

Care for *Life*



HOSPITAL SERVICES | HEALTH INFORMATION

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VOL3 | ISSUE2

REAL LIFE CASES

A Lifesaving Diagnosis

BACK ON TRACK

Management of Common Sports Injuries

CANCER ACROSS CULTURES

Examining Causes of the Disease

SHEDDING LIGHT ON HAEMODIALYSIS

Therapy for Better Quality of Life

HEALTHY MOTHER & BABY

THE IMPORTANCE OF POSTNATAL CARE





Care For Life

QUALITY HEALTHCARE

Since our inception in 1981, KPJ Healthcare Berhad (KPJ) has cemented a reputation as one of the leading healthcare providers in the region with more than 20 specialist hospitals in Malaysia and 2 in Indonesia providing promotive, preventive and curative medical services. KPJ's education arm has been awarded a University College status in 2011.

OUR STRENGTHS

- Availability of more than 800 medical specialists as well as nearly 8,000 supporting staff such as nursing, paramedic, pharmaceutical, technical and management services.
- Complementing the expertise of our specialists, our hospitals are equipped with the latest medical technology as well as facilities that allow us to offer a comprehensive set of medical services including cardiac, orthopaedics, oncology, bariatric surgery, and reconstructive and plastic surgery, among others.
- Our commitment to patient safety is reflected in 11 KPJ hospitals being accredited by the Malaysian Society for Quality in Health (MSQH) which is affiliated with the International Society for Quality in Health Care (ISQua), while other hospitals are in the process of being accredited.
- KPJ hospitals also implement the Integrated Management System (IMS), thus guaranteeing high standards in quality services, environmental safety and health management.
- The above mentioned qualities have enabled KPJ hospitals to attract 2.2 million outpatients and 220,000 inpatients in 2010, including a sizeable amount of foreign patients from all over the world.
- The upgrading of KPJ's education arm to KPJ International University College in 2011, clearly signifies KPJ's efforts to continuously strive for excellence. This official upgrade is a testament to our unceasing commitment to excellence, and is a well-deserved recognition of KPJ's efforts in healthcare education.

AWARDS AND ACCOLADES OF KPJ HEALTHCARE BERHAD



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KPJ NETWORK OF HOSPITALS

MALAYSIA

ACCREDITED BY MALAYSIAN SOCIETY FOR QUALITY IN HEALTH (MSQH)

- KPJ Johor Specialist Hospital (JSH)
- KPJ Ipoh Specialist Hospital (ISH)
- KPJ Ampang Puteri Specialist Hospital (APSH)
- KPJ Damansara Specialist Hospital (DSH)
- KPJ Selangor Specialist Hospital (SgorSH)
- KPJ Seremban Specialist Hospital (SSH)
- KPJ Perdana Specialist Hospital (PdSH)
- KPJ Kajang Specialist Hospital (KjgSH)
- KPJ Penang Specialist Hospital (PngSH)
- Kedah Medical Centre (KMC)
- KPJ Tawakkal Specialist Hospital (TSH)

MOVING TOWARDS ACCREDITATION

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- Kuantan Specialist Hospital (KSH)
- Taiping Medical Centre (TMC)
- Damai Specialist Hospital (DmSH)
- Kuching Specialist Hospital (KcSH)
- Sentosa Medical Centre (Sentosa KL)
- Kluang Utama Specialist Hospital (KUSH)
- Sabah Medical Centre (SMC)
- Sibiu Specialist Medical Centre (SSMC)

INDONESIA

- Rumah Sakit Medika Permata Hijau, Jakarta
- Rumah Sakit Bumi Serpong Damai, Jakarta

EDUCATION

KPJ International University College (KPIIUC)

- Main Campus (Nilai, N.Sembilan)
- Branch Campus (Johor Bahru, Johor)





"I am optimistic that we can still accomplish much more, and turn KPJ Healthcare into a truly international brand."

Caring for the Future

30 years of operations for any company is a significant milestone, but it should not be a sign to sit back and relax. Enriched and encouraged by this three decades of experience in healthcare management, we look towards the next decade ahead and determine what we wish to accomplish within that period.

This continual endeavour reflects our commitment to excellence. We have always striven to deliver the best service to our customers and have steadfastly raised the bar as high as we can. That we have come this far and succeeded in these efforts, time and again, brings me great joy.

KPJ has grown from operating just one hospital in Johor to its present position as Malaysia's largest private healthcare provider with more than 20 hospitals locally and two more in Indonesia. Like a proud parent, I have seen this development with my own eyes from the very beginning, and I am optimistic that we can accomplish much more and turn KPJ Healthcare into a truly international brand.

Even as we continue to develop strategic growth plans for the future, KPJ team members including medical consultants, nurses and allied health professionals remain committed in ensuring that the next generation receives only the best care in our

hospitals. From prenatal care to childbirth, from postnatal care to pediatrics, we are with you and your child every step of the way. We are helping to safeguard the future of the world – our children.

Aside from providing top class medical treatment and hospital care, KPJ Healthcare has always been keen to explore the provision of quality geriatric care. Leveraging on our involvement as majority shareholder of the Jeta Gardens Retirement and Aged Care Resort in Brisbane, Australia, KPJ plans to establish aged care and retirement villages in Kuala Lumpur, Johor and other parts of Malaysia. The residents will be able to live out their golden years in peace and enjoy the quality care they have always associated with the KPJ name.

As always, I greatly appreciate the contribution of everyone in KPJ for giving their time and effort to ensure we accomplish our goal of caring for life, as well as to our customers for continuing to believe in us. To you, our customers, I wish to say: Thank you. On the road to the future which you and your children create, you can trust KPJ to always be by your side.

YBhg Datin Paduka Siti Sa'diah Sheikh Bakir
Managing Director, KPJ Healthcare Berhad



Accredited Hospitals



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FUNNY BONES
 Jokes, trivia and puzzles that will make your day brighter and lighter.



New Friends of KPJ Healthcare Berhad

Upin & Ipin The Musical 2012

MALAYSIA'S favourite twins, Upin and Ipin, are now "friends" with country's preferred healthcare provider. KPJ Healthcare Berhad was the main sponsor of Upin & Ipin The Musical – a stage production based on a most successful local 3D animation. Produced by Les' Copaque Production Sdn Bhd and CTRA Production, the musical which was staged at Istana Budaya from 14th April until 6th May involved a cast of 55 actors and took a year to make.



To promote the musical, the cast members made an appearance at the launch of the Cutie Club Card which took place at KPJ Ampang Puteri Specialist Hospital on 31st March, during World Health Day 2012. At the event, which was attended by VIP guests including Tun Dr Siti Hasmah Mohd Ali, the cast entertained the crowd with skits and songs from the musical.

According to Managing Director, Datin Paduka Siti Sa'diah Sheikh Bakir, KPJ hospitals nationwide receive up to half a million young patients every year. The Cutie Club KPJ membership is aimed at patients 6-12 years of age, entitling card holders to a 10% discount on room rates and 5% discount as outpatients, as well as for pharmacy, radiology and physiotherapy services.

With Upin and Ipin's status as children's icons, it is hoped that KPJ Healthcare Berhad's 'friendship' with the twins will promote the professional healthcare services of KPJ hospitals to a younger audience, and encourage a wider appreciation of health education.

Top: The Upin and Ipin mascots visited the paediatrics ward of KPJ Selangor Specialist Hospital with Datin Paduka Siti Sa'diah after a press conference announcing KPJ's sponsorship for Upin & Ipin the Musical.

Bottom: KPJ Healthcare Berhad's sponsorship of Upin & Ipin The Musical was announced during the World Health Day 2012 celebration.



KPJ HEALTHCARE BERHAD (247079-M)
(A Member of Johor Corporation Group)

Care For Life

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	KPJ Penang Specialist Hospital		Kuching Specialist Hospital
	Taiping Medical Centre		Sibu Specialist Medical Centre
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	KPJ Selangor Specialist Hospital		Puteri Specialist Hospital
	KPJ Damansara Specialist Hospital		KPJ Johor Specialist Hospital
	Sentosa Medical Centre		Kluang Utama Specialist Hospital
	KPJ Tawakkal Specialist Hospital		KPJ Seremban Specialist Hospital
	KPJ Ampang Puteri Specialist Hospital		RS Bumi Serpong Damai, Jakarta
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Preventing Death by Dengue

THE incidence of dengue fever has increased dramatically since the 1960s, infecting between 50 and 100 million people every year. In a number of cases the illness can develop into the acute dengue hemorrhagic fever variation, which can result in bleeding, low levels of blood platelets and blood plasma leakage. In order to forecast who will develop the more severe form of dengue fever, researchers from the University of Texas Medical Branch devised the first accurate predictive model to differentiate between dengue fever (DF) and dengue hemorrhagic fever (DHF).

Approximately 500,000 people are hospitalised each year due to DHF, with nearly 12,500, many of whom are children, ultimately dying of the disease. Dr Allan Basier, Director of The University of Texas Medical Branch's Institute for Translational Sciences, believes that personalised

medicine will allow doctors to provide better individual diagnostics and more effective treatment for common diseases. "We have long known that dengue has many manifestations, from asymptomatic to a flu-like state to a life-threatening condition. If we could figure out early a patient's susceptibility to the deadly form, we could save thousands of lives," he said.

A team of protein biochemists and bioinformatics specialists found that cytokine IL-10, a protein involved in immune response, and reduced platelet and lymphocyte counts were key indicators of DHF. Research also showed that the most successful method of predicting DHF was based on IL-10, as well as seven other proteins (namely tropomyosin, complement 4A, immunoglobulin G, fibrinogen and three forms of albumin), and it was effective in 100% of the cases studied. "We've proved it is feasible to identify predictive proteins associated with DHF," said Dr Brasier. Further testing is still required, but these firm predictors of dengue hemorrhagic fever may assist doctors to provide earlier treatment for DHF, and thereby saving more lives.

A Military health-care worker provides vaccination against yellow fever and dengue in San Lorenzo, a city located east of Asuncion, Paraguay.

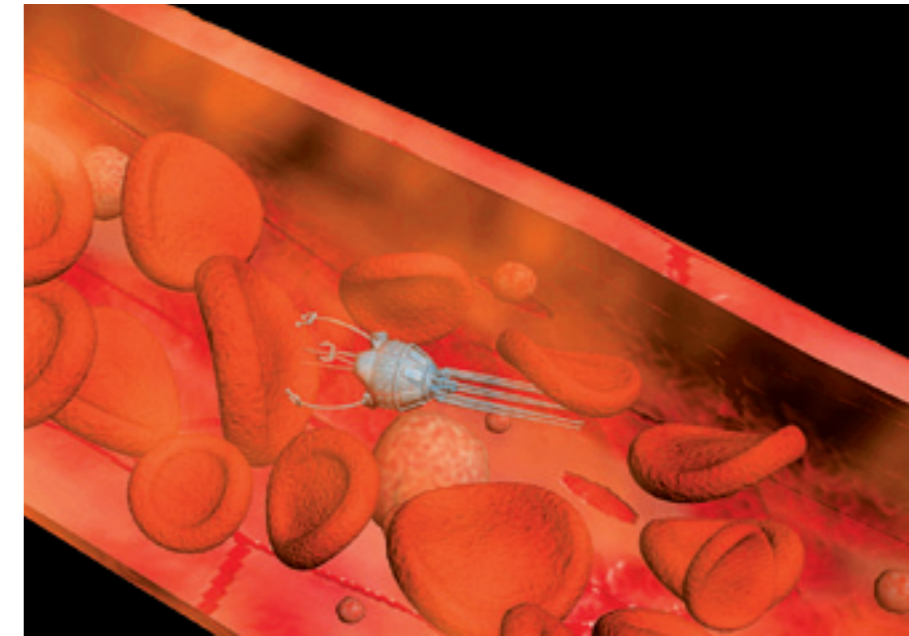


Cancer Fighting Nanobots

CANCER is a disease which can affect anyone without regard to age, gender, class or lifestyle choices. Because it is one of the most insidious illnesses today, contemporary medical research is determined to find a cure for the disease sooner rather than later. Recently, a major breakthrough by Harvard scientist indicates nanotechnology as a crucial component in treating diverse forms of this disease.

Shawn Douglas, Ido Bachelet and George Church of the Harvard Medical School's Wyss Institute for Biologically Inspired Engineering and Department of Genetics published a peer-reviewed study in the journal *Science*, which described a series of experiments using nanotechnology to treat maladies such as cancer that have proved difficult to treat with conventional medicine.

Unlike conventional robots which are created using materials such as metal and plastic, the researchers have created nanobots using DNA origami or overlapping DNA chains to form a barrel-like shape which is able to incorporate a quantity of cancer antibodies. Programmed to recognise specific types of cells through the use of aptamers, which are strands of molecules that can be engineered to recognise certain types of cells such as cancer, the nanobots release the



antibodies they contain when coming into contact with the target cells. In the examples described in the peer-reviewed study, nanobots successfully delivered antibodies to lymphoma, leukemia and other types of cancer cells, effectively stopping their growth.

Cancer is an extremely pervasive disease in Malaysia, affecting approximately 30,000 people each year. Leading the battle are facilities such as the KPJ Damansara Specialist Hospital Oncology Centre which provides cutting-edge cancer treatment including surgery, radiotherapy, chemotherapy and hormone therapy, as well as counselling services for both patients and their families.

Hepatitis B involves the inflammation of the liver but can be prevented through three doses of the vaccines spaced between a 2-6 month duration.

Therapy for Renal Failure Haemodialysis

KIDNEYS are the unsung heroes of the body. Their function is to remove toxins and excess water from the blood in the form of urine, and make the hormones that maintain blood pressure, produce red blood cells and keep the bones healthy. Although people have two kidneys, their function can be carried out by just one. *Care for Life* explains the inner workings of haemodialysis, its advantages and disadvantages and where to get it done.

WHAT IS HAEMODIALYSIS?

When kidneys are severely damaged by diabetes, high blood pressure (hypertension), infection or inflammation or affected by stones or cysts so that their function is reduced to below 15%, they are no longer able to filter the blood and make urine. Toxins then build up in the body along with excess fluid, leading to end-stage kidney (renal) disease (ESRD), or kidney failure when the kidneys shut down.

According to health authorities, the number of Malaysians suffering from end-stage renal failure has increased from more than 40 in 1980 to more than 12,000 today. The number of chronic kidney patients in the country who have to undergo dialysis has increased from 79 per million in the population in 2000 to 146 per million in 2009, said Datuk Seri Liow Tiong Lai – Malaysian Health Minister. Based on the National Renal Registry, the total number of patients on dialysis has grown from 6,689 in 2000 to 21,159 in 2009.

A patient requiring haemodialysis must first undergo surgery to create an access for withdrawing blood.



