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IN THIS ISSUE

MODERN EDUCATORS: PURSUING CHANGE

KKH's innovative educators are continuing to expand and reimagine the pedagogy of healthcare education, seeking to make critical transformations to the future of patient-centred care.

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MODERN EDUCATORS: Pursuing Change

(Left to right) KKH medical educators A/Prof Philip Yam Kwai Lam, Mr Satyaki Sengupta and Ms Wong Kin Ling

Every year, more than 1,250 undergraduate medical students and healthcare professionals undergoing postgraduate training pass through the wards, clinics and operating theatres in KK Women's and Children's Hospital (KKH).

Continuing a 158-year legacy as a teaching hospital, KKH runs the largest specialist training programmes for obstetrics and gynaecology and paediatrics in Singapore, and is an accredited academic medical centre recognised for excellence and innovation in training and education.

Today, KKH's innovative educators are continuing to expand and reimagine the pedagogy of healthcare education, seeking to make critical transformations to the future of patient-centred care.

BUILDING MENTORING RELATIONSHIPS

With Associate Professor Philip Yam Kwai Lam

"Lectures, tutorials and workshops can teach you facts, information and even skills. But how to work as a team; how to mentor and teach generations of obstetricians and gynaecologists during different stages of their careers – I learned these through working alongside my mentor."

A seasoned clinical educator who began his teaching career in 1980, Associate Professor Philip Yam Kwai Lam has mentored and taught generations of obstetricians and gynaecologists throughout his 42-year career.

As Senior Mentor with the Department of Gynaecological Oncology at KKH, A/Prof Yam spends several hours each week with junior doctors, building what he refers to as mentoring relationships.

"A mentoring relationship is a great way for both the junior and senior clinician to

progress in professional and personal development. My mentees and I meet regularly in clinics and operating theatres – wherever clinical and theoretical skills can be practically demonstrated and improved on.

"In a healthy mentoring relationship, there is open and honest discussion of strengths and weaknesses, long-range objectives, strategies to achieve sustainable improvements, and educational needs. Regular monitoring of the mentee's progress with feedback, encouragement, nurture and support from the mentor are also absolutely essential for growth," says A/Prof Yam.

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A/Prof Yam (second from right) guides two residents in carrying out a surgical procedure.

His hands-on methods have won him the gratitude of many of his students, in particular MRCOG Prize (Gold) medallist, Dr Serene Thian, who was one of his mentees.

"A/Prof Yam is a wonderful mentor, with a kind personality and an infectious enthusiasm for teaching. His surgical expertise in the operating theatre is certainly an eye-opener, and it has been an honour to be able to operate with him," says Dr Thian.

A/Prof Yam's uncanny ability to relate with and motivate his bright young charges is due in no small part to having gone many a mile in his students' shoes. He recounts the obstacles faced in the early years of medical training:

"When I graduated from medical school in the 1970s, supervision and regular assessment from senior doctors was relatively lacking in many practical procedures. You could be observing a procedure being done, and in the next minute have to actually carry it out yourself on a patient.

"In those days, the running of the women's wards was often left to us as trainees, and

during one memorable night duty, the nursing team and I delivered 20 babies together. Additionally, we had to struggle through breaking bad news to families, and dealing with end-of-life and palliative care issues without formal training or the help of palliative physicians."

Within this tough environment, A/Prof Yam credits his first mentor, the late Dr Choo Hee Tiat, with helping him to stay the course through a mentoring relationship.

"I was appointed a clinical teacher in 1980, which first sparked my interest in education. However, during my senior registrar years, I witnessed an exodus of government doctors in search of better working conditions. Fortunately for me, Dr H.T Choo, who was then my senior consultant, took me under his wing and began to teach me gynaecological oncology surgery.

"Dr Choo was skilful and meticulous in his craft, and greatly devoted to ensuring the safety and wellbeing of his patients. He was also generous in passing his surgical skills on to those who worked with him, and I had the privilege of assisting him in the operating theatre many times.

"Under Dr Choo's experienced tutelage, I was able to build competency in many complicated and complex obstetrical and gynaecological procedures. As I progressed, he even arranged a six-month fellowship in Japan, enabling me to further my experience in the field.

"Lectures, tutorials and workshops can teach you facts, information and even skills. But how to work as a team; how to mentor and teach generations of obstetricians and gynaecologists during different stages of their careers – I learned these through working alongside my mentor."

THE ROLE OF THE MODERN MEDICAL EDUCATOR

Amidst a fast-evolving healthcare landscape, A/Prof Yam continues to advocate for a holistic approach to patient care, driven by empathy and awareness of the patient's needs. At the same time, he keeps a paternal eye on his junior clinicians.

"As we move towards increasingly technological and team-based care, a new set of challenges are confronting healthcare professionals," says A/Prof Yam. "It is not an easy task maintaining a delicate equilibrium between clinical, academic and personal responsibilities, and adhering to a reasonable standard of care whilst maintaining high standards in service, training and professional development to mitigate the risk of complaints and litigation.

