.

Research on human cloning poses serious challenges to those who defend human life right from the moment of fertilization. The scientific and medical communities all over the world are eager to harness the powers of the stem cells of very young human embryos without considering the ethical consequences of these acts. Technological reproduction, and specially cloning would tempt many to view a child as a human achievement rather than as a gift of God. We need to educate ourselves on the new technology in order to dialogue intelligently and confidently with these researchers and at the same time question the morality of these new procedures and practices in the light of the teaching of the Church.

The Church is not opposed to technological progress. At the same time the Church seeks to guide what the technological development has to serve, viz. the human person. Pope John XXIII had declared this in his Encyclical Letter Mater et Magistra. The Second Vatican Council also stated that technological progress is not to be seen as the conquest of the human person, but as the sign of the greatness of God and the fulfillment of his project and plans. John Paul II, in his address to the Ninth International Conference organized by the "Pontifical Council for Pastoral Assistance to the Health Care Workers", has not only expressed confidence in the mission of science, but also of the necessity of its union with faith. He affirmed:

"The Church for her part invites us to look confidently at the most holy mission of science and encourage every form of research which is respectful to man's dignity, for she sees in it what we could term the inexhaustible capacities of intelligence, the reflection and imprint of the intelligence of God. At a time when human life is experiencing such serious dramatic aggressions, the Church, by virtue of her pastoral mission, feels the duty to support scientific research in the awareness that faith and science interface in that wisdom wherein God's design fully upholds".

**A. ETHICAL ISSUES CONNECTED WITH HUMAN CLONING:**

Cloning is a broad term that refers to the production of a precise genetic copy of any molecule (including the DNA molecule), cell, tissue, plant or animal. However, in popular terminology, cloning refers to the production of an identical human being through a process technically called 'somatic cell nuclear transfer'. It is the taking of the donated unfertilized egg (or sex cell) of a female of the species from any fertility clinic and removing its nucleus (i.e., the enucleation of the DNA or genetic material). Then, in a petri dish, the dormant DNA nucleus of a somatic cell (a body cell and not a sex cell) from the same species or from another of the species (male or female) is injected in the female sex cell. Then, by electric shock, the dormant DNA is (parthenogenetically) reactivated, and so begins to multiply like a fertilized egg, and then divide to form early embryos. No male participation is necessary, and the reproduction process is or can be parthenogenic. The result will be an exact genetic and biological replica of the one who gave the DNA. Thus, cloning is a form of artificial reproduction which is achieved without the contribution of the two gametes.

***1) Human Embryos that are in Continuous Cyropreservation***

There are some researchers who argue that what is going to die through neglect ought just as well die serving some higher or noble cause, viz. research therapy. They maintain that the human embryo is a mere collection of cells. Others affirm the theory of delayed hominization which states that the soul is not infused until the primitive streak appears (at approximately 14 days) or when some other criterion of individuation has been met. All of them fail to understand that a human embryo is not a part of a human being, but the whole human being. The exact moment at which God infuses the soul into the body does not matter. The fact that the embryo is a whole confers upon it that unique and intrinsic dignity that forbids anyone to use it for mere

utilitarian purposes. Donum Vitae states: "The freezing of embryos, even when carried out in order to preserve the life of an embryo - cyropreservation - constitutes an offence against the respect due to human beings by exposing them to grave risks of death or harm to their physical integrity, and depriving them at least temporarily of maternal shelter and gestation, thus placing them in a situation in which further offences and manipulation are possible".

***2) Infertile Couples craving to have a Child:***

When couples experience infertility, the quest to conceive a child becomes an all-consuming commitment, overshadowing every other aspect of a couple's life. They seek some forms of advanced reproductive technologies which justify the destruction of fertilized eggs and depersonalizes the humanity of these beings existing in a petri dish. Natural law forbids us to place ourselves or another human person in a situation which endangers life and health. After egg and sperm meet, a human soul will always be infused by God, which makes this one-celled organism a human being. In the petri dish there lives several human embryos of which only two or three will be implanted. Those who are left behind face either destruction (which is willful abortion) or cyropreservation. Just as the Church condemns induced abortion, she also forbids acts against the life of these human beings. It is a duty to condemn the particular gravity of the voluntary destruction of human embryos obtained in vitro for the sole purpose of research, either by means of artificial insemination or by twin fission.

***3) Theological Debate over Embryo Adoption:***

Today, there is a theological debate over the adoption of frozen embryos. The Catholic Church does have its clear position on the issues of the methods of reproductive technologies and has also condemned the ongoing practice of creating embryos. What is to be done to the thousands of embryos that are already frozen due to IVF procedures? With regard to cyropreservation of embryos, Donum Vitae states: "…even when carried out in order to preserve the life of the embryo…[it] constitutes an offense against the respect due to human beings…".