There are basically two types of renal replacement therapy or treatment that replaces kidney function. One type is haemodialysis which filters waste, removes extra fluid and balances electrolytes comprising sodium, potassium, bicarbonate, chloride, calcium, magnesium and phosphate. Haemodialysis is usually recommended for people who cannot cope with carrying out peritoneal dialysis, such as those who are visually impaired, have dementia or are in a poor state of health.

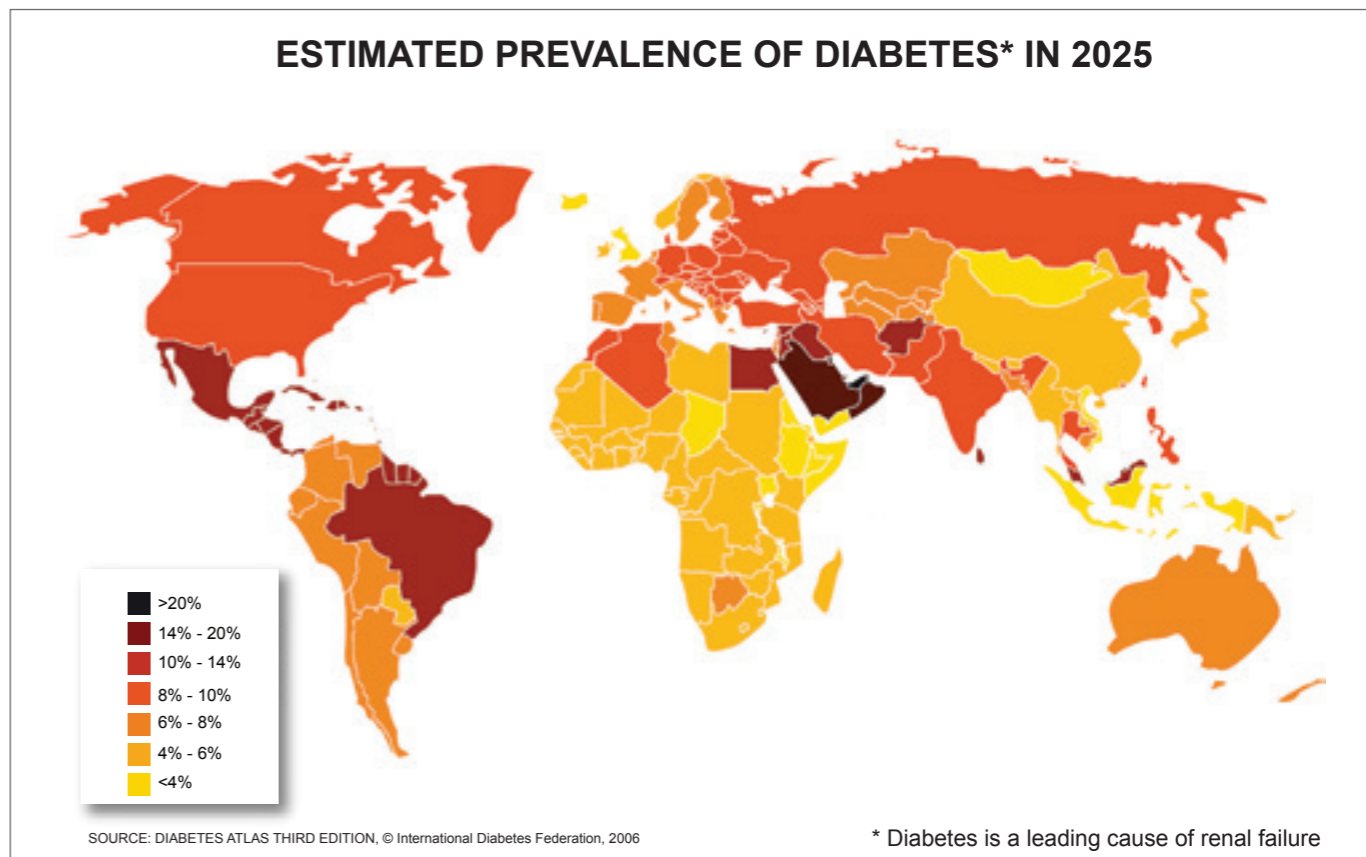
The other type is peritoneal dialysis when blood vessels in the abdominal lining (peritoneum) fill in for the kidneys, with the help of a fluid (dialysate) that flows into and out of the peritoneal space. This is usually recommended as the first form of treatment for children who are two years of age or above, those who still have some limited kidney function or adults who do not have other serious health conditions, such as heart disease or cancer.

HOW IS ACCESS CREATED?

In haemodialysis, blood is drawn and filtered through a man-made membrane called a dialyser, or artificial kidney, and then the filtered blood is returned to the body. The average person has about 10 to 12 pints of blood, but during dialysis only one pint (about two cups), is outside the body.

There needs to be an access created to get the blood from the body to the dialyser and back to the body, and there are three types.

The first is an Arteriovenous (AV) fistula. This requires advance planning because a fistula takes some time after surgery to develop – in rare cases, as long as 24 months. The advantage is that a properly formed fistula is less likely than other kinds of vascular access to form clots or become infected, and properly formed fistulas tend to last many years – longer than any other kind of vascular access. A surgeon,



creates an AV fistula by connecting an artery directly to a vein, usually in the forearm, causing more blood to flow into the vein. As a result, the vein grows larger and stronger, making repeated needle insertions for haemodialysis treatments easier.

If the patient has small veins that won't develop properly into a fistula, an AV graft which is a vascular access that connects an artery to a vein using a synthetic tube, or graft, can be implanted under the skin in the patient's arm. The graft becomes an artificial vein that can be used repeatedly for needle placement and blood access during haemodialysis. A graft doesn't need to develop as a fistula does, so it can be used sooner after placement, often within 2 or 3 weeks. Compared with properly formed fistulas, grafts tend to have more problems with clotting and infection and need replacement sooner. However, a

well-cared-for graft can last several years.

If the kidney disease has progressed quickly, a patient may not have time to get a permanent vascular access before starting haemodialysis treatments. In such a case, a venous catheter which is a tube inserted into a vein in the neck, chest, or leg near the groin can provide temporary access. It has two chambers to allow a two-way flow of blood, and once a catheter is placed, needle insertion is not necessary. However, they are not ideal for permanent access. They can clog, become infected, and cause narrowing of the veins in which they are placed. If a patient needs to start haemodialysis immediately, a catheter will work for several weeks or months while a permanent access develops.

The AV fistula is the access most recommended by the dialysis community, but the patient and doctor will decide which access is best.

The map shows an estimate of how prevalent diabetes will be in the year 2025.

HOW IS HAEMODIALYSIS PERFORMED?

When you go for haemodialysis, a nurse or technician will check your vital signs and record your weight. The weight gain will show how much excess fluid needs to be removed during the treatment. You are then hooked to the machine. If you have a vascular access (AV fistula or AV graft) two needles are used, one to take blood out of the body, the other to funnel it back. If you have a central venous catheter, two tubes are connected to the tubes that lead to the dialyser and back to the body. Once you are hooked up, the dialysis machine is programmed and treatment begins.

The dialysis machine acts as a big computer and a pump. It keeps track of blood flow, blood pressure, how much fluid is removed and other vital information, and mixes the dialysate, or dialysis solution which is the fluid bath that goes into the dialyser to help rid the blood of toxins. The pump keeps the blood flowing by creating a pumping action on the tubes.

A modern haemodialysis machine.



HOW DOES HAEMODIALYSIS WORK?

The key to haemodialysis is the dialyser, also known as the artificial kidney because it filters the blood – the job of the kidneys. It is a hollow plastic tube about a foot long and three inches in diameter, containing many tiny filters. These come in different sizes so doctors can prescribe the best one for their patients. There are two sections, the section for dialysate and the section for the blood, divided by a semi-permeable membrane so that the two don't mix together. The membrane has microscopic holes that allow water and waste to pass through but not blood cells.

Dialysate, also called dialysis fluid, dialysis solution or bath, is a solution of pure water, electrolytes and salts, such as bicarbonate and sodium, whose purpose is to pull toxins from the blood into the dialysate. This works through a process called diffusion. In the blood of a haemodialysis patient, there is a high concentration of waste, while the dialysate has a low concentration. Due to this difference, the waste will move through the semi-permeable membrane to create an equal amount on both sides. The dialysis solution is then flushed away along with the waste. The electrolytes in the dialysis solution are also used to balance the electrolytes in the patient's blood. Extra fluid is removed through a process called filtration, when the fluid is separated by higher pressure on the blood side than on the dialysate side.

HOW OFTEN IS HAEMODIALYSIS DONE?

Blood needs to flow through the dialyser for several hours to adequately clean the blood and rid the body of excess fluid, and in-centre haemodialysis is generally done three times a week for about four hours each session. Your doctor will prescribe

how long your treatments will be, usually between 3 to 5 hours, most commonly 4 hours. Some feel that dialysis takes a long time, but compare this with healthy kidneys which work 24 hours a day and 7 days a week. Dialysis must do the job in only 12 or so hours a week.

Talk to your doctor if you are interested in home haemodialysis (HHD) or in-centre nocturnal dialysis. You may also want to check if additional treatment, such as the longer nocturnal haemodialysis or short daily haemodialysis will be covered by your insurance.

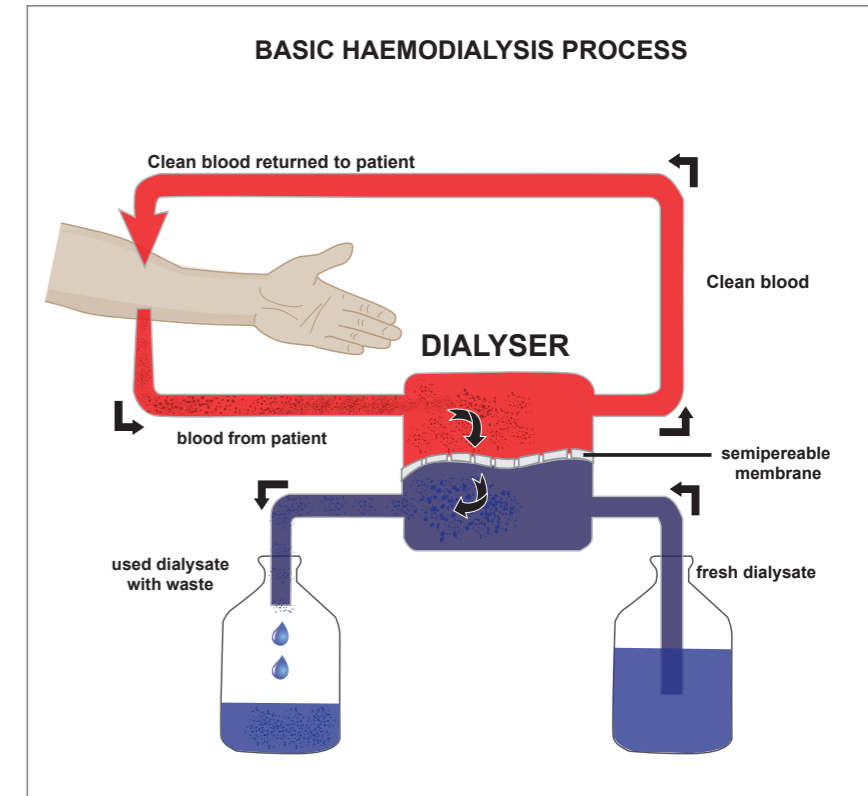
ADVANTAGES AND DISADVANTAGES OF HAEMODIALYSIS

Those who choose in-centre haemodialysis will have their treatment monitored by trained professionals. You can also pursue leisurely activities, and have four dialysis-free days a week.

However, the disadvantage is that you will have to travel to and from the centre three times each week and have to plan your life around your dialysis sessions. What most people find difficult is monitoring their diet, where restrictions include limiting foods that contain phosphorus, potassium and sodium, and drinking a limited amount of fluid.

People who choose to perform haemodialysis at home enjoy the feeling of control they have over their lives. Instead of going to the dialysis centre at a certain time, they schedule when to perform haemodialysis.

All dialysis treatments have their advantages and disadvantages. Based on your lifestyle and medical needs, you and your doctor can discuss your options and decide which one is right for you. However, haemodialysis alone will not provide a complete treatment for those with kidney failure. Diet and fluid restrictions need to be followed, and medicines may need to



A basic haemodialysis machine works by drawing blood out of the body through a dialyser which functions as an artificial kidney, filtering wastes and access fluids from the blood, before returning it to the body.

be taken to replace other functions of the kidneys, such as regulating blood pressure and stimulating production of red blood cells to prevent anaemia.

WHERE CAN YOU GO FOR HAEMODIALYSIS?

KJP Healthcare Berhad has haemodialysis units at its various hospitals around the country. These units provide dialysis for patients with acute renal failure (who are admitted to the ward or ICU) or those with end stage kidney failure that requires life-long dialysis treatment. They also cater to patients from other areas on business or holiday.

These units come equipped with state-of-the-art dialysis machines and have a Waterman reverse osmosis water treatment system. This ensures safe dialysis and avoids long term complications due to poor water quality.

A Chance for a Better Quality of Life

Dr Jeyabalan on the benefits of haemodialysis

FOR many patients with chronic kidney failure, the very mention of haemodialysis evokes a negative reaction. Speaking to Care for Life, Dr Jeyabalan Velayutham – Physician & Nephrologist of **KPJ Damansara Specialist Hospital** explains that patients need to look at what they stand to gain by undergoing the procedure.



MECHANICAL BLOOD CLEANSING

When the kidneys fail to perform the natural function of removing waste products and excess water from the blood, the individual may have to undergo a procedure called haemodialysis where blood cleansing is done by a machine. The procedure involves drawing out a few ounces of blood from the body at a time, through a dialyser – a special filter that acts as an artificial kidney, filtering away harmful wastes, extra sodium and fluid to help regulate blood pressure and keep body chemicals in balance.

There are two types of haemodialysis that cater to both acute and chronic kidney failure but both types of haemodialysis, although involving different machinery, use the same principles. In acute cases, the procedure is carried out to treat sudden kidney failure caused by some other disease. It is done more slowly and gently, without affecting the patient's blood pressure, for 24 to 48 hours continuously over a short term period, until the patient regains normal kidney function.

Dr Jeyabalan Velayutham – Physician & Nephrologist of KPJ Damansara Specialist Hospital advises chronic kidney failure patients to overcome the inherent fear of haemodialysis as the procedure will be beneficial to them and improve their quality of life.

However, patients whose kidneys are irreversibly damaged and have chronic kidney failure, haemodialysis becomes a lifelong treatment that must be done three times a week, with each session usually lasting three to four hours.