Beyond imparting practical and soft skills, today's educators and mentors are well-placed to guide our juniors in continuing the spirit of camaraderie and cooperation that is vital to deliver safe and cost-effective optimum care for every patient."

ABOUT ASSOCIATE PROFESSOR PHILIP YAM KWAI LAM



Age: 70 years

Family: My wife, two sons – a medical doctor and a legal officer – and a granddaughter

Interests: Walks, music, reading medical journals after work and time with family

Current positions:

- Senior Mentor and Senior Consultant, Department of Obstetrics and Gynaecology, KKH
- Adjunct Associate Professor, Duke-NUS Graduate Medical School
- Clinical Associate Professor, Yong Loo Lin School of Medicine, Singapore.
- Faculty Member, SingHealth Residency Obstetrics & Gynaecology Program

BRINGING EFFECTIVE CHANGE

With Mr Satyaki Sengupta

"Collaborating with our healthcare colleagues on training and education strengthens cross-boundary teamwork between acute and community care, which helps to facilitate a smooth transition for the patient into the community, and enhance their quality of life for the long term."

For more than 26 years, Mr Satyaki Sengupta has been working to bringing change to children and their families, and transforming the landscape of allied health through a combination of skill, knowledge and innovative education.

Deputy Director of the Division of Allied Health Specialties and Clinical Education Lead (Allied Health) at KKH, Mr Satyaki spearheads the facilitation of clinical training and attachment for students; organises education and training for a variety of allied health specialties; and leads the design of allied health training and educational initiatives.

"Effective healthcare is practiced across teams, disciplines, systems and networks, and nowhere is this more clearly demonstrated than KKH's allied health specialties – which comprise the complementary yet distinct disciplines of medical social work, nutrition and dietetics, pharmacy, psychology, physiotherapy, occupational therapy, speech therapy, respiratory therapy, radiography and many more," says Mr Satyaki.

As Clinical Education Lead (Allied Health) at KKH, Mr Satyaki works with various departments to facilitate effective clinical education and supervision training for clinical educators. This ensures that appropriate training is provided to the students placed at KKH from different universities.

"To be an effective allied health practitioner requires continual advancement of knowledge and skills after professional qualification. Thus, structured and systematic training curricula are needed – that provide



Heads together – Mr Satyaki Sengupta (second from left) leads a curriculum design session with physiotherapists Ms Chua Shuzhen (left) and Ms Catherine Chua (right), and occupational therapist Ms Foo Ce Yu (second from right).

both clinical experience and didactic learning, and cater to the developmental training needs of allied health professionals at all levels," says Mr Satyaki.

"Recently, I worked with our radiographers and sonographers to draft the first professional training curriculum in Singapore for sonographers specialising in gynaecology. This gave us the freedom to adapt it to our hospital's workflows, and include job shadowing and mentorship.

We are also drafting a post-graduate level professional curriculum unique to physiotherapy and occupational therapy for women's and children's health. The curriculum will incorporate interprofessional education and community-based practice attributes to facilitate holistic learning," says Mr Satyaki.

With an emphasis on educating participants on the dynamics of inter-professional teamwork, and how they can better leverage their skills for the benefit of patients, Mr Satyaki's educational efforts are invariably multidisciplinary and team-based in nature. To that end, he frequently invites allied health professionals from partner healthcare institutions and voluntary welfare organisations (VWOs) to participate and collaborate in training events.

"As a leader in women's and children's health, we have a duty of care to train Singapore's allied health professionals and students in these areas," says Mr Satyaki. "Additionally, our patients receive follow up care in the community. Collaborating with our healthcare colleagues on training and education strengthens cross-boundary teamwork between acute and community care, which helps to facilitate a smooth transition for the patient into the community, and enhance their quality of life for the long term."

CHARTING THE COURSE FORWARD

Ever on the lookout for more ways to effect change, Mr Satyaki currently leads the development and implementation of electronic allied health referral and clinical documentation systems at KKH.

"As healthcare technology progresses, increasingly sophisticated ways of keeping records and analysing data will enable us to better integrate care delivery, education and research for the benefit of our patients," he says.

ABOUT MR SATYAKI SENGUPTA



Age: 50 years

Family: My wife and twin sons

Interests: Travelling, badminton, cooking

Current positions:

- Deputy Director, Division of Allied Health Specialties, KKH
- Clinical Educator Lead (Allied Health), Education Office, KKH
- Honorary Secretary, Cerebral Palsy Alliance, Singapore

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TEACHING FROM THE HEART

With Ms Wong Kin Ling

“By understanding the beliefs, mindsets, values, traditions and habits on the ground, we as educators are better informed to teach our students to challenge their mindset and thinking, and promote a climate of continual reflection in pursuit of excellent practice.”