***4) Problem of Identity Crisis for the Cloned Replica***

In cloning, fertilization of the two gametes is replaced by the fusion of a somatic cell with a female enucleated oocyte. The most disturbing result is an individual who has a body structure very similar to that of the DNA donor. However, this does not necessarily imply that a perfectly identical person is created. The spiritual soul, which is the essential constituent of everyone who belongs to the human species and is created directly by God, cannot be generated by parents or produced by artificial fertilization or cloning. Further, psychological development, culture and environment always lead to different personalities. The popular image that cloning portrays, namely that the individual is an exact replica of the person fails to consider the person's ontological and psychological reality.

The person being cloned enters the world by virtue of being a biological copy of another being. His psychic identity is jeopardized by the presence of the other. And since he resembles someone who was 'worthwhile' cloning, he will be the object of fateful expectations which will constitute a true and proper attack on his personal subjectivity. And since both have the same DNA, fingerprinting for identification would be made difficult.

***5) Natural Vs. Artificial Reproduction:***

The fundamental position of Donum Vitae with regard to procreation is that every pregnancy must occur within heterosexual marriage and be the result of the conjugal act between the husband and wife. So, the basic difference between natural and artificial reproduction is that in the latter, the procreative act is severed from its natural relationship to the sexual union within a marriage. Artificial reproduction establishes the dominion of technology over the origin and destiny of the human person, and gives the life and identity of the embryo into the power of doctors and biologists. As a result of this parents and children lose their dignity. The instruction is absolutely clear and unambiguous in its judgement on artificial reproductive technologies. Thus, it prohibits artificial insemination, in vitro fertilization, embryo transfer, surrogate motherhood, cryptoperservation of embryos, and most research on embryos and tissues. With regard to cloning, Donum Vitae states:

Attempts or hypothesis for obtaining a human being without any connection with sexuality through "twin fission", cloning or parthenogenesis are to be considered contrary to the moral law, since they are in opposition to the dignity both of human procreation and of conjugal union.

Like all other reproductive techniques, cloning too replaces the conjugal act, and is considered illicit by the Church. Cloning represents a radical manipulation of the constitutive relationality and complementarity, which is at the origin of human procreation in both its biological and personal aspects. It tends to make bi-sexuality a purely functional left-over, given that an ovum must be used without its nucleus, in order to make room for the clone-embryo. Thus, cloning reduces the person to a technological production and removes the clone from the love act at origins. A clone is made by an act of technology and not born by an act of love between two people. Thus, the personal, unitive, two-in-one flesh dimension of marital love is rejected. A child has the right to be procreated, not produced.

***6) Cloning Ruptures the Bond of Basic Family Relationships:***

In the cloning process, the basic family relationships of consanguinity, kinship, and parenthood are radically ruptured. Thus, a woman can be a twin sister of her mother, lack a biological father and be the daughter of her grandfather. The cloned person also may experience serious concerns about his/her identity because he/she is an identical duplicate of another human being. Each person has a right not to be deliberately denied a unique genotype. The dignity and worth of each human being is central to the personal identity and individuality of the cloned person – an idea rooted in the Judeo-Christian tradition of each person's relationship to the Creator.

***7) Cloning radically exploits Women:***

Women are radically exploited and reduced to a few of their purely biological functions such as providing ova and womb. In the process of experimenting on fetuses and embryos, their suppression before birth is required, and so the woman's body becomes a mere research tool. Such experimentation is immoral and it is not permissible to use woman as a source of ova or use of her womb for conducting cloning experiments.

***8) Cloning violates the Natural Moral Law:***

Research on cloning as it applies to the human person is degrading. It destroys the dignity of human nature by treating the human person as a material commodity to be manipulated according to whim and fancy. The end result is science without ethics, technology without morality, and the human person without God. Such activity is contrary to the method of procreation designed by God. Human cloning violates the natural moral law. In this regard, Donum Vitae establishes from the onset that the natural moral law will be the criteria on which the Church's teaching is based.

***9) Cloning violates Two Fundamental Human Rights Principles:***

Human cloning violates two fundamental principles on which all human rights are based: First, the principle of equality among human beings is violated because cloning demonstrates man dominating over man. Second, the principle of non-discrimination is broken since the entire selective-eugenic dimension inherent to cloning indicates this discrimination. The Resolution of the European Parliament on 12 March 1997 expressly states the violation of these two principles and strongly appeals for the prohibition of human cloning and for the value of the dignity of the human person. The basic reason for the Church's rejection of human cloning is that it denies the dignity of the person subjected to cloning and the dignity of human procreation.