In cases of chronic kidney failure, it is important for patients to be examined earlier on to see if they are suitable for haemodialysis. "Before we can start a patient on haemodialysis, an access point to the blood must first be created. Patients must undergo a surgical procedure to create an AV (arteriovenous) fistula, where a surgeon joins an artery and a vein together to bypass the capillaries. After around four to six weeks, the fistula becomes enlarged and hardened so two needles can be inserted, one to draw blood and one to return it," Dr Jeyabalan explained. "Sometimes, the creation of a fistula may be unsuccessful. In such cases, an AV graft will be done, where an artificial vessel is inserted to join the artery and vein," he added.

Stressing the importance of preparation, Dr Jeyabalan cautioned, "For patients who came in too late for treatment, access will have to be created by inserting a synthetic catheter with two lumens into a large vein at the neck or groin. We try to avoid this method because not only is it uncomfortable for the patient, there is a risk of infection and bleeding in the vein. That is why we often advise patients approaching end stage kidney failure to prepare for haemodialysis."

POSSIBLE COMPLICATIONS

Like most medical procedures, haemodialysis is not for everyone and definitely not risk-free. "The main concern before prescribing haemodialysis are the possible complications associated with the cardiovascular system. A person with a weak heart is generally not a suitable candidate for the treatment, because the process leaves the body with insufficient blood and water, making the heart work harder. This can lead to low blood pressure and cardiovascular collapse. Heart patients are either prescribed another form of dialysis or they will have to be monitored carefully," explained Dr Jeyabalan.

Because the procedure involves drawing blood, patients are at risk of contracting blood borne infections, especially Hepatitis B and C, as well as

HIV. This risk is heightened by haemodialysis centres that reuse dialysers. At KPJ hospitals, however, patients can have peace of mind because all dialysers are disposed of after a one-time use.

A BLESSING NOT A CURSE

For Dr Jeyabalan, perhaps the most difficult part of prescribing haemodialysis is getting patient compliance. "Patients often think of it as a curse. While it is true that it is a lifelong treatment, it is because their kidneys are not functioning and to wait for a kidney donor so an organ transplant can be performed can lead to many problems," he said.

Knowing how many patients often react with anger and grief, Dr Jeyabalan advised, "The problem most patients have is that they often compare being healthy with having to be dependant on a medical procedure. What they should be comparing is living with kidney failure and undergoing haemodialysis."

He further explained that without haemodialysis, a chronic kidney failure sufferer's health will deteriorate, and he or she will often experience shortness of breath and low appetite, or feel lethargic. "The quality of life for patients who choose to undergo haemodialysis is definitely superior to those who don't. The procedure should be regarded in a more positive light because it gives patients an opportunity to live a fairly normal life," he said.

FAST FACTS

Dr Jeyabalan Velayutham – Physician & Nephrologist of KPJ Damansara Specialist Hospital urges patients to consider the positive impact haemodialysis will have on their lives versus living with kidney failure. The following are some of his credentials:

- 1991 – Doctor of Medicine, Universiti Kebangsaan Malaysia
- 1997 – Masters in Internal Medicine, Universiti Kebangsaan Malaysia
- 1998 – Membership of the Royal Colleges of Physician, UK
- 1997-2000 – Lecturer in Internal Medicine and Nephrology, Universiti Kebangsaan Malaysia
- 1990-2000 – Consultant Nephrologist, MAA Medicare Charity Dialysis
- 2003-present – Physician & Nephrologist, KPJ Damansara Specialist Hospital



Healthy Mother, Healthy Baby

The Importance of Postnatal Care

CARRYING a child for nine months and then welcoming the newborn into the world is an immensely joyous occasion. However, this cause for celebration is also a significant transitional period for both the mother and baby.

In medical terms, the postnatal phase or postpartum period generally refers to the time immediately after the birth of a child and extends for about six weeks. During this period, the mother's body undergoes changes as hormone levels and uterus size returns to non-pregnant state. No longer relying on the mother for the umbilical cord's supply of oxygen and nutrients, the infant's tender and fragile body begins its adaptation of life outside the uterus.

To make this transition a smooth one, proper postnatal care for mother and child is of the utmost importance.

Welcoming a new member into the family is a momentous occasion that also comes with many life adjustments for the mother.



THE RECOVERY PERIOD

Since ancient times, various cultures have placed importance on the postpartum period. Intended as a period of recuperation for the mother, most traditional customs for postpartum care involve a home confinement for 30 to 40 days. In many eastern cultures, the welfare of mother and child are placed under the care of a 'confinement lady', a

A mother's physical and psychological health is important because it will affect her ability to care for her newborn.



hired helper or an elderly female relative who will see to the mother's diet and the infant's well-being.

During the confinement period, the mother will normally be prescribed a special diet and herbal tonics believed to facilitate milk production and increase haemoglobin levels, as well as being required to restrict certain activities considered to be harmful.

While modern medicine often transcends these traditions, healthcare professionals recognise that post-pregnancy care is of great benefit to the psychological as well as the physical health of the mother, both of which affect her ability to care for her baby.

First and foremost after delivery, the mother must be monitored for various medical conditions that may occur in the postpartum period. Physical health issues can be as minor and easily manageable as constipation and haemorrhoids to more serious complications like bladder infection and postpartum hypopituitarism due to blood loss. Of greater concern during this period of hormone fluctuation are mental illnesses such as clinical depression, posttraumatic stress disorder, or at worst, postpartum psychosis.

The first postnatal check-up is usually scheduled within a month after delivery for an assessment of the mother's overall condition. The check-up routine generally includes checking to see if the womb has shrunk, breast examination and weight assessment, along with blood pressure check and urine test. At this point, the recovery progress of abdominal wounds from a Caesarean section and perineum sutures as a result of episiotomy will also be assessed.

Aside from regular clinical visits, diet during the postpartum period also plays a crucial role, not only for the



Bathing a baby can make for a relaxing and bonding time for mother and child.

mother's recovery, but also for successful breastfeeding. A lactating mother requires approximately 500 extra calories per day and four litres of water to produce adequate breast milk. To replenish the body with much needed nutrients, a postpartum diet should be rich in protein, iron and calcium, primarily found in lean meats and low fat dairy products.

Mothers are also encouraged to start exercising as soon as they can, as physical activity is the best remedy for returning to pre-pregnancy shape. Plus, the release of endorphin hormones from exercise helps to curb mood swings and anxiety. Because of all the stress to the body during delivery, however, it is advisable for mothers to start their workout regime with light-impact and low-intensity activities such as brisk walking and yoga. As a general guideline, a doctor should be consulted before attempting any intense

physical activity in the first six weeks post-pregnancy.

In addition to addressing their own health related issues, new mothers need to be equipped with information about breastfeeding, reproductive health and dealing with all the life adjustments that arise as a result of the a new family member's arrival.

THE FIRST VISIT

Even before the mother's postnatal check-up, a baby's first trip to a paediatrician should be a week after his or her entry into the world, just as the umbilical cord stump dries and drops off. At the clinic, the baby will be weighed and measured to verify that the child is growing as expected. The doctor will then carry out a thorough head-to-toe physical examination, which includes measuring





the circumference of the baby's head, examining the fontanelles (soft spots between the bones of the skull), the size of the abdominal organs, feet alignment and spine vertebrae.

Additionally, the doctor will check if the baby's navel is healing and free of infection once the umbilical cord stump has fallen off. During the check-up, the doctor will also inquire about the baby's sleep cycle, bowel movement and feeding schedule. Apart from a comprehensive physical examination, the doctor may administer a Hepatitis B shot, if baby has not received one at birth, and provide parents with a list of

all the immunisation shots to be given in future.

A HELPING HAND

Busy juggling career and family life, many modern mothers find traditional confinement methods do not meet or agree with their lifestyle requirements. Often, they are living away from the traditional family support and do not have the option of assistance and care of a family member.

To lighten the load of new mothers, KPJ hospitals provide a wide range of services which cater to post-pregnancy and neonatal care beyond hospital stay. Through KPJ

Below:

Equally important as prenatal, proper postnatal care greatly impacts an infant's well-being.

Next page:

First-time mothers in particular must be equipped with the right information in order for them to be capable of independently caring for their infant.



New mothers need to be equipped with information about breastfeeding, reproductive health and dealing with all the life adjustments that arise as a result of a new family member's arrival.

Home Care services, recuperating mothers are given help in bathing, caring for the umbilical cord and advice on feeding and nurturing the new born. The range of services also include self-care advice for mothers on diet and postnatal exercise, as well as monitoring infants for signs of jaundice – a condition caused by a reduced liver function and evidenced by a yellowing of the skin.

Mothers who have undergone a Caesarean birth or experienced an episiotomy wound may also be cared for by professional nurses who will clean the wounds and monitor vital signs. In addition, home care reduces hospitalisation cost.

Caring for mothers and infants in the comfort and privacy of their home, KPJ Healthcare Berhad aims to provide health guidance and education to ensure mothers are in optimal health and capable of independently taking care of their newborns.



Early Bundles of Joy

Dr Ismail Haron discusses caring for the premature

THE birth of a child earlier than 37 weeks of gestation, also known as a premature birth, presents a lot of hurdles for the parents as well as doctors attending to the child. Dr Ismail Haron – Consultant Paediatrician & Neonatologist of **Puteri Specialist Hospital** shares with *Care for Life* the joy he finds in caring for newborns, especially premature infants.



In his work as a neonatologist, Dr Ismail Haron develops a strong bond with the premature infants he attends to as well as the parents.

FOR THE LOVE OF CHILDREN

When Dr Ismail reflected on his journey into the medical field, he recalled that his decision to become a doctor was purely one of practicality. Due to his family's financial circumstances, accepting a medical scholarship was the only option to a tertiary education that guaranteed future professional security. Looking back at his decision after two decades, Dr Ismail does not have the slightest regret. "I developed an interest in medicine because I enjoy being directly involved in caring for people," he said.

In fact, venturing into the medical field led him to discover a lifelong passion for paediatrics. "Being surrounded by children makes my life richer, and makes me feel younger," Dr Ismail jokes.

After completing his postgraduate studies in paediatrics, Dr Ismail decided to follow a path less travelled by pursuing neonatology – a sub-specialty in the discipline that specialises in caring for newborns, up to one month old. "Neonatology is one of the most challenging areas of paediatrics, especially when it involves caring for premature babies. It keeps you alert and on your toes most of the time," Dr Ismail said.

UNTIMELY BIRTH

Elaborating further on the most challenging aspect of his job, Dr Ismail continued, "Having a premature baby (or preemie) is a sign of challenging times ahead, especially for the parents. Depending on how premature the baby is, a wide variety of complications could occur during a hospitalisation period that normally extends for months. For example, the baby's underdeveloped organs could become infected."

Speaking on a personal level, Dr Ismail added, "As a doctor, you come to develop a close relationship with the baby and the parents. Witnessing the growth and eventual discharge of a baby that used to be the size of an adult palm gives me immense satisfaction."

For preemies, however, developmental problems do not end with the baby leaving the hospital, as complications related to prematurity may not be apparent until years later. "As preemies get older, there is a possibility of developing other long-term health issues such as learning disabilities and physical limitations. Their physical growth may also be slower than their peers," Dr Ismail said.

While the outcome is uncertain, Dr Ismail urges parents not to despair, because studies have shown that many preemies do adjust well during childhood and adolescence. "Approximately 25 to 30% of premature babies have a normal IQ and grow up without any problems," he said.

A DIFFICULT PREDICAMENT

Much to Dr Ismail's delight, the discipline of neonatology is rapidly growing, with a lot of new technologies being introduced. These innovations not only present premature babies with better chances of survival than ever before, but also minimise risks of prematurity-related complications.

Despite all the benefits, advancements in medical care have also raised an ethical dilemma. Since it remains impossible to predict the survival of preemies or whether they will develop disabilities, healthcare professionals must make the difficult decision of how much intervention to save a preemie is justifiable. The biggest dilemma doctors normally face is whether or not to admit

a premature baby to the neonatal intensive care unit or to let the child pass on. Normally, this issue is addressed based on the gestational age at which a child is born, which varies based on the laws of a country.

"In Malaysia, babies born under 24 weeks will not be resuscitated," Dr Ismail said. He then recalled a case of miscalculation. A mother went into premature labour at what was thought to be the 24th week into her pregnancy. Together with an obstetrician, Dr Ismail counselled the parents-to-be and it was decided that nothing could be done for the baby. A week later, when the baby was born, Dr Ismail was called by the doctor attending the birth. "I was told that the baby was crying loudly and actively kicking. I rushed to the hospital, and after assessing the birth weight and baby's condition, we realised that the preemie was at least over 25 weeks. We quickly took the baby to the ICU and did what was necessary," he said.

This case reminded Dr Ismail of the importance of attending to patients first-hand rather than just sticking to the pre-birth assessment, as mistakes could make the difference between life and death. "The baby is now about two years old, growing normally," he concluded.

With such dedication and enthusiasm in caring for children born before their time, Dr Ismail truly exemplifies KPJ Healthcare Berhad's commitment to excellent service, and providing patients and their families with the best care possible.