Assistant Director of Nursing, Ms Wong Kin Ling, has kept an eagle eye on nursing care excellence in KKH for more than a decade. For a practical problem-solver, the secret to her success is startling.

“Do everything in life from the heart,” says Ms Wong. “Educators must keep their performance stellar at all times to maximise every learning opportunity during classroom interactions – your class may be the only time a student has such a learning exposure.”

To thrive in a dynamic hospital environment where rapid changes are a norm, nurses need a high degree of problem-solving skill and the ability to apply knowledge to new situations.

“The extent to which nurses develop these capacities is largely influenced by the quality of education that they receive,” says Ms Wong. “Nurses need to be empowered and inspired to be self-directed critical thinkers. The traditional lecture will not be sufficient to prepare them adequately.”

Packing a holistic punch, Ms Wong’s teaching strategies are built on the twin pillars of evidence-based practice and 360-degree feedback. However, she begins simply by listening.

“An effective training curriculum takes into account everyone involved in patient care, not just the intended beneficiary. Nurses provide crucial feedback not only on what works well, but also on what can be done better and how this can be achieved.

“By understanding the beliefs, mindsets, values, traditions and habits on the ground, we as educators are better informed to teach our students to challenge their mindset and thinking, and promote a



Ms Wong Kin Ling leads a group of nurses from several disciplines in a learning session on anticipatory care.

climate of continual reflection in pursuit of excellent practice.”

Drawing inspiration and insight from reality, Ms Wong builds real-world patient and staff experiences, feedback and recent news headlines into the core of her training modules. Further, she takes pains to incorporate a range of experiential learning techniques to broaden the appeal of the training curriculum to nurses across a wide range of ages and learning styles.

“We learn faster and better when the relevance to daily practice is clear, and we are able to immediately apply what we have learnt,” explains Ms Wong. “When these catalysts are combined, training participants respond with increased engagement and enjoyment, leading to deeper critical thinking and active learning.”

Using these concepts, Ms Wong has designed numerous nursing training programmes, including ‘Service from the Heart’, and award-winners ‘eLearning for Communication’ and ‘Anticipatory Caring Power Station’ (ACPS). While the programmes have been

well-received by nurses across healthcare disciplines, the ACPS remains particularly close to Ms Wong’s heart.

“The ACPS was developed to help our nurses think out of the box in anticipating the needs of our patients and their families. Every interaction with a patient or caregiver is an opportunity to meet a need that they may not even be aware of – be it for information, education, relief of physical or emotional distress, or just a listening ear,” says Ms Wong.

“Taking it one step further, if we can anticipate the self-care our patients will need after returning home, we can educate and equip them during their limited time in hospital, and hopefully keep them from having a relapse or complications. From a societal perspective, this is particularly important in view of Singapore’s ageing population. If we can help the public learn how to stay healthy and manage their chronic diseases at home, they can have a better quality of personal and family life. This is the power of anticipatory care.”

ABOUT MS WONG KIN LING



Motto: *Do everything in life from the heart*

Family: *My husband and daughter*

Interests: *Cooking – her specialties are stewed beef brisket in chu hou sauce and drunken prawns*

Current positions:

- Assistant Director, Division of Nursing, KKH
- Associate in Education, Duke-NUS Graduate Medical School

In acknowledgement of her notable contributions to healthcare education, Ms Wong was presented with the Outstanding Educator Award (Nursing) and Programme Innovation Award at the Academic Medicine Education Institute (AM•EI) Golden Apple Awards 2016.

Breaking New Ground

Raising the bar in training and preparedness to improve child health.



At the official launch of the Stay Prepared – Trauma Network for Children – Guest of Honour, Dr Janil Puthuchery, Minister of State, Ministry of Communications and Information & Ministry of Education (centre); with Prof Kenneth Kwek, Chief Executive Officer, KKH (left); Adj Professor Richard Magnus, Chairman, Temasek Foundation Cares (second from left); Mr Lim Boon Heng, Chairman, Temasek Holdings (second from right); and A/Prof Ng Kee Chong, Chairman, Division of Medicine, KKH (right).

BUILDING TRAUMA CARE FOR SINGAPORE'S CHILDREN

K K Women's and Children's Hospital (KKH), together with Temasek Foundation Cares, has launched Singapore's first network to support children affected by trauma.

The Stay Prepared – Trauma Network for Children aims to bring psychosocial trauma support and care into the core of the community, by developing a culture-sensitive model to provide psychological and emotional "first aid" to children immediately after a traumatic event.

To build a greater capacity of school counsellors and community-based psychologists and social workers in a locally adapted Trauma-Focused

Cognitive-Behavioural Therapy, the network will also develop a training pedagogy, and establish a trauma learning network for school and community practitioners.

"In addition to educating the public about trauma, and how and when to seek support or treatment for a child, the network stands ready to unite the local community in rendering psychosocial support and care for our children experiencing traumatic stress," said Associate Professor Ng Kee Chong, who is Chairman of the Division of Medicine at KKH, and Director of the Stay Prepared – Trauma Network for Children.