***Conclusion:***

Human cloning is both "in method the most despotic and in its aim the most slavish form of genetic manipulation, its objective is not an arbitrary modification of the hereditary material but precisely its equally arbitrary fixation in contrast to the dominant strategy of nature". Halting the human cloning project is a moral duty which must also be translated into cultural, social and legislative terms. The Holy See too expressed its unequivocal condemnation of the cloning industry.

The scientist cannot regard the moral rejection of human cloning as a humiliation. Rather, this prohibition eliminates the degeneration of scientific research by restoring its dignity. Today, the need of the hour is to re-establish the harmony between the demands of scientific research and the indispensable human values. When such research is undertaken to alleviate suffering, to cure illnesses, to make a better use of the earth's resources, it becomes one of the richest resources for humanity's welfare.

## B. THE ETHICAL DEBATE ON SURROGACY IN INDIA

Known as the surrogacy capital of the world or The

Cradle of the World, India is emerging as a leader in international surrogacy and a destination in surrogacy-related fertility tourism. There are more than 2,500 Assisted Reproductive and Fertility clinics in India. Reproductive technology raises the question of whether it is proper for science to interfere with natural reproduction. Treatments that introduce genetic material from a third party (e.g. AID, Ovum transfer, surrogacy) raise many questions. Does this technology violate the exclusiveness of marriage? What are the moral and legal rights and obligations of the contributor of genetic material? What are the emotional ramifications for the couple when only one partner is the biological parent?

Does surrogate motherhood reduce marriage to a contract without responsibilities? The fullest expression of love between man and woman finds its home in marriage. Marriage is the most ethically appropriate place in which to have and raise children. Children are the supreme gift of a marriage. But, no one can claim a "right" to a child, just as no one can have a "right" to a gift. Reproductive technologies which seek to 'take' a child apart from sexual intercourse do not treat a child as what he or she truly is.

***1. A Child asks his rights to be born of his own father and mother:***

A child is not only "the most gratuitous gift of marriage", but is also "living testimony of the mutual giving of his/her parents". Sexual intercourse is the mutual giving of partner to partner. So, the most proper way to conceive a child, who is a gift from God, is from within a context which is itself a giving one. It is the child's right "to be the fruit of the specific act of the conjugal love of his/her parents". The very nature of surrogacy arrangements rules such out.

This applies not only to surrogacy arrangements in which the surrogate is the genetic mother of the child, but also to so-called "gestational surrogacy", in which the surrogate woman carries a child not genetically related to her. The mutual giving of oneself expressed by "the language of the bodies" morally requires that the child not only be conceived through sex between its biological father and the mother, but also carried and gestated by its genetic mother. Thus, the child has the right to be conceived, carried in the womb, brought into the world and brought by his own parents. No child wants to live in a womb for hire.

***2. Surrogacy is not the same as adopting an abandoned child***

Reproductive organs are purchased by patrons of surrogacy just as sexual organs. Women are often reduced to their biological capacity. Some people argue that if adopting an abandoned child is morally praiseworthy and a gift of love, then why can't surrogacy be likewise? Certainly, children who are adopted are not "the fruit of the specific act of conjugal act" of the parents raising them. But, it is one thing to raise an orphaned child; it is another to cause a child to be an orphan. So too, it would be one thing for a couple to raise a child which isn't biologically both of their own or a child which is genetically their own but not gestated by the mother whose furnished the egg; it would be another for them to intentionally cause such a child to be born.

The fidelity of the spouses in the unity of marriage involves reciprocal respect of their right to become a father and a mother only through each other. The child is the fruit and thus the sign and symbol of the union between this man and this woman.

***3. Paid Surrogacy treats persons as market commodities***

Surrogacy asks all of us some very difficult questions: what does it mean to be a parent? How should we consider children? Obviously, money frequently changes hands in surrogacy. Paid surrogacy violates the dignity of the personhood of our offspring, for only THINGS have prices- people are too valuable to be for sale.

Is sex crucial for generating children? Or is it the case that as long as children come about from love, then parents are exercising proper stewardship over their offspring? There are two equal purposes of sex in marriage, the unitive and the procreative and that both must be present in each act of sex in marriage. Marital sex should be both physically and emotionally unifying AND open to the transmission of new life. Human love should be both love-enhancing (unitive) and life-giving (procreative). This connection between unity and procreation is "inseparable" and a requirement in "each and every marriage act". Artificial contraception delivered unity without openness to procreation. Namely, if it is wrong to separate procreation from unity with the use of artificial contraception, it is wrong to separate procreation from unity and have offspring

apart from the sexual act of the married couple. In short, no sex, no babies.