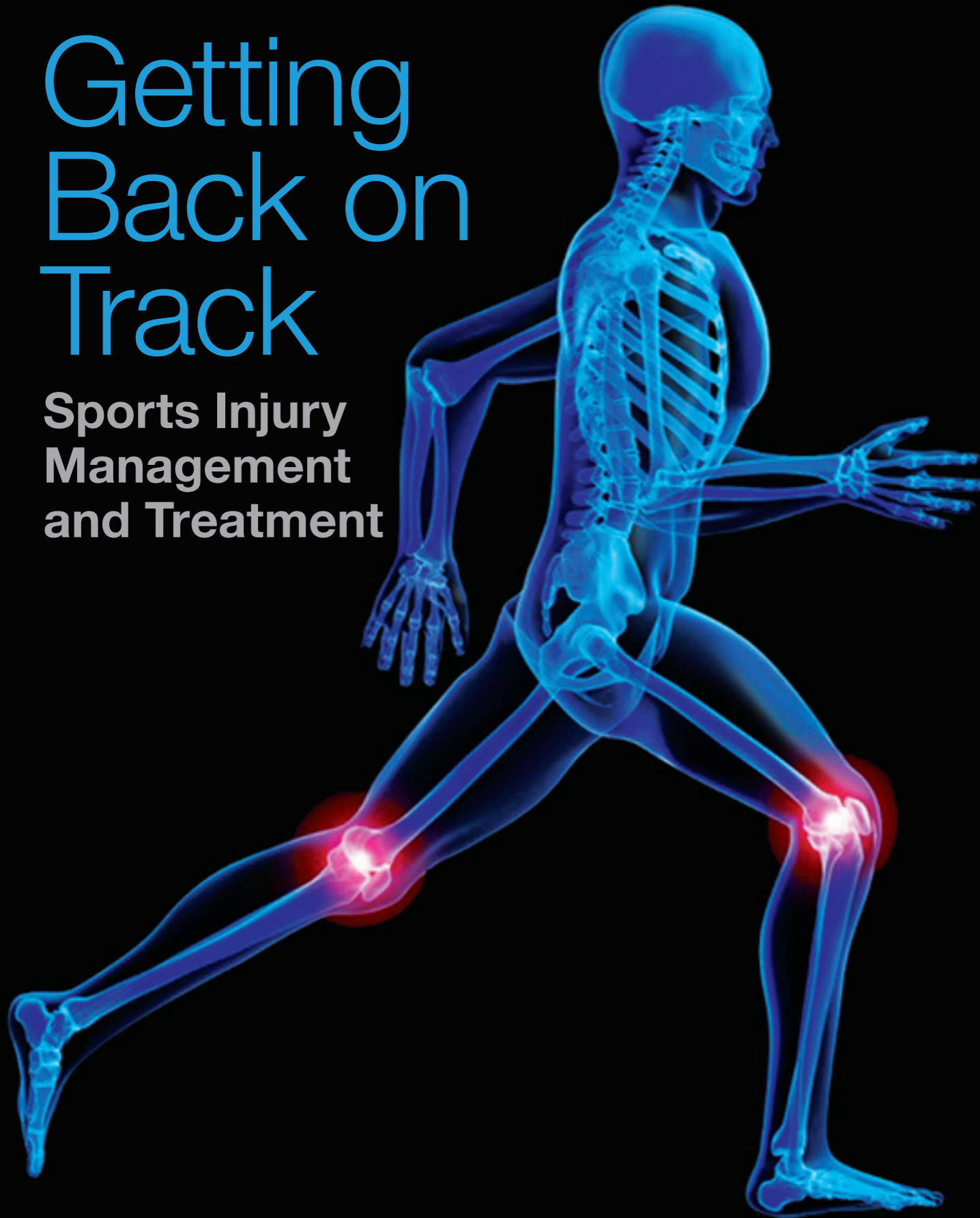
FAST FACTS

Dr Ismail Haron – Consultant Paediatrician & Neonatologist of Puteri Specialist Hospital made the decision to specialise in a rarely chosen sub-specialty in paediatrics because he loves caring for infants, particularly preemies. Here are some of his credentials:

- 1989 – Doctor of Medicine, Universiti Sains Malaysia
- 1998 – Master of Paediatrics Medicine, Universiti Sains Malaysia
- 2003 – Fellow of Neonatology, The Royal Women's Hospital, Australia
- Areas of Interest
 - Management of infants with extremely low birth weight
 - Neonatal nutrition
 - Infant ultrasonography as a tool for quick assessment in newborn infants

Getting Back on Track

Sports Injury Management and Treatment



INCORPORATING a regular exercise regime and sporting activities to maintain optimal physical fitness can go a long way in preventing various health-related issues and illnesses. While the benefit of participating in vigorous activity is unquestionable, it does come with risks of physical injuries, some of which can be devastating.

Sports-related injuries can happen to anyone, regardless of their level of athleticism, and prompt and proper treatment is crucial, not only to speed recovery and allow for the resumption of an active lifestyle, but also to prevent further deterioration of the injured site.

To shed light on the management of sports injuries, *Care for Life* looks at some of the most common hazards to which athletes are vulnerable and the treatments available, from simple first-aid care to major orthopaedic surgery.

SPRAINS AND STRAINS

Sports injuries commonly occur in the sinewy tissue that connects muscles to bones, known as tendons, and the fibrous cords in the joints that connect bones together, called ligaments. These connective tissues have a natural elasticity and strength that allows for stretching during dynamic movement. However, if subjected to sudden, unaccustomed forceful movement, overstretching and tearing of the tissues may occur. A tearing of the ligament is referred to as a sprain, whereas a tearing of the muscle or tendon is known as a strain.

Generally, sprains and strains tend to happen when the body is not adequately prepared for physical stress. This is why athletes are encouraged to perform warming-up exercises before attempting any strenuous feat, and always practice correct form and technique for the sport. Even though training and preparation can lower the risk, injuries are not entirely preventable as accidents are bound to happen. Joints that are most involved during vigorous movement, particularly the

knees, ankle joints and elbows, are most prone to injury.

Being the biggest joint in the body, the knee consists of various parts that gives leverage to the leg muscles, as well as several large ligaments responsible for bracing and controlling the joint's motion.

Damage to the knee mostly involves the Anterior Cruciate Ligament (ACL), which

When injury occurs, the first course of action is to stop any pain-causing activities and seek medical attention to assess the extent of the damage.



is the most important component in the knee structure that holds the bones together and provides stability. Normally, a torn ACL is immediately disabling – characterised by a ‘pop’ sound, followed by the knee giving way. Knee injuries are not always apparent, as some may be a result of over-exertion of the joint. Severe knee pain, for instance, can happen over time because of the kneecap being repeatedly pushed against the sides of its groove through a lot of running.

Besides the knees, the ankle is another important joint involved in bearing the weight of lower limb activities, and is capable of sustaining forces up to five

times the body’s weight. The most common ankle injury is the Lateral Ligament Sprain, where the ligaments in the outer part of the ankle are injured by a sudden excessive turning to the foot downwards and inwards.

Activities involving repetitive motion of extending the wrist or rotating the forearm, such as racket sports put one at risk of developing a condition called Lateral Epicondylitis. Commonly known as tennis elbow, it is a degenerative condition where the tendons and muscles attached to the outer part of the elbow become sore and tender.

Aside from the joints, muscles and tendons of the lower body such as the hamstring and calf muscles are at risk of sprains, especially during sprints and jumps.

IMMEDIATE ACTION REQUIRED

Depending on the severity, sports injuries can cause varying degrees of pain and swelling in the affected area. Regardless, immediate cessation of the activity and the appropriate action to protect the affected area is a must to prevent the injury from escalating. If neglected, even a minor sprain or strain may lead to long-term damage such as joint stiffness, muscle weakness and instability of movement.

When the injury happens, first aid treatment should be applied (see R.I.C.E.D. First-Aid Treatment) and medical attention should be sought as soon as possible to assess the extent of the injury, so a decision can be made on whether further treatment is needed.

Treatment for sports injuries varies according to the nature of the damage.

In cases of severe injury where one needs to undergo major surgery, a period of physiotherapy is required for one to fully recover before resuming a normal lifestyle.



R.I.C.E.D First Aid Treatment	
Rest	Stop the activity that is causing pain.
Ice	Apply crushed ice wrapped in a damp towel to the injury for 15-20 minutes immediately after the injury. Repeat once every 4 hours over the next 2 days, so the cold can reduce the pain, bleeding and swelling.
Compression	A firmly applied elastic bandage will also reduce pain, bleeding and swelling, as well as provide support to the injured part. If there is any numbness or tingling in the fingers or toes, loosen the bandage.
Elevation	Raise the injured body part by resting it on a chair or a cushion. This will help reduce bleeding and drain the swelling.
Diagnosis	Consult your doctor if there is severe pain, swelling or deformity (suspect fracture) or if symptoms worsen or are unchanged after 2 days. In addition to the sprain/strain treatment and exercise rehabilitation, further evaluation may be necessary to rule out fracture or a more severe injury.

**R.I.C.E.D. must not be used on open wounds*

Source: All about Pain Malaysia

Simple sprains and strains are normally manageable with adequate rest and corrective exercises to strengthen the affected limb, whereas more extensive damage like a partial tearing of a ligament may require surgery. In severe cases, such as complete tearing of a major ligament or

bone fracture, major surgery followed by a period of rehabilitation is necessary to restore normal movement. In addition to surgery, painkillers and anti-inflammatory drugs may be prescribed to help manage an injury or a condition that has resulted from long-term pressure on a joint.

At KPJ hospitals, management of sports injuries is provided by highly trained specialists, orthopaedic surgeons and physiotherapists who will see to a patient’s full recovery. While minimally invasive surgery techniques are used in treating common injuries such as torn ligaments, tendon problems and dislocated joints, KPJ hospitals also provide treatment for extensive injuries such as joint replacement and reconstruction surgery as well as treatment of spinal injuries. The range of treatment offered for sports injuries is yet another example of KPJ’s commitment towards providing comprehensive healthcare services.

Mending a Broken Body

Dr Marvin Joseph Nair on Sports Injury



For Dr Marvin, the most remarkable aspect of the human body is its ability to renew itself.

DR Marvin Joseph Nair – Consultant Orthopaedic Surgeon at **Puteri Specialist Hospital** sheds light on the nature of sports injury and what fascinates him the most about the field of orthopaedic surgery.

ACCIDENTS HAPPEN

Dr Marvin realised early in his medical career that he wanted to specialise in treating musculoskeletal injuries. “I find the field of orthopaedics interesting because of the immediate results I see from treating patients. It is very satisfying,” he said.

As an orthopaedic specialist trained in managing sports injury and trauma, Dr Marvin has attended to varying degrees of emergency cases. According to him, amongst the most common sports-related injuries are knee injuries, especially in football players.

Stating that prevention is always better than cure, Dr Marvin said that you can never be too careful, especially with

physically demanding and rough sports. “Injuries can be prevented by educating the people who are partaking in the sport on the possibilities of injuring themselves. They need to properly warm up before the game and take other precautions, but even so, sometimes injuries are unavoidable,” he said.

TREATMENT FOR ATHLETES

When patients arrive to see Dr Marvin, they are usually in great pain or experiencing some sort of disability due to the injuries they have sustained. “We usually propose a certain plan of treatment which may include arthroscopic surgery followed by physiotherapy. Patients may need to return for subsequent review procedures,” Dr Marvin said, explaining the steps to treating sports injury in a nutshell.

“The recovery process varies, depending on the severity of the injury. There are patients who are up and about in just a few days, but on average, complete healing takes up to six weeks,” he added.

Offering assurance to athletes, Dr Marvin said that sports injury cases are usually not complex. “Hospital stay is short, about a day or so. We normally start a post-surgery patient on physiotherapy very quickly. Patients can resume their active lifestyle after full recovery, which may take anywhere between 6 weeks to 3 months,” he explained.

Acknowledging his commitment towards his patients, Puteri Specialist Hospital does not fall short when it comes to assisting Dr Marvin in treating his patients. “We have a whole range of trauma implants and facilities available to treat patients. For severe cases, such as patients with significant bone loss, we are able to regenerate bone by using special distraction devices,” he said.

A MIRACLE THAT IS THE HUMAN BODY

Speaking about the hospital's role in aiding him, Dr Marvin recalled a case of a 31 year-old traffic accident victim who was brought to him in 2009. “He had multiple fractures in one of the femur (thigh) bones. The bone loss was so significant that amputating his leg seemed like the only way to go,” Dr Marvin said.

“We put him on distraction unit and taught him to manage the device so that the bone could be stretched one millimetre each day. We monitored his progress and by 2011, a significant amount of his femur (thigh bone) had regenerated. One of the most amazing things about the human body is its ability to renew itself,” he added.

Remembering such cases, Dr Marvin was reminded once again of what made the field of orthopaedics so appealing to him. “You manage patients and see them get better and return to their pre-injury state. In actual fact, as a surgeon, you are just aiding the body to recover,” he concluded.

FAST FACTS

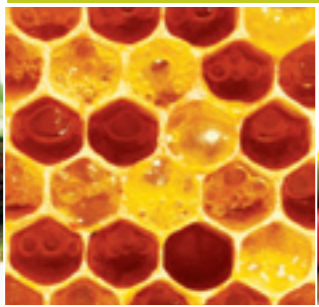
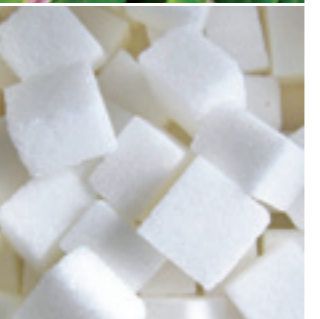
Specialising in orthopaedics, Dr Marvin Joseph Nair – Consultant Orthopaedic Surgeon at Puteri Specialist Hospital has attended to emergency sports injury and trauma cases of varying degrees. Here are his qualifications:

- 1995 – Bachelor of Medicine, Bachelor of Surgery, Kasturba Medical College, India
- 1999 – Fellowship of Royal College of Surgeons, Ireland
- 2001-2003 – Specialist Orthopaedic Surgeon, Hospital Sultanah Aminah, Johor
- 2003-present – Consultant Orthopaedic & Trauma Surgeon, Puteri Specialist Hospital, Johor
- Areas of interest – Management of complex trauma and sports-related injuries

HOME REMEDIES



“THE greatest wealth is health,” said classical Roman poet Virgil. In today’s fast-paced pursuit of success and riches, we often neglect our health with the excuse there is just no time. While nothing can replace the expertise of qualified doctors, there are certain things we can do and certain home remedies we can apply to alleviate symptoms of such things as headaches, eye strain and indigestion, or just boost our general well-being. *Care for Life* shows how.



Hiccups

WHAT ARE HICCUPS?

Hiccups are a sudden, involuntary squeezing of the diaphragm, the main breathing muscle under the lungs, which results in the air being sucked quickly into the lungs thereby snapping and shutting the glottis above the voice-box (larynx). This snapping makes the sound of a hiccup. Hiccups will usually stop on their own, but continuous hiccups lasting for more than a day or two may indicate an underlying condition, which needs medical intervention.

Numerous home remedies for hiccups exist. One of them is holding your breath which builds up carbon-dioxide in the blood and that stops the hiccup. If the vagus nerve that runs from the brain to the stomach is stimulated, hiccups can also be alleviated (this is what is happening when a person drinks water or pulls on the tongue).

GET ON YOUR NERVES

Some doctors recommend that you put your fingers in your ears to stop hiccups. The branches of the vagus nerve also reach into the auditory system, and by stimulating the nerve endings there, the vagus nerve goes into action. Sticking your tongue out achieves the same purpose. A popular remedy of getting a fright can overwhelm the vagus nerve and put an end to hiccups.

The old standby, breathing into a paper bag, is believed to work on the same principle as the breath-holding method. Both increase the amount of carbon dioxide in the bloodstream, and the body becomes preoccupied with getting rid of it and forgets about the hiccups.

Swallowing water interrupts the hiccupping cycle and can quiet the nerves. Gargling with water may also have the same effect.



Now there is a valid reason to indulge in a sugar overload as the rush is one effective hiccup cure.

ASSAULT THE TASTE BUDS

Overloading the nerve endings in the mouth with a strong sensation may also do the trick. Place one-half teaspoon of dry sugar on the back of the tongue. Repeat this process 3 times at 2-minute intervals, if necessary. (Use corn syrup, not sugar, for young children.) Similarly, put one teaspoon of sugar or honey, stirred in warm water, on the back of your tongue and swallow it. Far less appealing is to either suck on a lemon or swallow a teaspoon of cider vinegar. These sweet and sour remedies will jolt the hiccups right out!

SHOULD I CALL A DOCTOR?

A person should see a doctor if the hiccups become chronic and persistent (if they last more than 3 hours), or if they affect sleeping patterns or interfere with eating.