The \$3.5 million programme is generously funded by Temasek Foundation Cares, and will be implemented over a period of three and a half years.

DR SHARON THAM COMMENDED FOR STRENGTHENING EMERGENCY MEDICAL SERVICES

In recognition of nearly a decade of dedicated service as paediatric representative for the Singapore Civil Defence Force (SCDF) Medical Advisory Council, Dr Sharon Tham Lai Peng, Senior Consultant, Department of Emergency Medicine, KKH, was awarded a Home Team Volunteers Award by the Ministry of Home Affairs in August 2016.

In her medical advisory role, Dr Tham provided strategic inputs to SCDF's medical protocols and ambulance operations, and relentlessly dedicated her time to conducting rigorous training for SCDF paramedics to enhance child safety, care and treatment.

Setting a new standard for education in paediatric emergency medical services, Dr Tham also spearheaded the first Pre-hospital Paediatric Life Support Course for level four SCDF paramedics, which is certified by the National Resuscitation Council Singapore.

"We are extremely proud of Dr Tham's contributions, which have directly shaped the emergent pre-hospital care delivery to neonatal and paediatric patients by SCDF paramedics in Singapore. Dr Tham continues to inspire all of us to press on in transforming care for children," said Head and Consultant of the Department of Emergency Medicine, KKH, Dr Lee Khai Pin.



Mr K Shanmugam, Minister for Home Affairs and Minister for Law (left) presents Dr Sharon Tham Lai Peng with a Home Team Volunteers Award during the Home Team National Day Observance Ceremony 2016.

An Art and a Science

Paediatric dental care for medically compromised children and those with special needs.

By Dr Chay Pui Ling



Paediatric dentist Dr Chay Pui Ling, from KKH's Dental Service, uses the "tell-show-do" technique to put a child patient at ease during a dental check-up.



In the presence of other pertinent health issues, dental care can often be of lower priority for these groups of patients. Yet, as they are at greater risk of oral health issues, it is vital for them to consistently practice good oral health care, and be brought to seek early dental intervention if issues arise.

Children with special needs or systemic medical conditions that can affect oral health and dental treatment present unique challenges for oral health management. These can be due to factors such as underlying medical conditions, ongoing medications, dietary habits, dependence on their caregivers, or oral hypersensitivity.

In the presence of other pertinent health issues, dental care can often be of lower priority for these groups of patients. Yet, as they are at greater risk of oral health issues, it is vital for them to consistently practice good oral health care, and be brought to seek early dental intervention if issues arise. Untreated dental disease can cause the child discomfort, and may lead to pain and infection. This inevitably affects their health and wellbeing.

Children with special needs, in particular, benefit from dental care in a paediatric hospital setting due to their propensity to exhibit challenging behaviours, the complexity of their treatment needs and the potential need to coordinate their care with other healthcare disciplines in view of their medical condition.

This article outlines key dental considerations for paediatric patients with autism, intellectual disability, congenital heart disease, cancer and diabetes.

AUTISM

Challenging behaviours by the child with autism is a known barrier to dental care, resulting in higher rates of unmet dental needs in the home.

There are divergent conclusions regarding the prevalence of dental caries in children

with autism, with various studies reporting lower, similar, or even higher prevalence of dental caries in children with autism compared to the general population. Nevertheless, the majority of studies consistently indicate a trend of poor oral hygiene in children and adults with autism¹.

In addition, some children with autism can exhibit self-injurious behaviour, such as habitually traumatising their gums using their fingernails. There is also a higher prevalence of tooth grinding and erosion amongst this group.

During a visit to the dentist, a child with autism can become frustrated by the interruption to their daily routine, or may become very anxious, especially upon their first encounter with unfamiliar dental equipment and facilities. Children with autism also have a strong tendency to be hypersensitive to specific sounds, light, scents, textures, or touch, all of which they will invariably experience during a dental appointment.

At KKH's Dental Service, paediatric dentists draw on various behaviour management techniques to help children with autism get used to a routine dental check-up and basic treatment; preventive dental care is also emphasised to reduce their treatment needs. Despite these strategies, about 30 to 40 percent of these patients continue to struggle with chair-side treatment. For their safety, comprehensive dental rehabilitation is completed under general anaesthesia.

INTELLECTUAL DISABILITY

Children with intellectual disability can experience difficulty with access to care, and impaired cognitive ability to maintain their oral health and cope with

the demands of dental examination and treatment. Dental para-functional habits such as teeth grinding, clenching, and the persistent eating or mouthing of non-food items (also known as pica behaviours) are also more common in this group.

Those with carer dependency or poor dietary habits can be at increased risk of developing dental caries, and certain underlying medical conditions (e.g., Down Syndrome), or medications (e.g., phenytoin, an anticonvulsant medication) can also increase their risk of gum disease.