Homologous forms of assisted reproduction breaks/ separates procreation from the sexual union of man and woman; also all heterologous forms of reproduction (such as surrogacy) do the same thing. In God's plan, impregnation is very much linked to generation (giving birth to a child). To allow impregnation as an act which is separated or delinked from marriage, for someone to be an impregnator non-conjugally, is not the proper way to achieve motherhood. Further, renting a womb leaves the door open for those in same sex unions, single heterosexuals e.g. single menopausal women to become parents, couples with serious fertility issues, like survivors of uterine cancer.

Infertility is "a difficult trial" and we express sympathy towards "the suffering of spouses who cannot have children". "Physically sterility in fact can be for spouses the occasion for other important services to the life of human person, for example, adoption, various forms of education work, and the assistance to other families and to poor or differently abled children".

***4. Surrogacy offends the dignity of the child***

Surrogacy is to be opposed as it offends the dignity of the child, the uniqueness of the mother-child relationship, and the sanctity of marriage. It also treats women and children as commodities. Conception, gestation, birth and nurturing are part of a continuum of life relationships. Child and parents grow into relationship together, a relationship meant to last a lifetime. The relationship is generic, gestational and nurturing, and strengthening the child-parent bond. Surrogacy fractures that continuum of relationship, introducing at least two, if not three, "mothers", and more than one set of parents. This is done to meet adult needs, not for the good of the child. Pregnancy belongs to the marital relationship. To gestate an unrelated embryo is a violation of the "unitive good" of marriage.

***5. Surrogate Mother if married, offends her own Marriage:***

The profound notion of marital communion, of the two in one flesh and the having of children through this "two in one flesh," is broken by the intimate use of the woman's body who is impregnated (and bears a pregnancy) in a way which isolates her husband, which excludes him from this part of her life, because he makes no direct contribution to the pregnancy and because it is established in her as a result of an embryo transfer procedure performed outside of the context of their expression of conjugal love. She becomes pregnant and he is not the father. He has no part in the pregnancy. The child is not an expression of their union.

***6. Pregnancy is an essential part of Marital Intercourse – Pregnancy outside marriage is infidelity***

When married persons engage in sexual intercourse and the wife becomes pregnant, the pregnancy (and thus the becoming pregnant) is not casually related to their intercourse, but morally speaking is an intrinsic part of their marital intercourse. And so, only a marital act should make a woman pregnant. Embryo adoption by way of surrogacy intentionally separates pregnancy from marital intercourse; therefore it vitiates the marital act and is a violation against marriage. The marital act, as the source of a new life and of childbearing, has an essential meaning not present in a single person, and gives childbearing its context so that the woman becomes pregnant through her free expression of love for her husband.

Nonconjugal impregnation is a violation of a woman's bodily integrity and the use of a woman as an object, because it lacks the meaning and character of marriage that dignifies being impregnated. When heterologous embryo transfer is deliberately chosen by a surrogate woman, it forms a union to which she is not entitled. The technician who effects the embryo transfer impregnates her, and that is an event properly belongs to the marital union. Marriage is thus, the only setting worthy of true and responsible procreation.

***7. When there is a 3rd party – a donor gamete: an unrecognized form of adultery***

- It is in and through the love of husband and wife and the intimate union of their bodies and entire beings that initiate the process of the beginning of human life.
- Each of them contributes to the creation of another being.
- A donor gamete introduces a third party genetic offspring into the relationship between the actual mother and father.

***8. Legal Issues:***

Many countries outlaw commercial surrogacy.

Agreements on surrogacy are not binding under Norwegian law. Egg donation is prohibited and is a criminal offence in many countries.

Surrogate motherhood and related birth technologies continue to pose legal and ethical dilemmas.

***9. Motherhood: Can the question of motherhood be ethically resolved?***

But what kind of woman would carry a child to term, only to hand him over moments after birth? Surrogates challenge our most basic ideas about motherhood, and call into question what we've always thought of as an unbreakable bond between mother and child. Many disparage the practice as interfering with the miracle of life, while others compare gestational carriers to prostitutes who degrade themselves by renting out their bodies. Some medical ethicists describe the process of arranging surrogacy as "baby brokering" or baby outsourcing.

A surrogate mother will be deprived of important information about her or his heritage. Parents try to explain that their biological mother isn't the same person as the mommy who tucks them to bed every night. Should the child be told, when old enough to understand, the pertinent details of his or her conception and birth? Should the identity of the surrogate mother be routinely disclosed? What if the surrogate mother wants to be known to the child? What if she doesn't? What if she insists on visitation rights or other ongoing involvement with the child? Should a child be deprived of personal information - information that not only might be important medically but can also affect the child's individual being?