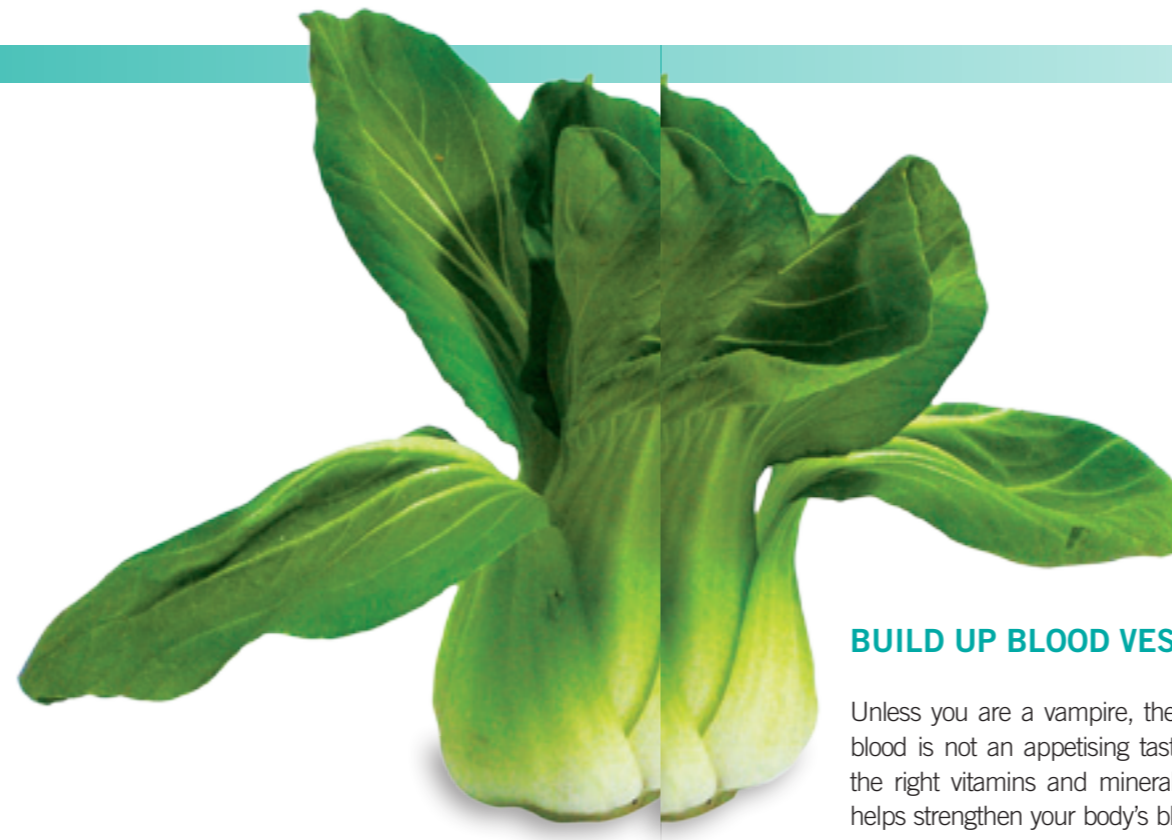
Hiccups are rarely a medical emergency. If they last for more than 3 hours, occur with severe abdominal pain, fever, shortness of breath, vomiting, spitting up blood, or feeling as if the throat is going to close up, one should seek medical attention immediately.

Nose Bleeds

WHAT CAUSES NOSE BLEEDS?

The nose contains many small blood vessels that bleed easily. Air moving through the nose can dry and irritate the membranes lining the inside of the nose, forming crusts. These crusts bleed when irritated by rubbing, picking, or blowing of the nose. The lining of the nose is more likely to become dry and irritated due to low humidity, allergies, colds, or sinusitis. A deviated septum (displaced nasal septum), foreign object in the nose, or other nasal blockage can also cause a nosebleed.

Below:
Don't swallow or try to expel the blood from your nose as this will only aggravate the nostrils.



PINCH IT AWAY

The most effective technique is the time-honoured pinch cure. Lean your head forward because tilting your head back will only cause you to swallow the blood. Pinch your nostrils together and apply direct pressure with the thumb and index finger for approximately 10 minutes. Time it to make sure the nostrils are not released earlier. Also, spit out any blood in the mouth as swallowing blood may cause you to vomit. It is important to remain calm as panicking accomplishes nothing.

A CUP OF CIDER A DAY

Apple cider vinegar (ACV) can work wonders as a nose bleed remedy as it treats the problem inside and out, preventing loss of blood. Simply soak a small cotton ball in ACV and pack it lightly into the nostrils to quickly stop the bleeding. If you are prone to nose bleeds when no injury is present, drinking a mixture of two teaspoonfuls ACV in a glass of water three times a day, with or without meals, can help reduce the occurrence of this.

BUILD UP BLOOD VESSELS

Unless you are a vampire, the salty flavour of blood is not an appetising taste. Incorporating the right vitamins and minerals into your diet helps strengthen your body's blood vessels and prevents them from being damaged so easily.

Zinc is a nutrient known to help maintain the body's blood vessels. A good way to incorporate more of this into your diet is to eat whole-wheat bread and brown rice, both of which are rich in zinc. Alternatively, when it comes to snack time, try some popcorn, which also contains zinc.

Vitamin K is essential for proper blood clotting, and dark green vegetables such as spinach, bok choy or kailan are a good source of this.

Vitamin C is necessary to the formation of collagen, which helps create a moist lining in your nose. So drink and eat vitamin C-rich foods to help stave off nosebleeds. Go for citrus fruits such as oranges, grapefruit and kiwifruit. Also, take vitamin C tablets and bioflavonoid supplements such as grape-seed extract, pinebark extract, pycnogenol or proanthocyanins. Flavonoids, which are compounds found in fruits and vegetables, particularly the bright coloured ones, are also helpful for capillary healing.

Finally, being well hydrated helps. Always consume at least the equivalent of eight 250-ml glasses of water a day, but have a few more during dry weather and if you are living in a dry climate.

SHOULD I CALL A DOCTOR?

It is recommended that you seek medical attention if you suffer from frequent nosebleeds (it could be an indication of an underlying problem), have an injury to the head, or take anticoagulants (blood thinning medication) and the bleeding does not stop.

If your physician suspects that there is an underlying cause, such as hypertension (high blood pressure), anaemia, or a nasal fracture, he or she may make further tests, such as checking your blood pressure and pulse rate or an X-ray, before recommending a suitable treatment option.

Far left:
Dark green vegetables are rich in Vitamin K and contribute to blood clotting.

Below:
Since dry weather irritates the nose's membranes and causes them to crack, drink plenty of water to stay hydrated.



Burns and Scalds

WHAT ARE BURNS AND SCALDS?

Burns and scalds are damage to the skin caused by wet or dry heat, chemicals or electricity. A burn is caused by dry heat, such as from an iron or fire. A scald is caused by something wet, such as hot water or steam. Most burns in the home are caused by domestic mishaps, such as scalding water, hot oil and grease, or hot food.



Right: For minor burns, keep the burn clean and do not burst any formed blisters. Seek medical attention for more serious burns.

Burns and scalds are classified under different degrees of severity. The mildest are known as 'first degree'. They may be red and tender with some swelling and are usually self-treatable. More serious injuries from fires, steam or chemicals usually result in second - and third-degree burns. Second-degree burns are moderate, red and painful with blistering and swelling. Third-degree burns are the most severe, where the skin is charred or black, white or red but does not hurt due to nerve damage. While there is no blistering, serious swelling requires urgent hospital treatment.

TREATING BURNS AND SCALDS

To treat a burn, follow this first aid advice:

- ➊ Immediately get the person away from the heat source to stop the burning.
- ➋ Cool the burn with cool or lukewarm water for 10 to 30 minutes. Do not use ice, iced water or any creams or greasy substances, such as butter.
- ➌ Remove any clothing or jewellery that is near the burnt skin area, but do not try to remove anything that is stuck to the skin.
- ➍ Make sure the person keeps warm – for example by using a blanket – but take care it does not rub against the burnt area.
- ➎ Cover the burn by placing a layer of cling film over it. Cling film is sterile, does not stick to the wound and can protect the burn area but do ensure that you do not wrap the cling film around the burn area as this can cause pressure on the burn.
- ➏ Use painkillers, such as paracetamol or ibuprofen, to treat any pain.



Left: Aloe Vera has been described as nature's own band aid as it accelerates the body's own healing process.

Bottom left: The marigold flower is an immunity booster, helping the body to fight bacteria and fungal infections.

NATURE'S THERAPY

Once the burn has had two or three days to heal, you can try any of the following natural remedies.

Acquire some aloe vera gel, whether from a freshly cut leaf or an aloe vera-based cream or gel, and apply directly to the burn area. The plant's natural cooling properties reduce pain, moisten the skin and help keep bacteria and air out of the wound. If you wish, put the gel in a small jar and mix a little vitamin E oil with it as it makes a good natural burn healer.



To help a burn heal faster, apply camomile cream or make a compress using a cotton cloth soaked in a strong infusion of camomile. Similarly, calendula ointment, made from the flowers of golden marigolds, may be applied as often as needed as a gentle healer.

When the blister ruptures naturally, leave the protective flap of skin intact and wash it thoroughly with an antiseptic skin wash made by mixing equal parts echinacea extract and water to ward off infection.

SHOULD I CALL A DOCTOR?

Depending on how serious a burn is, it may be possible to treat it at home. More serious burns will require professional medical attention to fend off infection and scarring. For example, burns that will need medical attention include large or deep burns and all chemical and electrical burns.

People who may be at greater risk from the effects of burns, such as children under five years of age and pregnant women, should also seek medical attention after a burn or scald. A healthcare professional will assess the size and depth of the burn, clean the affected area and apply a dressing. They will also tell you when the dressing should be changed and offer pain relief if necessary.



Donating Blood to Save Lives

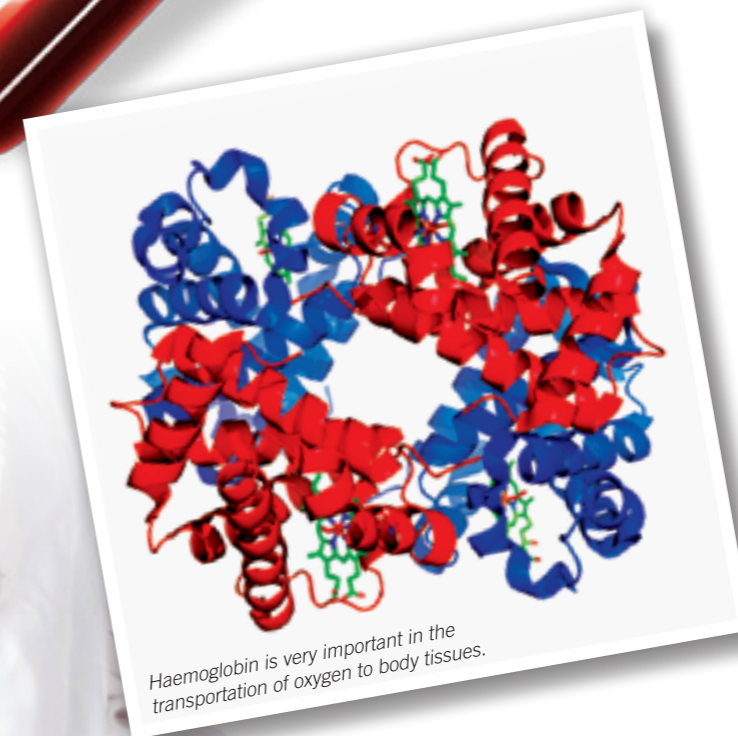
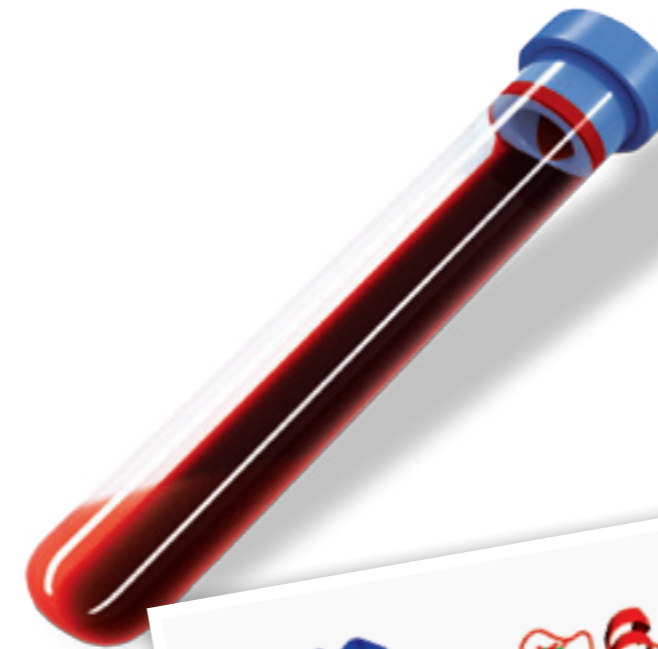
On 14th June, countries across the globe celebrate World Blood Donor Day – an event to raise awareness of the need for safe blood and blood products to save lives. *Care for Life* helps you separate fact from fiction through some intriguing questions to test your knowledge on the life-sustaining red matter.

1 Which of the following conditions does not disqualify a person from donating blood?

- A. Has not donated blood within the last eight weeks
- B. Has had a tattoo or any cosmetic treatment that involves skin piercing in the last 6 months.
- C. Has undergone dental treatment within the last 48 hours
- D. Has had a vaccination in the last 24 hours

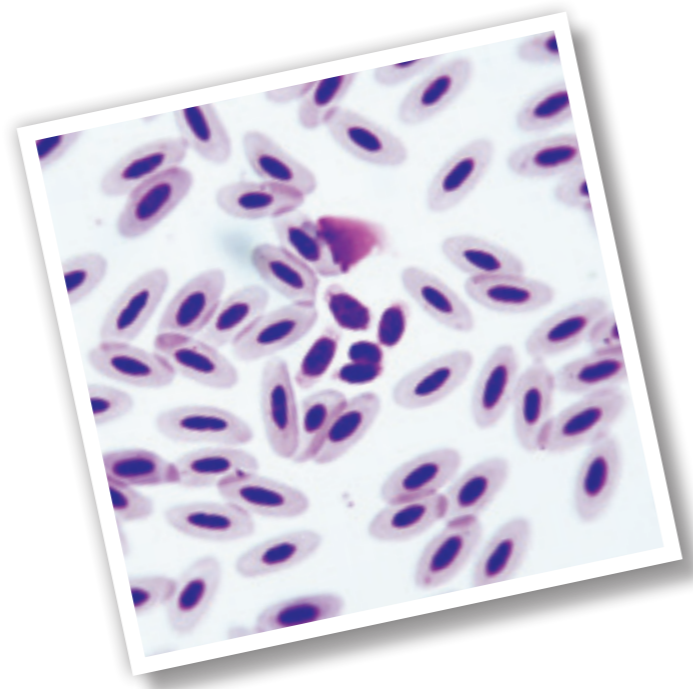
2 What fraction of human body weight does blood account for?