Behaviour management techniques, such as tell-show-do, are utilised to help patients accept treatment on the dental chair. However, if the child remains uncooperative, other options include treatment under general anaesthesia or the use of protective stabilisation.



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There is evidence that bacteraemia associated with periodontitis may increase insulin resistance and the destruction of islet cells of the pancreas. Consequently, periodontal infections may increase insulin resistance in children with diabetes.

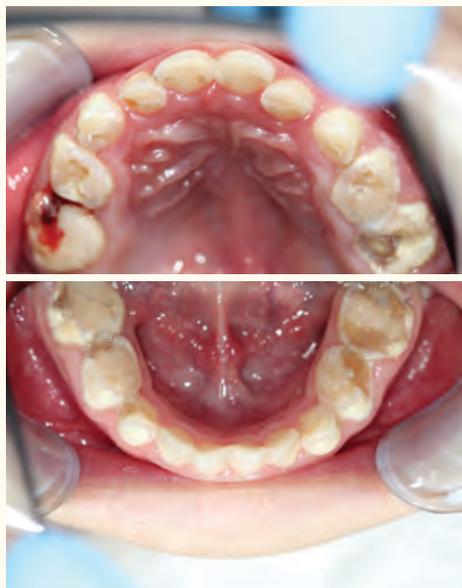
CONGENITAL HEART DISEASE

Children with congenital heart disease may experience challenges prioritising their oral care due to the comparatively greater concern of their complex cardiac condition. Unsurprisingly, most studies chart an increase in caries prevalence and untreated dental disease amongst children with congenital heart disease despite preventive efforts².

Poor oral health can have serious implications for the child's general health, as dental disease can be a source of bacteria in the child's circulating blood (bacteraemia) and may contraindicate crucial cardiac surgery or cause its postponement.

Antibiotic prophylaxis is indicated for some cardiac conditions prior to undergoing invasive dental procedures, to reduce the risk of infective endocarditis. However, antibiotic prophylactic guidelines do agree and stress that the vast majority of infective endocarditis incidents by oral bacteria are most likely to be caused by bacteraemia introduced during routine daily activities (e.g., tooth brushing, flossing and chewing), rather than a single dental procedure.

Hence, the regular maintenance of optimal oral health and hygiene to reduce the incidence of bacteraemia from daily activities plays an increasingly crucial role in protecting the child's health, as compared to consuming prophylactic antibiotics prior to undergoing a dental procedure.



(Above) Dental caries, tooth wear and dental erosion in a four-year-old patient with intellectual disability.

CANCER

A frequently documented source of sepsis in the immunosuppressed cancer patient is bacteraemia via the mouth. Intervention is early and usually aggressive, aimed at minimising the risk of oral and associated systemic complications.

Dental interventions for the patient with cancer usually involve:

- evaluation prior to commencing cancer treatment, to stabilise or eliminate existing and potential sources of infection and irritants in the mouth, and advise oral care and preventive measures;
- oral care during cancer treatment to manage adverse effects of chemotherapy and radiotherapy, such as mucositis;
- post-treatment follow up to manage the medium and longer-term effects of cancer treatment, which can include dry mouth due to reduced saliva flow, reduced mouth opening, and dental anomalies or growth defects.

DIABETES

For children with diabetes, the oro-systemic link between diabetic control and periodontal health is fairly well-established, and the relationship between diabetes and periodontal disease goes both ways.

Children with well-controlled diabetes have a similar periodontal status to non-diabetics; however, those with poor glycaemic control are at comparatively higher risk of severe periodontal disease. Similarly, periodontal infection also has an adverse effect on glycaemic control. There is evidence that bacteraemia associated with periodontitis may increase insulin resistance and the destruction of islet cells of the pancreas. Consequently, periodontal infections may increase insulin resistance in children with diabetes³.

Patients with poorly controlled diabetes are at particular risk of dental problems such as increased gingival bleeding and inflammation, rapid recurrence of deep gum pockets, less favourable response to dental therapy, recurrent gingival abscesses, increased susceptibility to oral infections, and poor oral wound healing. Management of periodontal health centers on good glycaemic control and oral health practices.

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Dr Chay Pui Ling, Associate Consultant, Dental Service, KKH

Dr Chay Pui Ling completed a Bachelor of Dental Surgery at the National University of Singapore. She further pursued and completed a Doctor of Clinical Dentistry at the University of Melbourne, Australia, with clinical training at the Royal Dental Hospital of Melbourne and The Royal Children's Hospital. Dr Chay's current interests include dental management of medically compromised children and children with special needs.



Getting Personal: Engaging Patients In Healthcare Decision-Making

By Ms Ang Lee Beng and Ms Gina Tan

Modern technology and treatment modalities have enabled medical and healthcare professionals to influence the course of illnesses. However, patients and their families often have preferences about their course of treatment which are reflective of their personal goals, priorities, values and beliefs.