In the case of heterologous embryo transfer: though they have two elements of parenthood, gestational and nurturing (or social), they lack the third element of being the genetic parents.

***10. Risks for surrogate women:***

Some medical practitioners state: "We first see their age, the medical history, their blood work and their obstetric history especially. If they have one caesarean we do take them but if it's more than one, we do not. If their health is not good we don't take them."

Yes. IVF and cloning require surgically extracting eggs from women's bodies, a process that generally begins with the use of powerful fertility drugs to make their ovaries produce many eggs at a time instead of one. Some women develop a condition called ovarian hyperstimulation syndrome, which can further damage their fertility and lead to serious medical complications and even death. Children conceived by IVF, if they do survive to birth, have been found by some studies to have an increased risk of some serious birth defects. The reproductive technology industry has been aggressively promoting an understanding of reproduction which is both sterile and asexual.

Women are being lured with huge amounts of money to do something to their bodies that is totally unnatural and also life threatening. Egg donation has never been studied in any scientific way to prove its safety. Financial considerations seem to dominate the decision of many people and can money compensate for the grave risks of egg donation? Shrewdly the industry calls the transaction as egg "donation". The demand for human eggs and hence the commercialization of human eggs has reached undue proportions as the IVF industry wants to pursue technological solutions without considering the ethical issues. Sadly, hardly any one in the IVF industry seems concerned about the risks or harms done to the women who provide the eggs, who are generally treated as commodities. The irony of it is the question: it worth the risk in a country with has one of the highest maternal mortality rates in the world?

***Conclusion:***

In examining all these issues, we conclude that surrogate motherhood is morally wrong. It affects the way people begin to view the birth of children. Further, controversies between the adoptive and biological parents may develop, causing arguments over whose child she or he really is. The best decision, when biological parenting isn't possible, is to adopt one of the many abandoned children waiting for a parent.

I stand with many others who call for the banning of surrogacy. For a mother to give away a child she loves is not a generous act as it violates the love–life bond. The child is torn from its mother's love, a love that necessarily belongs to the child. Unfortunate situations may require giving up a loved child for adoption. But it is precisely the unfortunate circumstances that justify it, not the mere desire to be generous.

# MANAGEMENT OF CANCER IN A RURAL SETTING

*– Dr Joseph Sequeira MS (Onco Surgery)*

The incidence of Cancer is rising with every passing day. We are all witness to the different presentations of these cancers in various stages from Stage 1 to Stage 4. Till today, 70% of our population reside in rural areas where Medical facilities are dismal. This leads to the exodus of patients to semi-urban and urban areas in the hope of cure for this dreaded disease. However, the overloaded Government Tertiary Cancer Centres are unable to accommodate the added influx of these patients and their relatives leading to never ending waiting lists. The only options available are to opt for treatment in a private hospital where the costs are exorbitant causing financial bankruptcy to the family or wait endlessly. During the waiting period the patients and their relatives are also drained physically mentally and financially but more importantly, the disease progresses sometimes beyond cure.

Can WE reverse this situation at least marginally?

The Sister Doctors Forum of India has more than one thousand members working in the remotest areas of our country. However they are dedicated to the medically underserved brethren and most importantly well trained and experienced. It is my humble belief that if the Sister Doctors could be imparted knowledge on some basic aspects of Cancer management which could be used in a rural hospital, the hardships to the patients and their relatives could be decreased.

**CANCER SCREENING** The main problem that we face in Cancer Cure is that majority of patients at presentation are in in an advanced stage of the disease. Though the trend is slowly being reversed in urban areas, the situation in rural areas is still dismal with no signs of improvement. The key to early detection is Cancer screening ideally of the entire population or at least high risk groups. This must be done on a regular basis at least once a year and any pre malignant condition or suspected malignancy must be rigourously followed up. Since targeting all Cancers will be cumbersome and not cost effective, I would suggest screening for the most common cancers occurring in males and females which would cover 80% of the cancer burden. For males, examination of head and neck, per rectal, Chest Xray +/- PSA (above 50) would cover head and neck, rectal, lung and prostrate cancers. For females, examination of head and neck, breasts, per rectal, per vaginal, pap smear, Chest Xray, +/- CA-125 would cover head and neck, breast, rectal, cervix, lung and ovary.