- A. 1/20
- B. 1/12
- C. 1/10
- D. 1/8



3 Which of the following is not a function performed by the blood?

- A. Regulation of the body pH
- B. Detection of foreign materials by antibodies
- C. Removal of waste such as carbon dioxide, urea, and lactic acid from the body
- D. Synthesis of Vitamin D



4 Haemoglobin, an iron-containing and oxygen transporting molecule that is also the main determinant of blood colour, is contained in which component of the blood.

- A. Red blood cells
- B. White blood cells
- C. Plasma
- D. Platelets

5 Which of the following is not an infectious blood disorder?

- A. Hepatitis B
- B. Acquired Immunodeficiency Syndrome (AIDS)
- C. Anaemia
- D. Hepatitis C



6 By volume, how much of the whole blood is made up of white blood cells?

- A. 45%
- B. 10.5%
- C. 0.7%
- D. 0.4%

7 What vital role do the platelets in the blood play?

- A. Transport substances like glucose, fats, proteins, enzymes, and hormones
- B. Help in the clotting and coagulation of the blood
- C. Carry oxygen from the lungs to various body tissues
- D. Defend the body from bacteria and other foreign organisms





8 Which blood group is known as the universal donor?

- A. A+
- B. B-
- C. AB+
- D. O-

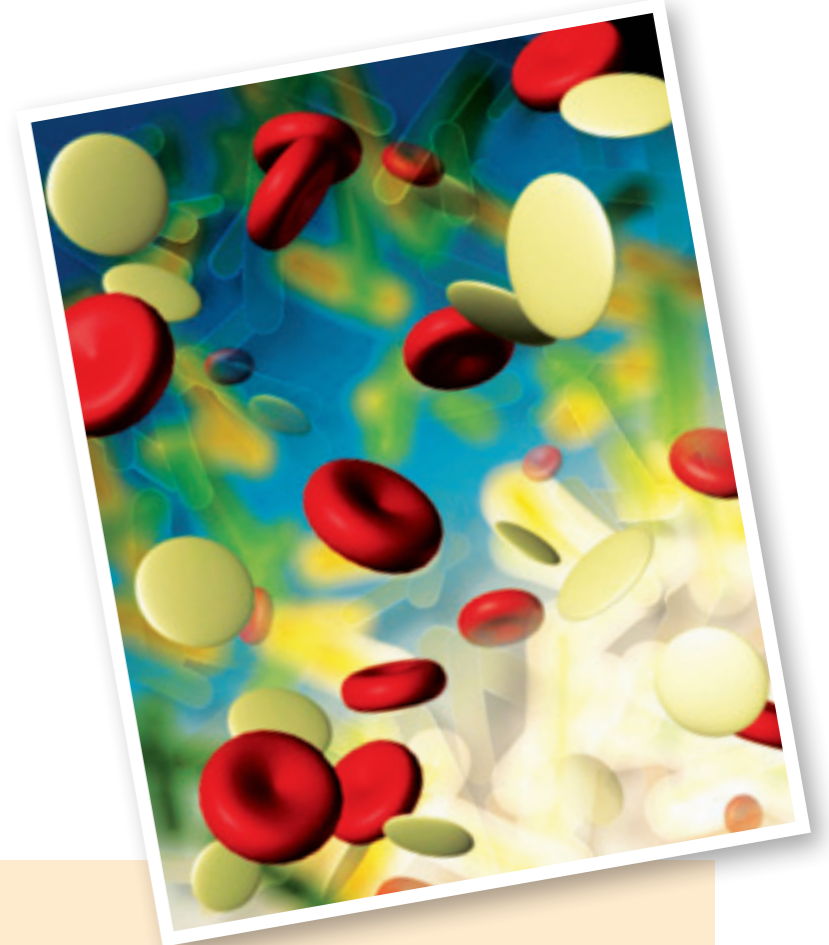
9 What is the average blood volume for a healthy individual?

- A. 5 litres
- B. 8 litres
- C. 10.5 litres
- D. 13 litres



10 Haemophilia is a genetic disorder characterised by...

- A. Insufficient red blood cells
- B. Abnormal increase of white blood cells
- C. Prolonged bleeding due to a dysfunction in the blood clotting mechanism
- D. Abnormal, rigid, sickle-shaped red blood cells



LIQUID OF LIFE

1. **A** – The minimum interval between blood donations is 56 days, but a 12-week interval is generally considered the safest, giving the body time to fully recover.
2. **B** – Blood has an average density of approximately 1060 kg/m³ and makes up 1/12th of an individual's body weight.
3. **D** – The blood performs many critical functions in the body, including supplying oxygen and nutrients to tissues, immunological functions as well as transport of hormones and the signalling of tissue damage. However, Vitamin D synthesis happens when the UV rays of the sun penetrate the epidermal layer of the skin.
4. **A** – Each red blood cell has about 270,000,000 iron-rich haemoglobin molecules, making up 95% of the cell.
5. **C** – Anaemia is a condition caused by insufficient red cell mass as a result of profuse bleeding or nutritional deficiency, normally causing a feeling of fatigue due to a shortage of oxygen. In severe cases, a blood transfusion may be needed.
6. **C** – The red blood cells constitute about 45% of whole blood, the plasma about 54.3%, and white cells about 0.7%.
7. **B** – Also known as thrombocytes, platelets are small, irregularly shaped clear cell fragments which are involved in the process of causing bleeding to stop and the formulation of blood clots.
8. **D** – Type O- (not O+) blood can be given to someone with another blood type. Although normally used only during emergency situations, it is still not considered ideal as there is a possibility of a dangerous reaction caused by the presence of antibodies in the blood. The best blood a person can receive is the exact match to his or her blood type.
9. **A** – On average, there are 5-6 litres of blood present in the body of a healthy individual. During blood donation, approximately 350ml to 450ml of blood is collected, depending on the individual's body weight.
10. **C** – Haemophilia causes the impairment of body's ability to control blood coagulation. This can cause an otherwise inconsequential wound to be life-threatening because of prolonged bleeding.

Medical Mysteries

The Case of Piecing Together the Fractured Talus



AS the most important weight-bearing joint in the body after the knee joint, the ankle joint is often susceptible to various degrees of injury. In a worst-case scenario, an injury can leave the entire anatomy of the joint in such a state that regaining normal function becomes impossible. But sometimes the impossible can become possible as Dr Abdul Jamal Mohd Thalha – Orthopaedic Surgeon at **Sentosa Medical Centre**, relates his encounter with a rare case of an ankle joint fracture dislocation when the damage seemed irreparable.

A RACE AGAINST TIME

It was around nine o'clock in the evening, Dr Jamal recalled, when a large-framed man was brought to the hospital with a major swelling of the ankle. Roughly four hours before, he had fallen into a drain on the way back from work and twisted his ankle. Thinking that it was nothing more than an ordinary sprain, the man did not bother to seek medical attention until the injured ankle began to swell.

After an immediate X-ray, it was discovered that his talus – a critical bone of the ankle joint that connects the leg and foot – was fractured, with a piece of the broken bone dislocated entirely from the ankle socket and lying just beneath the skin.

“There are three types of classification for fractures of the talus, known in the medical field as Hawkins Classification. Type I is characterised by a fracture, but without the bone being displaced. In Type II, the broken bone is displaced, but the entire ankle remains aligned. Type III, which is the worst sort, sees the bone dislocated from the ankle anatomy,” Dr Jamal explained.

When his patient's condition was confirmed to be a Type III fracture of the talus, Dr Jamal's main priority was for immediate surgical intervention. This is because the bones in the human body rely on blood supply to remain alive and a fracture could lead to avascular necrosis (AVN) – a condition where the bone dies as a result of the blood supply being cut off. AVN of the talus can be devastating, resulting in arthritis, deformity and pain. “There is a 25% likelihood of AVN with a Type I fracture, whereas Type II has a 25 to 50% chance. For a Type III fracture, theoretically speaking, AVN is a given,” said Dr Jamal.

“The key to saving the ankle is to perform surgery as soon as possible because the longer the bone is dislocated, the longer blood vessels are stressed and the chances for AVN becomes higher,” he added.

PUTTING IT ALL BACK IN PLACE

At 11:25pm, the patient was wheeled in for surgery. “When the initial incision on the skin was made, the bone was immediately visible,” Dr Jamal remembered.

"The key to saving the ankle is to perform surgery as soon as possible because the longer the bone is dislocated, the longer blood vessels are stressed and the chances for AVN becomes higher... If we don't see any evidence of AVN for a year, it means the bone has survived. It has been over a year and there is still no sign of AVN the last time I saw him."

~Dr Abdul Jamal Mohd Thalha

Reattaching pieces of the fractured bone with diagonally placed screws required extreme care and he admitted that the surgery was no simple jigsaw puzzle work. "It was not just rejoining the bone and putting it back where it belonged. Because there are tissues that carry blood supply attached, we were faced with the challenge of putting the bone back in without disturbing the inherent architecture," said Dr Jamal.

Although the patient was operated on within six hours from the time of injury, which is the ideal timeframe, and the replacement of the bone was successful, Dr Jamal was pessimistic, "Given the severity of his condition, AVN seemed inevitable and so I told the patient that we would try our best, but to be prepared for the worst."

A MIRACULOUS AFTERMATH

Not one to give up hope easily, Dr Jamal saw to it that his patient received optimal care after surgery. "We wanted to prevent swelling, which could disrupt the blood supply to the recovering bone and cause further complications. So, during the one week he was hospitalised, we put ice on the leg to reduce the swelling. When he was discharged, he had to walk with crutches because I did not allow him to place weight on the joint for three months. He could move the joint, but not step on it until after

four months, followed by two months of physiotherapy. Exactly six months post-injury, much to everyone's surprise, the bone did not die and life was back to normal for him!" Dr Jamal exclaimed.

Although the ankle had healed completely, there was one permanent side-effect: the fracture left the patient with a stiff ankle. However, according to Dr Jamal, the physical limitations are minor, "He has regained 80% of normal function in the joint. He just has some limitations with dorsiflexion (upward movement of the ankle), which can be problematic when he runs or jumps. This means that he must take extra precautions when performing vigorous activity as there is a risk of fracturing the ankle again. Had AVN occurred, the only option for treatment would have been to fuse the ankle bones in a functional position, resulting in loss of movement."

As a precautionary measure, the patient returned to Dr Jamal every three months for X-rays to check for any collapse in the bone. "If we don't see any evidence of AVN for a year, it means the bone has survived. It has been over a year and there was still no sign of AVN the last time I saw him," he said.

"HE WAS A LUCKY GUY"

An orthopaedic surgeon for 11 years, Dr Jamal has treated a total of six Type III



Dr Jamal attributed the successful outcome of his last talus fracture case to timely treatment and management, as well as luck.

FAST FACTS

In the 11 years of his career, Dr Abdul Jamal Mohd Thalha – Orthopaedic Surgeon of Sentosa Medical Centre has treated six cases of Type III Fracture of the Talus, normally considered inevitable to progress into Avascular necrosis, but he was successful in one case. The following are some of his credentials:

- 1990 – Bachelor of Medical Science, Universiti Kebangsaan Malaysia
- 1993 – Doctor of Medicine, Universiti Kebangsaan Malaysia
- 2001 – Masters in Orthopaedic Surgery, Universiti Kebangsaan Malaysia
- 2005 – Fellowship in Arthroplasty & Arthroscopy, Australia

fractures of the talus and this particular case was the only one where the fractured bone survived.

When asked what contributed to the success of his sixth case, Dr Jamal believed it was partly because the patient was brought in for treatment early. "With a fracture like this where blood supply is affected, accurate, early diagnosis and immediate management is important if you hope for a good outcome," he noted.

However, recalling the fact that the likelihood of AVN is a 100% for Type III talus fractures, Dr Jamal humbly attributed part of the success to luck. "He was a lucky guy. His surgery went smoothly and everything fell in place for him," he added.

Reflecting back on the case, Dr Jamal feels that what he had gained most out of the case is a reminder that one should not give up hope. "As hopeless as things seem sometimes, you never say never. Of course, we have to be realistic with our expectations, but if there is something we can do, we have to give it a try rather than just going by what has been written in medical textbooks," said Dr Jamal.

Regularising the Flow

New Technologies in Vascular Surgery

IF the heart and the brain are the engine and central processing unit of the human body respectively, then the blood vessels are the connecting routes that circulate vital fluids throughout the body to ensure optimal life-sustaining functions are carried out. In fact, the role of the blood vessels is so crucial that the slightest abnormality in the distribution network can develop into a life-threatening condition.

So important is the function of the circulatory system – particularly the vascular system or arteries and veins – that a specialty in that field of surgery was developed to treat the diseases associated with it.