As part of a nationwide effort towards helping Singaporeans live dignified and meaningful lives, healthcare teams at KK Women's and Children's Hospital (KKH) are taking broader steps to engage patients and their families in healthcare decision-making through advance care planning.*

TRANSFORMING THE PRACTICE OF PATIENT CARE

Advance care planning involves a series of frank conversations between a certified facilitator, patients and their loved ones, centering healthcare decision-making on the patient's preferences during their healthcare journey. This helps patients and their families to:

- Understand the medical condition and potential future complications,
- Be aware of the options for future medical management,
- Reflect on their personal goals, priorities, values and beliefs,
- Consider the benefits and burdens of current and future treatments, and
- Discuss the patient's choices with family/loved ones and healthcare providers.

* Not to be confused with an advance medical directive (also known as a "living will") which is a legal document.

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COMPASSIONATE CARE MAKES A DIFFERENCE

At KKH, between April 2015 and 2016, more than 120 women and child patients and their families benefited from advance care planning discussions. These included women with conditions such as gynaecological and breast cancer and children with neurological, cancer and cardiac conditions. The youngest patient was a few weeks old.

THE BENEFITS OF ADVANCE CARE PLANNING AMONGST KKH PATIENTS ARE OBSERVED AS FOLLOWS:

1 Early introduction of advance care planning allows patients and their families more time to deliberate on their preferred course of medical management prior to an anticipated event.

2 The discussions present opportunities to clarify individual goals of care, and provide patients a strong sense of control. This provides avenues to address "taboo" topics, such as the patient's preferred place of care and death, and any differences between the patient's and their loved ones' preferences.

3 Open communication helps to minimise anxieties of the unknown, which can be especially helpful for children, who often wonder about dying, life after death, and what happens thereafter.

4 The healthcare team is afforded a clearer picture of the patient's values and wishes about their care, such as prioritising quality of life over more life-prolonging treatment, and the desire to avoid unnecessary suffering.

RESPECTING CULTURAL PERCEPTIONS

There are concerns about whether advance care planning should be introduced to patients and families. Particularly since cultural, ethnic and religious factors have been shown to strongly influence views on end-of-life care – including the Chinese cultural superstition that talking about death and dying is inauspicious and brings bad luck¹.

Due to this cultural perception of the power of the spoken or written word, some patients may decline advance care planning during active treatment, or if they feel well. Still others may not wish to engage in verbal discussion or to document their preferences. Despite these reservations, there is still positive feedback received from patients and caregivers.

In the paediatric context, it may be perceived that the discussion may be discouraging or burdensome to patients and family members, and may indirectly affect the child's zest for life².

However, research shows that many parents consider the possibility of withdrawing life support even prior to discussion with the healthcare team³. This supports our belief that many parents do understand the implications of their child's diagnosis and are weighing the benefits and burdens of treatment.

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Ms Ang Lee Beng, Master Medical Social Worker, Department of Medical Social Work, KKH

With a Masters of Social Science (Social Work) from National University of Singapore, Ms Ang Lee Beng has journeyed alongside patients at KKH for more than 16 years, providing psychosocial support. Ms Ang is especially passionate about helping patients with cancer and HIV to live their lives to the fullest.



Ms Gina Tan, Senior Medical Social Worker, Department of Medical Social Work, KKH

Ms Gina Tan graduated with a Masters of Social Work from SIM University, Singapore. With great breadth of experience in medical social work, she is committed to providing holistic and family-centred support to paediatric patients and those with disabilities.

IMPROVING CARE FOR SERIOUS ILLNESSES

Advance care planning is greatly beneficial during long-term care or end-of-life situations, creating a safe and compassionate space for patients and their families to voice their goals and priorities for care. Documenting these choices assists the healthcare team to put the best interests of the patient into practice in the event they are unable to make decisions, and/or communicate their wishes to others.

Due to its comprehensiveness, advance care planning is increasingly regarded as the gold standard in the holistic care of patients with life-limiting illnesses⁴.

LIVING LIFE TO THE FULL

As the model for the implementation of advance care planning continues to evolve alongside patient needs, we continue to closely evaluate outcomes such as treatment and care preferences, patient and family experience, and knowledge and awareness.

Much remains to be done to better educate the public and patients on the benefits of advance care planning, and to improve their comfort level with the concept. To that end, every healthcare professional has a part to play in engaging patients at appropriate times during their healthcare journey, and helping them to understand the options that are available to them.

By taking the time to get personal with our patients, we can continue to provide care that honours their wishes and helps them live their lives to the fullest.

The best time for caregivers to be engaged on the issue is usually when the patient is in a stable condition, as the caregiver is the least stressed then, and thus better mentally and emotionally prepared for the discussion.



Four-year-old En Ning (centre) and her mother (left) having a discussion with Senior Medical Social Worker and advance care planning facilitator, Ms Gina Tan (right).