**DIAGNOSIS** Once Cancer is suspected the focus is on a complete work up to prove malignancy. The initial investigations are mainly to locate the primary from where a biopsy could be taken if possible. For this, basic investigations like Chest Xray, Sonomammography, CT scans and Tumour Markers would suffice in guiding the location for a FNAC, TRU-CUT biopsy or fluid cytology which could be performed either directly or USG or CT guided. The specimen may be sent to a central lab or tertiary centre for expert opinion.

**STAGING** Proven malignancy ideally requires a metastatic work up. Simple investigations like Xrays , USG +/- CT scans can usually detect gross metastatic disease in a majority of cases. Tissue diagnosis and metastatic work up helps in staging the disease, which in turn helps in prognosis with its treatment options. This is where the most important and difficult step lies and that is counseling the patient and the relatives for further treatment at the rural hospital or reference to a tertiary Cancer centre.

**MANAGEMENT** Depending on the infrastructure available some Surgeries can definitely be performed in rural hospitals by trained specialists. However the surgeon must be confident of performing the surgeries as per the Oncological principles independently with minimal blood loss and minimal complications. Having set up and performed Cancer surgeries in rural hospitals for the past 22 years I would say that the following Curative surgeries can be performed in rural hospitals with adequate infrastructure by experts. Breast Radical Mastectomies, Radical Hysterectomies / Wertheims Hysterectomies, Gastrectomies / Colectomies, Oral surgeries including Commandos and laryngectomies. In addition almost all palliative surgeries can be performed like Tracheostomy, Feeding gastrostomy, jejunostomy, Intestinal bypass surgeries, Colostomies etc.

Advanced Metastatic disease patients and their relatives require extensive Counselling about the poor prognosis and the implications of shifting to a tertiary cancer centre, especially the financial aspect and deterioration of the general condition of the patient. The relatives could be given an option of taking an opinion at a Cancer hospital of their choice with all the reports available and if the treatment options are better and beneficial, then the patient could be shifted to a higher centre.

**CHEMOTHERAPY** can definitely be given in a rural primary care hospital. A good venous access and prevention of extravasation are are the basic nursing requirements. Choose a larger I V cannula in a moderate sized vein. Today PICC and Chemoports are a fashion though frightfully expensive. Knowledge of the common side effects of the various Chemotherapeutic agents is essential, though drug allergies would be mostly encountered. Remember that adverse reactions would even occur in a tertiary hospital set up and anticipation and emergency resuscitation is the only expected treatment. Though a Chemotherapy protocol given by an Oncologist would be ideal I would always suggest you to check the protocols to rule out printing errors especially in dosage.

**PALLIATIVE CARE** is the backbone of Cancer management since the majority of cases present in a late stage i.e. Advanced Metastatic Stage IV disease. Basic divisions include PAIN MANAGEMENT based on the WHO based step ladder choice of drugs. Titrate drugs dosage and frequency to the optimum pain free state. Choose drugs that are easily available. WOUND CARE Suitable dressings to prevent bleeding, absorbent dressing for copious discharge so as to keep the patient comfortable.

**NUTRITION** Enteral feeds are the most preferred route, sometimes with the help of tube feeds. Parenteral route can be used in required cases (IV fluids, TPN)

**SYMPTOMATIC TREATMENT** for vomiting, constipation, cough, breathlessness etc.

**INVASIVE TECHNIQUES** Ascitic tapping, Pleural tapping, Pleurodesis, etc.

**PALLIATIVE SURGERIES** for stridor eg. Tracheostomy and pathological fracture of bones.

**FOLLOW UP PET** – CT scan is the best investigation available to assess metastatic, residual and recurrent disease and hence widely used in follow up. However, its limited availability and high cost prevents its widespread use. Hence a good clinical examination and basic investigations can give a rough idea and then costlier investigations can be suggested in case of strong suspicion. Blood tests include CBC / LFT / RFT / LDH and Tumour Markers (CEA, CA-125, AFP, B HCG, CA 15-3, CA 19-9). Other tests include Xrays (Chest, Spine, Skull, Abdomen) Sonography (Neck, Chest, Breasts, Axilla, Abdomen, Pelvis), Mammography, CT Scans, MRI. Adequate information can be obtained from basic scans reported by a dedicated Radiologist.

**CONCLUSION** Adopting few if not all the above Management techniques in Cancer by our Extremely Efficient, Dedicated and Experienced Sister Doctors will go a long way to improve Cancer Survival and Reduce Suffering.