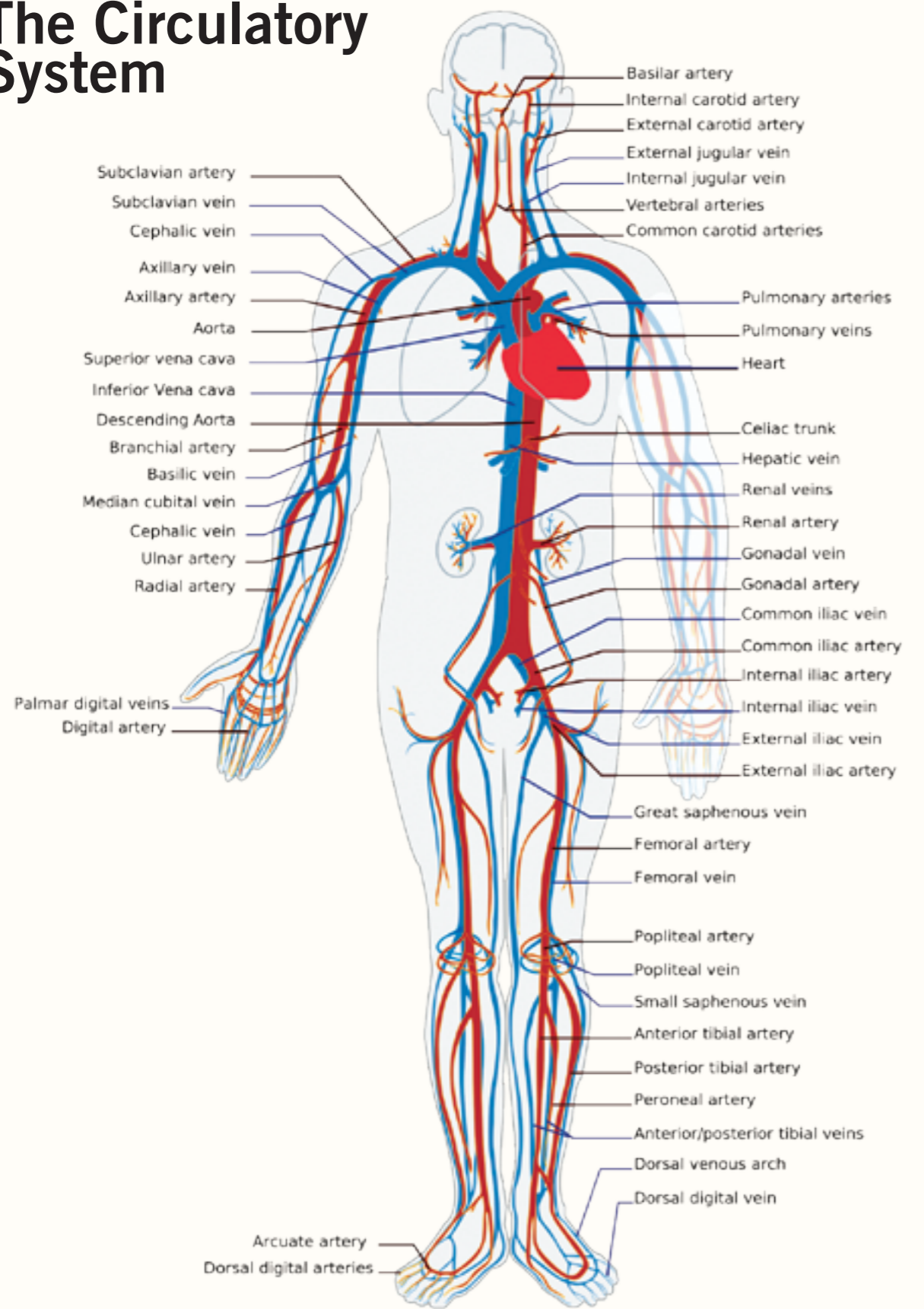
A BRIEF HISTORY

Basically, vascular surgery deals with the diagnosis and management of diseases affecting all parts of the vascular system, except the heart and brain.

Although the importance of the vascular system and its connection to the heart was acknowledged and recorded as early as 16th century BC by the Egyptians, a discipline dedicated to its care only gained recognition as a specialised discipline in the

When pathogens, damaged cells or irritants try to harm vascular tissue, immune cells congregate to begin the process of healing.

The Circulatory System



Source: http://en.wikipedia.org/wiki/File:Circulatory_System_en.svg

1970s. Previously considered as part of general surgery practice, vascular surgery gradually evolved from cardiac surgery.

Initially, vascular surgeons predominantly performed conventional open surgery. Over the past two decades, however, discoveries in science and technological advancements have led to the innovation of less invasive techniques known as endovascular surgery – minimally invasive procedures designed to access regions of the body through major blood vessels. The advent of endovascular procedures has resulted in vascular surgery becoming increasingly separated from general surgery, not just within the medical community, but also within academic circles.

RANGE OF SPECIALTY AND COMMON PROCEDURES

The breadth of the vascular surgery discipline includes arterial diseases such as aneurysm and ischemia, venous diseases like deep vein thrombosis, venous malformations, varicose veins and lymphatic diseases, as well as disorders involving a significant vascular component such as Scleroderma and Hyperhidrosis.

More often than not, cases that require vascular surgical intervention are those with a high likelihood of becoming a life-threatening condition. An example of such procedures is Endovascular Aneurysm Repair (EVAR) to treat abdominal aortic aneurysm. The procedure places a tube, known as a stent, in the aorta through a small incision in the groin.

Another common procedure is a carotid endarterectomy performed to prevent stroke. This is an open surgery to rectify a narrowing in the common carotid artery by removing the plaque formation inside. An endovascular procedure for the same outcome, known as carotid stenting, is also commonly performed.

Other procedures include Embolectomy, Thrombectomy and Bypass surgery, done to relieve a blocking of blood circulation or to dissolve a clot in the veins or arteries



At KPJ Hospitals, consultation is vital to ensure patients are fully aware of their options.

which could lead to further complications in the cardiovascular system or the brain.

Some of the other areas where vascular surgeons are called to lend their expertise include organ harvesting and transplantation, as well as performing access surgery to join an artery and vein to create a fistula for kidney patients in preparation for haemodialysis.

It is predicted that societal changes which have contributed to a rise in obesity and diabetes worldwide will also lead to an increase in arterial and venous disease. Fortunately, vascular surgery is a rapidly changing field, with many new and innovative procedures being developed, replacing conventional surgery and offering patients a new lease on life.

The Surgeon and the Circulatory System

Dr Mohd Mazri Bin Yahya on Vascular Surgery

DR Mohd Mazri Bin Yahya – General and Vascular Surgeon of **KPJ Johor Specialist Hospital** talks to *Care for Life* about how minor abnormalities in our circulatory system can turn into a life-threatening condition.



Dr Mohd Mazri Bin Yahya – General and Vascular Surgeon of KPJ Johor Specialist Hospital is the only vascular surgeon in south Malaysia.

THE BLOOD FLOW NETWORK

The blood vessels – which are part of the body's circulatory system – form the distribution network responsible for transporting blood throughout the body. While the network consists of several kinds of vessels, the three major types are the arteries, in charge of carrying blood away from the heart; the capillaries, which enable exchange of water and chemicals between blood and bodily tissues, and the veins which carry blood back to the heart. As a vascular surgeon, Dr Mazri is the one called when any health conditions involving these vessels arise.

Although there are various diseases that are exclusive to either of the major vessels, according to Dr Mazri, most cases which require his expertise involve the veins, the common ones being varicose veins and deep vein thrombosis (DVT). Although the former may lead to complications in the advanced stage, the latter can become deadly.

“We have two main vein systems, the superficial and the deep veins, and inside these veins are multiple valves. DVT is a condition where a thrombus (blood clot) forms inside the valves of the deep vein. Signs of DVT usually show up on the extremities, such as in the form of a swollen leg,” said Dr Mazri, providing a

brief explanation of DVT. “There are several DVT risk factors and it can also occur as a hereditary condition. The majority of cases in Malaysia, however, are caused by long hours of surgery, especially orthopaedic surgery, and prolonged sitting during a long journey. Thrombi mainly happen due to venous stasis (slow blood flow in the veins and hypercoagulability of the blood in the vessels,” he added.

Dr Mazri further explained that based on statistics worldwide, roughly 30% of those who undergo surgery develop DVT, but the venous disease is under-diagnosed as most non-severe cases is asymptomatic. The main concern is the likelihood of DVT leading to pulmonary embolism (PE), which is the most severe complication. “The thrombus can dislodge and migrate up to arteries of the lung, and this can be deadly,” Dr Mazri said.

For Dr Mazri, the urgency in confirming the diagnosis for DVT and treating it accordingly is to prevent PE. “Normally, DVT can be managed with anticoagulation medication. If the patients exhibit a high risk of developing PE, then surgery is needed to insert an inferior vena cava filter into the blood vessel. Depending on the patient's condition, other surgical intervention may be required, such as a thrombectomy where the blood clot is removed by making a cut in the vein, or a thrombolysis where drugs are given to break down the clot,” he explained.

MATTERS OF THE HEART

Because the functions of the blood vessels are closely related to the heart, Dr Mazri has had his share of interesting cardiac cases. “Once, there was a young patient from Indonesia who developed congestive cardiac failure after a surgery when pins were inserted to fix a fractured clavicle bone,” Dr Mazri recalled.

Continuing, he said, “He was examined by a cardiologist who thought the condition may have some relation to the arteries and veins. We did a medical imaging scan and it was confirmed that one of the pins had punctured an artery. The patient was referred for surgery and he recovered. This particular case shows that not all cardiac cases are related to the heart, but could also be caused by other factors.”

STAYING UP TO DATE

Currently with less than 20 practitioners throughout the country, vascular surgeons in Malaysia are a small group. Therefore, the Vascular Society of Malaysia (VSM) holds regular meetings to discuss and share knowledge regarding the latest innovations in the field.

“Keeping abreast of the latest advancements is very important in the field of vascular surgery. We are responsible for various procedures, from minimally invasive surgery to conventional surgery, so having state-of-the-art equipment is crucial for us to function optimally in performing these interventions,” Dr Mazri said.

“Take Thoracic aneurysm for example. In the past, we would have to perform open surgery on the aneurysme arteries and the mortality rate is about 25-40%. However, with the advancement in medical technology, we can insert the stent through a three centimetre incision. This new procedure is not only less invasive but has also lowered the mortality rate to 2% worldwide. Such innovations have a tremendous effect on helping us treat patients. Fortunately, KPJ Johor Specialist Hospital is equipped with all the latest technologies to accommodate my practice,” Dr Mazri concluded.

FAST FACTS

As one of the few vascular surgeons in the country, Dr Mohd Mazri Bin Yahya – General and Vascular Surgeon of KPJ Johor Specialist Hospital always keeps himself up-to-date on the latest advancements in his area of specialty. Here are some of his achievements:

- 1994 – Excellence Service Awards, Kamsis Tun Dr Ismail UKM
- 2000 – Ethicon Free Paper Prize, College of Surgeons, Academy of Medicine of Malaysia
- 2006 – Started the Endovascular programme for vascular diseases in Hospital Kuala Lumpur
- 2006 – Started Thoracoscopic Sympathectomy programme for Hyperhidrosis in Hospital Kuala Lumpur
- Dr Mazri has also written articles on vascular surgery for various medical journals, including *ANZ Journal of Surgery*, *Asian Journal of Surgery* and *Annals of Vascular Surgery*.



Critical Operations

Lifesaving Neurosurgical Interventions

In the song *Mind and Heart*, the German musical band, Enigma, perfectly described the vital role of the human brain in the line, “(the) Heart is the engine of your body, but (the) brain is the engine of your life”. Today, death is clinically defined as a complete absence of brain activity as measured by electroencephalography (EEG), rather than by cessation of heartbeat and breathing as in the past.

“The brain is like a muscle. When it is in use we feel very good. Understanding is joyous.”

– Carl Sagan, astronomer, astrophysicist, cosmologist and author

As the body's central processing unit, the brain governs both the nervous system and cognitive functions. Even a simple glitch within this complex 1.5kg organ can cause major defects in an individual's intelligence, memory, personality, and physical movement. Should a person sustain severe injuries to the head or develop medical abnormalities in the brain and its surrounding structures, surgical intervention may be needed.

DELICATE PROCEDURES

Not to be mistaken for neurology, which deals with disorders of the brain, neurosurgery is the corresponding surgical specialty which treats medical conditions affecting the brain, spinal cord and nervous system.

Neurosurgery is carried out to save a patients' life and prevent long-term brain damage or bodily paralysis. The most common reason for this surgery is head injuries, such as concussions, contusions (bruises on the brain tissue), scalp wounds and skull fractures. Often, a neurosurgeon is called to drain blood and infection from the brain if there is a clotting in a blood vessel that is potentially life-threatening, such as in the case of an aneurysm.

Besides emergencies, neurosurgery is also employed to remove tumours and to reduce the frequency of symptoms from chronic neurological conditions like epilepsy, so the condition becomes more manageable with medication.

Because of the complicated structures of the nervous system which consists of billions of microscopic vessels, many



Left: Innovations in medical imaging technology have contributed significantly to the discipline of neurosurgery, particularly in helping doctors make an accurate diagnosis.

Below: SHELTER (Stroke Help using an Endo-Luminal Transcatheter Embolus Retrieval) is a new device for emergency stroke therapy, developed by US-based company, Insera Therapeutics. The device contains two primary components: an outer sheath for containing captured clots and an inner filament that grabs and filters the clots. At the time of writing, developers hope to run clinical trials of SHELTER in the US in 2012 or 2013 and seek regulatory approval.

© Insera Therapeutics

aspects of neurosurgery utilise microsurgical procedures – surgery conducted under high magnification with miniaturised instruments. Such procedures include the clipping of aneurysms, minimally invasive spine surgery and insertion of artificial spinal discs.

Neurosurgeons also utilise minimally invasive endoscopic surgery – an image guided procedure – for cases such as disturbance of cerebrospinal fluid circulation, repair of craniofacial disorders and for cranioplasty (repair of defects on the skull).

Like a lot of disciplines, neurosurgery adopts medical imaging technologies including computer assisted imaging computed tomography (CT), magnetic

resonance imaging (MRI), positron emission tomography (PET) and magnetoencephalography (MEG) to enhance accuracy of diagnosis and treatment.

RISKS AND EXPECTATIONS

Despite advancements in the medical field, neurosurgery remains a risky procedure. In fact, surgery on any area of the brain may lead to subsequent problems with speech, memory, muscle weakness, vision and bodily coordination. Such problems may be short-term or permanent, depending on a patient's individual condition. According to the Brain Aneurysm Foundation – a US-based charity organisation – approximately 4 out of 7 people who survive and recover

from a ruptured brain aneurysm will have disabilities.

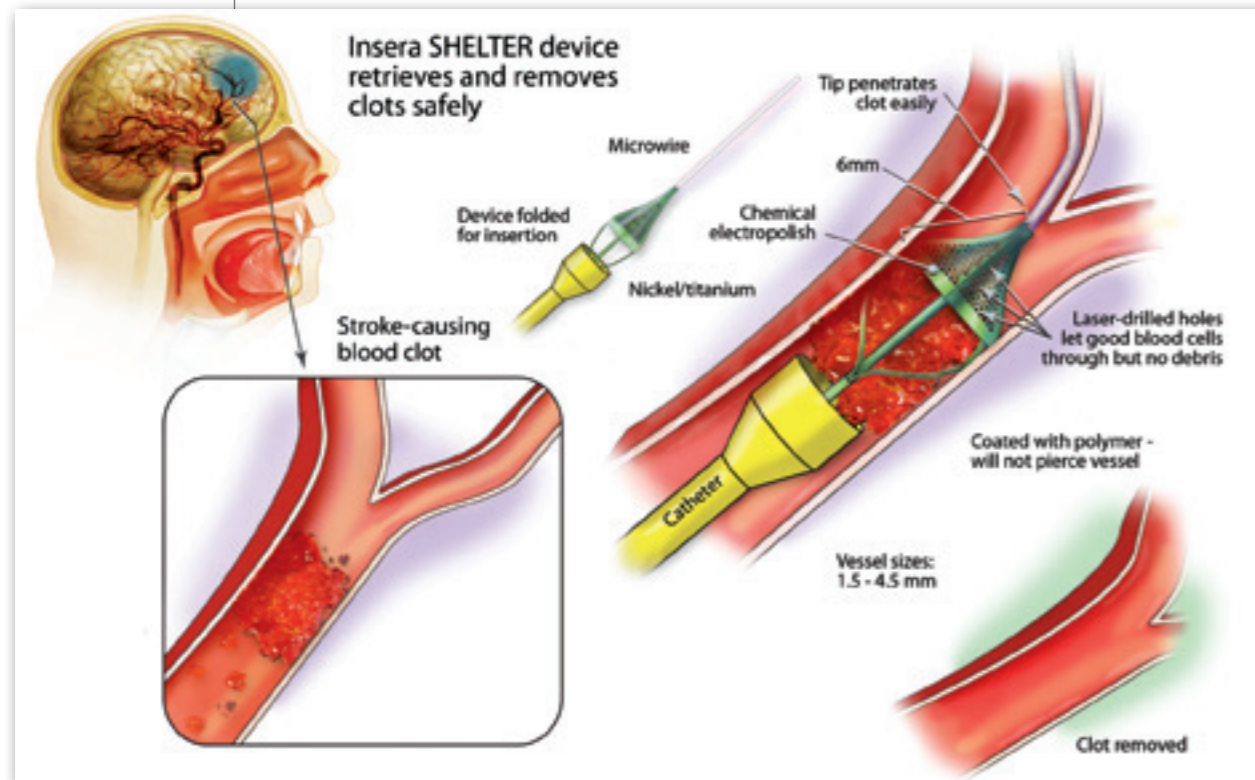
A greater cause of concern for post-neurosurgery patients is the possibility of blood clotting and bleeding in the brain, as well as the likelihood of brain swelling and infection in the surgical wound. In a worst-case-scenario, patients may have a stroke or fall into a coma.