Antley Bixler syndrome: A Case Study

Four-year-old En Ning was born at 34 weeks with Antley Bixler syndrome, a rare genetic disorder characterised by craniofacial malformations and additional skeletal abnormalities. In addition, she also has hearing loss. To explore options for En Ning's care and health outcomes, her parents met with her medical team and advance care planning facilitator to discuss their preferred course of medical management.

"We wanted to try to plan as much as possible for En Ning's healthcare, and it was helpful and reassuring to have an open and thorough discussion with her care team on the future healthcare decisions that we may need to make for En Ning," said En Ning's mother.

While the discussion of possible deterioration in a loved one is never an easy conversation to have, the best time for caregivers to be engaged on the issue is usually when the patient is in a stable condition, as the caregiver is the least stressed then, and thus better mentally and emotionally prepared for the discussion.

En Ning has undergone multiple surgeries, and will continue to require frequent follow-up and more corrective surgeries as she grows and develops. Under the devoted care of her parents, and with support from her KKH care team, En Ning is happily attending special school and rehabilitation sessions.

Turning The Tide

KKH pilots a medical education and training programme to combat maternal and infant deaths in Tiruchirappalli, India.

By Rebecca Tse



LOCATION:

TIRUCHIRAPPALLI

THE FOURTH-LARGEST DISTRICT IN THE STATE OF TAMIL NADU, India

The fourth-largest district in the state of Tamil Nadu, India, Tiruchirappalli has long struggled with high maternal and infant mortality rates. To enhance antenatal care and maternity services, KK Women’s and Children’s Hospital (KKH) is piloting a programme to provide local healthcare professionals learning opportunities to build their capacity to provide care – and the training to lead in medical education themselves.

Since 2015, KKH teams have been conducting medical education and training to address gaps in Tiruchirappalli’s healthcare practices and equip local healthcare professionals to better tackle obstetric and neonatal emergencies. These include interactive lectures and case discussions, workshops and simulation training programmes.

“Our ultimate goal is to help Tiruchirappalli’s healthcare system gradually achieve self-sustainable progress. Through building teamwork and capacity, we are witnessing considerable improvement in the operations of the labour wards and neonatal units within the local healthcare facilities,” says Dr Shephali Tagore, Senior Consultant, Department of Maternal Fetal Medicine and Director, International Medical Programme (Obstetrics and Gynaecology), KKH.

POPULATION

2.7 MILLION

BIRTH RATE



40,000 PER YEAR

MATERNAL MORTALITY RATE:



72 PER 100,000

MAIN CAUSES OF MATERNAL MORTALITY:



POSTPARTUM HAEMORRHAGE, PULMONARY EMBOLISM AND SEPSIS

“The main contributing factors of maternal and neonatal morbidity and mortality in India are postpartum haemorrhage, pre-eclampsia and sepsis,”

Dr Deepak Mathur
Senior Consultant, Department of Women’s Anaesthesia, KKH

BUILDING TEAMWORK AND READINESS

The Tiruchirappalli pilot programme is part of the ‘Enhancing Maternal Child Health Services’ project to enhance antenatal care and maternity services in Tamil Nadu. The three-year partnership includes Singapore International Foundation (SIF); SingHealth; the Directorate of Public Health and Preventative Medicine, Tamil Nadu; and various local hospitals and primary health centers.

“The main contributing factors of maternal and neonatal morbidity and mortality in India are postpartum haemorrhage, pre-eclampsia and sepsis,” explains



A/Prof Anette Sundfor Jacobsen (second from right), Senior Consultant, Department of Paediatric Surgery, and Director, International Medical Programme (Paediatrics), KKH, presents a certificate to a midwife upon completion of a simulation training course.

Dr Deepak Mathur, Senior Consultant, Department of Women's Anaesthesia, KKH. "To effectively manage these emergency situations, a high level of preparedness, cross-disciplinary teamwork and communication is crucial to achieve optimal clinical outcomes."

To that end, simulation training has proven to be highly effective in facilitating learning and encouraging multidisciplinary teamwork and communication. This hands-on method of training allows repeated practice in a non-threatening environment, and increases the readiness of participants to deal with real medical emergencies collaboratively. Post-exercise, debriefs have also proven invaluable in enhancing the participants' critical-thinking skills and knowledge in dealing with emergencies.

LAYING FOUNDATIONS FOR SUSTAINABLE CHANGE

"Beyond clinical care education, an important part of our mission in Tiruchirappalli is to equip local healthcare professionals with the skills to train and to teach," says Senior Nurse Clinician Ms Lim Bee Leong, Neonatal Intensive Care Unit, KKH. "Openness and determination are necessary to bring about change in providing better care for women and children."

In July 2016, a KKH team visited Tiruchirappalli to conduct a 'Train the Trainers' programme for the second time,

reiterating key aspects of teamwork and simulation training, and identifying local master trainers and fostering foundational leadership skills to enable them to spearhead simulation training programmes in their respective hospitals.