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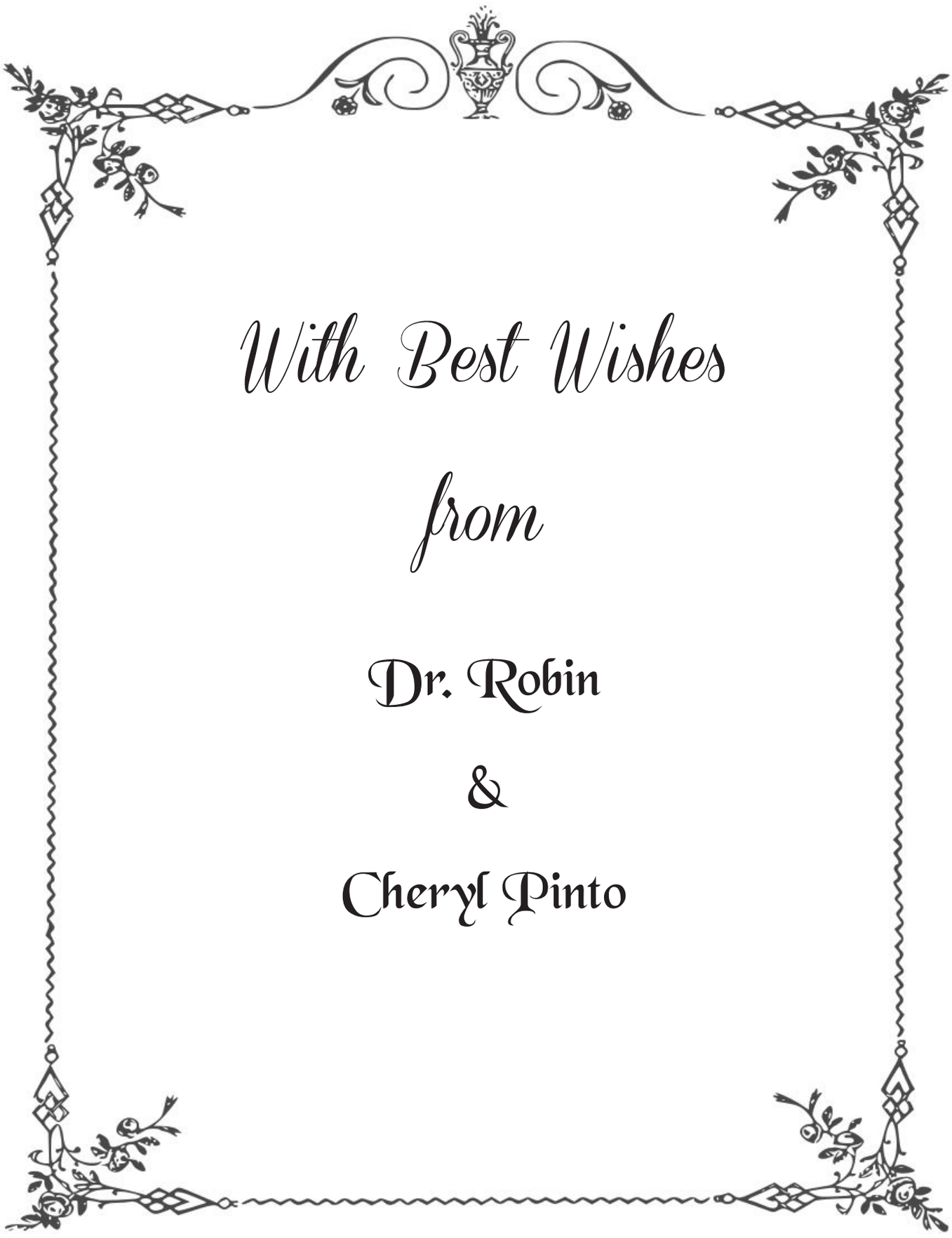
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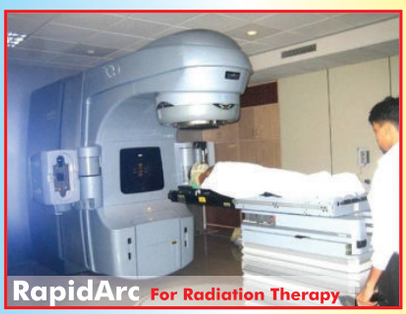



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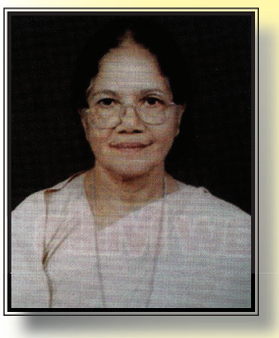
# OBITUARY TO OUR DEAR SDFI MEMBERS

*God saw you getting tired,*
*And wrapped his arms around you*
*And whispered "COME TO ME"*
*He gave you the needed rest,*
*God's garden must be beautiful,*
*He only takes the best.*



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# We say "Thank You"

***'Gratitude is the music of the heart, when its chords are swept by the breeze of kindness.'***

'It is not happy people who are grateful but grateful people who are happy' and it is with this happiness that I on behalf of the Sister Doctors Forum of India (SDFI) and the Organising Committee of the Western Region, extend a deep sense of appreciation to many who have been instrumental in planning and organising the 23rd Annual General Body Meeting cum National Conference of the SDFI held on April 21st, 22nd & 23rd 2017 at St. Pius X College, Goregaon, Mumbai.

We thank His Eminence Oswald Cardinal Gracias for inaugurating the event and for his support and good will towards the SDFI. His Lordship Bishop Percival Fernandez, to whom we owe a lot and are ever grateful, has been a friend and mentor to each Sister Doctor down the years and he has inspired us by his guidance in organising this event, the keynote address and his message at the Holy Eucharist. The inaugural Holy Eucharist focused on 'the Healing Mission of Jesus' and we thank the main celebrant His Lordship Bishop John Rodrigues for his kind presence. We thank His Lordship Bishop Barthol Barretto for praying for us at the Holy Eucharist that we be co-healers with Jesus.

We have been welcomed, and we received whole hearted cooperation from the community of St. Pius X Seminary, especially Fr. Aniceto Pereira - Rector, Fr. Marcellus Crasto, Fr. Godwin Fernandes, Fr. Dolreich Pereira, Fr. Jervis Dsouza, Sr. Agnes, Brothers and the support staff. We express our grateful thanks to Fr. Stephen Fernandes and Fr Benhur Rodrigues for the timely help. The Sisters and support staff at Sarvodaya have made our stay comfortable and we are grateful.

Success doesn't just happen but it is planned for, and it was the dedication and hard work of the Local Organising Committee (LOC) who saw to every detail that has made the hosting of this event possible. Our appreciation to Mrs. Freda DeSouza, member of the LOC and Mr. Cyril Roger, coordinator of the SDFI, for their valuable secretarial contribution to the making of this event. We are very grateful to Sr. Dr. Beena UMI, President of the SDFI, for her involvement and whole hearted collaboration with the LOC in organising this conference. We also thank all the Board Members of SDFI for their encouragement and advice given from time to time.

Gratitude is the memory of the heart and it is fitting to say a big thank you to all the Speakers of the Conference for giving purpose and direction to this event through their academic sessions. The Paper Presentation is a new addition to this 23rd National Conference of SDFI and we appreciate the Sister Doctors for sharing their experiences through the presentation of their paper on various topics.

We are grateful to many more for the support extended towards the making of this event - Dr. Joseph Sequeira for being our anchor at the inaugural function, Rev. Dr. Mathew Abraham CHAI Director General, for the cooperation we received from CHAI as Sister Doctors, Dr. Praveen Rodrigues who represents the Alumni Association of St. John Medical College, Fr. Joby Kavungal RCJ Associate Director of CHAI for the artistic artwork in the making of the backdrop, Religious Sisters from different congregations, the lay faithful from many parishes in Mumbai and the staff of Dayasagar Hospital, Amravati, Holy Cross Hospital, Mumbai, Holy Family Hospital, Mumbai and Karuna Hospital, Mumbai.

We are indeed very grateful to the sponsors – Platinum, Gold and Silver, advertisers and donors for their financial assistance towards the expenses incurred in organising this event. God bless you in all your endeavours.

We thank Mr. Antony Gomes of Abbey Caterers and Backyard Lawns for the Catering, Mr Saby Almeida of Audio Tech for the Sound and Light, Mr Vijay Rodrigues for the Decorations, Mr Rakesh Kapoor for the Coolers, Mr Gurminder Singh Kohl for the memento and Mr Gwilym D'Souza for the LED Screen. We thank the Society of St Pauls for printing the souvenir, as well as Mr Joy and Mr Pradeep Desai for printing other stationary. A special thanks to the IC parish choir of Borivali - Mrs Antonella and team for their melodious singing. A special word of gratitude to the Sisters of Holy Family Hospital, Mumbai, St Joseph's Convent, Mumbai, Dayasagar Hospital, Amravati and Karuna Hospital, Mumbai, for allowing Sr. Dr. Beena, Sr. Dr. Angela, Sr. Dr. Rachita, and myself to spend quality time in the preparation of this entire event. God bless you dear Sisters.

The backbone behind this entire 23rd National Conference right from the start to its finish is Our God who has always been with us, guiding, directing, uplifting and inspiring us so that we can say with grateful hearts "Mission Accomplished. Thank You Jesus".

God Bless you

**Sr. Dr. Ashreena Miranda (MSA)**
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