The 'train the trainer' concept has been integral in empowering programme participants to implement education and simulation training within their own primary and tertiary health centers. To date, 31 clinician and nurse master trainers have been identified and mentored to deliver simulation training alongside the KKH team.

As a final step, the master trainers will undergo cascade training to ready them to run simulation training programmes independently, and improve clinical expertise in maternal and neonatal care in their community.

"Since its inception, the response to KKH's medical education and training programme in Tiruchirappalli has been overwhelmingly positive. We are heartened by the local medical fraternity's thirst for knowledge and enthusiastic participation," says Dr Ku Chee Wai, Resident, Department of Obstetrics and Gynaecology, KKH.

"Despite the challenges they face, such as severely limited resources of manpower, equipment, transport and facilities, the healthcare professionals in Tiruchirappalli demonstrate great resilience in coping with emergencies, adds Dr Kwek Lee Koon,

"Beyond clinical care education, an important part of our mission in Tiruchirappalli is to equip local healthcare professionals with the skills to train and to teach."

Ms Lim Bee Leong
Senior Nurse Clinician,
Neonatal Intensive Care Unit, KKH

Resident, Department of Obstetrics and Gynaecology, KKH

Tried, tested and refined in the local environment, KKH's education and training pilot programme is continuing to expand across Tiruchirappalli and other centers in the South of India.

"It is our hope that this model will serve as a key blueprint for future partnerships with local health services to improve maternal and infant care across Tamil Nadu," says Dr Sonali Chonkar, Staff Physician, Department of Obstetrics and Gynaecology, KKH.

"We are greatly looking forward to the life-saving progress that India's healthcare professionals will bring about in their communities in the near future."



KKH team members together with local participants in the 'train the trainers' programme in Tiruchirappalli, India. Back row from left – Dr Ku Chee Wai, Dr Kwek Lee Koon, Ms Judith Wee, Ms Lim Bee Leong, Dr Karuna Mary Lionel, Dr Sonali Chonkar, Dr Deepak Mathur, Ms Patricia Chong, Ms Anna Tan, Dr Abdul Alim; Front row in black – A/Prof Anette Sundfor Jacobsen.

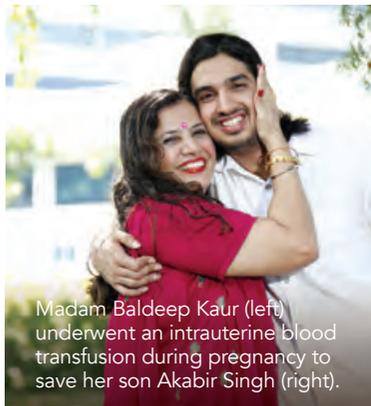
BORN IN KKH



Midwife Saleha Kamsan has delivered hundreds of babies – including her own nephew – throughout her 40 years at KKH.



Muhammad Nur'Darwish (centre) was born seven weeks premature, spending eight months in intensive care. Today, he is a happy, healthy five-year-old.



Madam Baldeep Kaur (left) underwent an intrauterine blood transfusion during pregnancy to save her son Akabir Singh (right).



Ms Lilian Kwok, Director of Nursery & Horticulture Outreach at NParks, is dedicated to greening up our City in a Garden.



Four-year-old Lau Yu Zhi at the playground during a hospital visit.



Assistant Director Nursing, Ms Thilagamangai, oversees the Delivery Suite at KKH, making a difference to the lives of women and children every day.



Mr Jimmy Yeo is one of the founding members of Caring Clown Unit – which makes regular appearances in KKH's paediatric wards to bring cheer to young patients.



Mr Samuel Lee, Southeast Asia's first successful IVF baby, was born in 1983.

PATIENTS. AT THE HEART OF ALL WE DO.



KK Women's and Children's Hospital
SingHealth

ABOUT KK WOMEN'S AND CHILDREN'S HOSPITAL

Founded in 1858, KK Women's and Children's Hospital (KKH) is a recognised leader in Obstetrics, Gynaecology, Paediatrics and Neonatology. The 830-bed academic medical institution is Singapore's largest tertiary referral centre for high-risk women's and children's conditions. More than 600 specialists adopt a multi-disciplinary and holistic approach to treatment, and harness compassion, medical innovations and technology to deliver the best medical care possible.

Accredited as an Academic Medical Centre, KKH is a major teaching hospital for all three medical schools in Singapore, Duke-NUS Medical School, Yong Loo Lin School of Medicine and Lee Kong Chian School of Medicine. The Hospital also runs the largest specialist training programme for Obstetrics and Gynaecology and Paediatrics in the country. Both programmes are accredited by the Accreditation Council for Graduate Medical Education International (ACGME-I), and are highly rated for the high quality of clinical teaching and the commitment to translational research.



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