Because of the possible after-effects and complications associated with neurosurgery, the road to recovery can be very trying for some patients. They may have to undergo physiotherapy to help strengthen muscles, regain normal motor functions and become more physically able. If speech and cognitive functions are affected, a speech therapist will assist patients to regain their communication and swallowing ability.

In addition to dealing with possible physiological limitations, patients may also be referred to a neuro-psychiatrist to help them cope with emotional and physical changes they may experience.



Because surgery on any area of the brain may lead to subsequent problems with nervous and cognitive functions, post-neurosurgery patients may have to undergo physiotherapy to regain normal strength and bodily coordination.



Understanding the critical nature of neurosurgery, KPJ Ipoh Specialist Hospital led the way by establishing the first neurosurgery unit among KPJ hospitals in 1990. Since its inception, the neurosurgery unit has been exemplary with their commitment in providing competent and comprehensive neurosurgery services and care. KPJ Ipoh Specialist Hospital also provides 24 hour emergency neurosurgery service where capable surgeons attend to patients with head and spinal trauma, stroke and aneurysm.

Knowing that patient care does not end after surgery, post-surgery patients will be referred to KPJ Ipoh Specialist Hospital's own neurosurgery clinic for further consultation, which is yet another example of KPJ Healthcare Berhad's commitment for caring for the whole individual.

According to Dr Hasnahbi Ahmad Jan – Consultant Neurologist of Puteri Specialist Hospital, neurology interrelates with several other disciplines, including psychiatry and paediatrics.

The Brain Matters

Dr Hasnahbi on common neurological diseases



DR Hasnahbi Ahmad Jan – Consultant Neurologist of **Puteri Specialist Hospital** recalled how she came to specialise in the human brain, and why it is important to seek treatment for neurological conditions while they are still at an early stage.

AS NECESSITY DICTATED

When Dr Hasnahbi made the decision to become a neurologist, it was because she perceived a need rather than a result of personal interest. “I started my medical career as a general physician. After some time, I decided to specialise in neurology because there aren’t many who chose the discipline and there certainly weren’t any neurologists in Johor back then,” she recalled.

Looking back now, after 30 years of practice in the field, Dr Hasnahbi has never regretted her decision. “Neurology is quite a complex field. There is also a common misconception among medical students that it is a discipline which deals mostly with chronic diseases and not much else. Although it was necessity that influenced my decision to study neurology, I began to develop a great interest in the discipline as I went along,” Dr Hasnahbi said.

TIME IS OF THE ESSENCE

As the sole referral for acute and chronic neurological diseases in the Johor, on a daily

basis Dr Hasnahbi attends to an average of 30 to 40 patients. Giddiness and headaches, from migraines to tension headaches are the usual referral. Apart from these common ailments, she also attends to patients with neurodegenerative conditions like Parkinson’s, multiple sclerosis, epilepsy, stroke, meningitis/encephalitis and all forms of dystonia.

“The most damaging misconception about neurological diseases is that it can’t be treated. Thinking that not much can be done, a lot of people tend to turn to traditional and homeopathy medicine, some even seeking mystical means,” Dr Hasnahbi said. “Neurological diseases must be detected early so they can be treated accordingly. That can’t be done when patients go to a bomoh when they should have come to us,” she added.

If Dr Hasnahbi has a general word of advice regarding brain diseases, she urges people to educate themselves more and realise how crucial it is to seek medical attention in the advent of signs and symptoms.

Citing stroke as an example, Dr Hasnahbi said, “I see roughly four to five stroke patients a day. In the acute phase of stroke, recombinant tissue plasminogen activator (rtPA) – a manufactured protein involved in breakdown of blood clots – could be administered and the patient can return to normality. However, the treatment has to be administered within three to four hours of symptom onset, and we must first examine the patient to see if the treatment is suitable to the type of stroke the patient is suffering. If a patient does not come to us early, the usual treatment has to be given and the patient may end up with subsequent chronic disability.”

IT IS ALL CONNECTED

Thanks to KPJ Puteri Specialist Hospital, every form of treatment and investigation is available including MRI Brain+spine, EEG, EMG, Nerve Conduction Study, Sleep Study, IV RTPA, IV Immuglobulin, Interferon, and a regular Botulinum Toxic Clinic. I work closely with my neurosurgical colleague, the

paediatrician and the neuropsychiatrist. We have a facility for a 4-vessel angiogram study in our nearby sister hospital and a PET scan in Johor Bahru. It also interesting because we have an active CME programme involving 4 hospitals and we are share knowledge with one other.

“We have very good neurosurgeons and spine surgeons with whom I often work closely, as a lot of disciplines are interrelated to neurology. For instance, I have seen a lot of patients with problems in the hands and legs related to the spine and brain. Because many cases of headache and giddiness are related to depression, we also have a neuro-psychiatrist, as well as paediatricians to attend to paediatric-neurology cases,” said Dr Hasnahbi, crediting the hospital and her colleagues for their cooperation.

Despite the comprehensive resources available to Dr Hasnahbi, she remains firm in her believe that early detection of neurological disorders is crucial to successful treatment and management of a condition. “The trouble is, people tend to go for other forms of treatment first instead of coming to us. A chronic condition like epilepsy, for example, can go on for so many years before the patient comes to a neurologist. Most brain diseases can and should be treated early,” she reiterated.

FAST FACTS

Dr Hasnahbi Ahmad Jan – Consultant Neurologist of Puteri Specialist Hospital urges patients suffering from brain disorders to seek professional medical help, as the most crucial part in dealing with neurological disorders is early detection. Here are her credentials:

- 1978 – MBBS, University of Malaya.
- 1983-85 – MRCP UK and MRCI Ireland and did general medical practice in Edinburgh, Scotland.
- 1985-88 – Hospital Sultanah Aminah, Johor Bahru – General Physician.
- 1988-90 – Neurology Training in Queen Square, England, St Thomas Hospital New Castle Upon Tyne.
- 1990-93 – General Hospital Kuala Lumpur Neurology and Hospital Sultanah Aminah, Johor Bahru – Medical & Neurology.
- 1993-Present – Puteri Specialist Hospital.

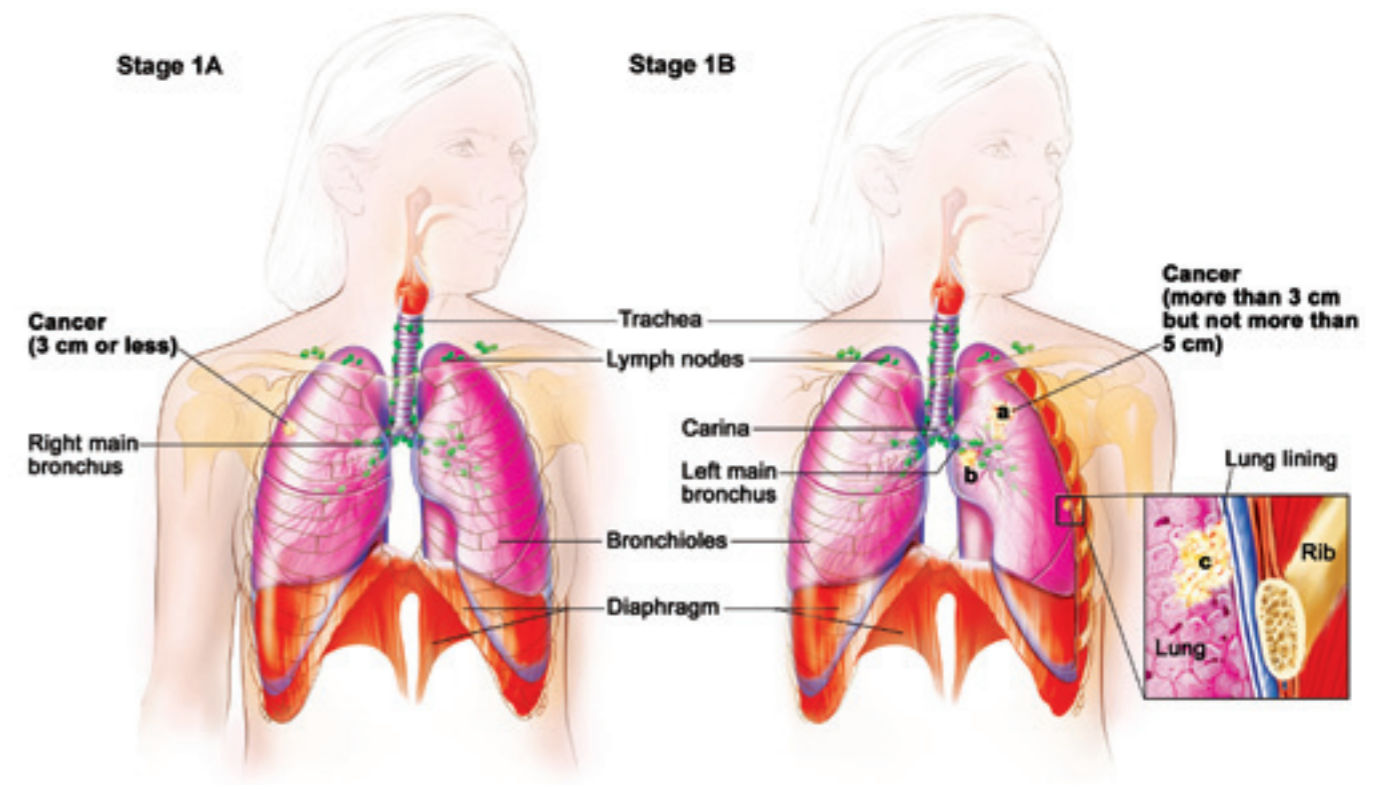
Cancer Across Cultures

Understanding and Confronting the Menace

FACELESS and very powerful, cancer does not discriminate in choosing its victims. It is the leading cause of death in developed countries and the second leading cause of death in developing ones. Virtually anyone can be a target of its harrowing symptoms, malicious torment and ultimately its death sentence.

The disease is a threat, but it strikes in varying degrees, and some types of cancer are more prevalent than others in certain parts of the world. Which begs the question, does the culture and lifestyle really have a bearing on the incidence of cancer? *Care for Life* examines which cancers thrive geographically and culturally, why this is so, and looks at preventive measures as a shield from the disease.

Among the 12 major types of childhood cancer, leukaemia, brain and central nervous system cancer account for more than half of new cases, with one-third of childhood cancers being leukaemia.



DISPARITIES IN CULTURAL CANCER

Using data from GLOBOCAN, a project by the International Agency for Research on Cancer, the World Cancer Research Fund (WCRF) found that in 2010, of the 50 nations with the highest overall cancer rates in the world, Denmark took first place and the South African Republic came in at number 50. Rounding out the top ten were Ireland, Australia, New Zealand, Belgium, France, USA, Norway, Canada and the Czech Republic. Interestingly, the Republic of Korea and Chinese Taipei were the only Asian countries to crack the top 50 countries at 24th and 29th respectively.

According to the World Health Organisation (WHO), cancer is a leading cause of death worldwide, accounting for 7.6 million deaths (around 13% of all deaths) in 2008. This number is projected to continue rising, with an estimated 13.1 million deaths in 2030.

Factors that contribute to geographic variation in cancer occurrence include

regional variations in the prevalence of major risk factors, availability and use of medical practices such as cancer screening, availability and quality of treatment, and age structure. In 2008, it was documented that the most common cancer among males in most economically developed countries was prostate cancer while lung cancer predominated as the top cancer in most of Eastern Europe and Asia.

The greatest variation among males was observed in Africa, where the most common cancers included prostate, lung, liver, oesophagus, bladder, Kaposi sarcoma and Non-Hodgkin lymphoma. Among females worldwide, the most common cancer sites were either breast or cervical cancer, with the exception of China (lung), South Korea (thyroid), and Mongolia and Vietnam (liver).

The latest figures are adjusted, taking age into account to allow a comparison with the world's population. This is done because cancer is more common in older people, and countries with an ageing population thus tend to have higher rates.

Lung cancer occurs when uncontrolled cell growth begins in one or both lungs, eventually forming into tumours that attach to the lung lining. This interferes with the lung's main function, which is to provide the bloodstream with oxygen to be carried to the whole body. Image courtesy by Terese Winslow

However, WCRF stated that the highest rates have been noted in 'high-income countries' and put this down to a variety of reasons. "This is likely to be partly because high-income countries are better at diagnosing and recording new cases of cancer. But a large part of the reason is also that high-income countries tend to have higher levels of obesity and alcohol consumption, and lower levels of physical activity."

The study found that people in rich countries tended to have cancers linked to affluence or a "Western lifestyle" – cancers of the colon, rectum, breast and prostate – that can be caused by obesity, lack of exercise, diet and age.

In the developing world, cancers of the liver, stomach and oesophagus were more common, often linked to consumption

of carcinogenic preserved foods, such as smoked or salted food, and parasitic infections that attack organs.

RECOMMENDATIONS

Perhaps the most comforting fact about cancer is that more than half of all cancer cases and deaths worldwide are estimated to be potentially preventable. Below are the recommendations to stave off the disease.

1. Achieve and maintain a healthy weight throughout life

In the United States, it has been estimated that excessive weight and obesity contribute between 14% to 20% of all cancer-related mortality, with strong evidence of increased risk of bowel, oesophagus, pancreas, kidney, endometrium and breast cancer. In fact, body fatness is linked to 24% of pancreatic cancer cases in the UK.

Scientists believe there are several reasons for the link between body fat and cancer. For example, research shows that fat cells release hormones such as oestrogen, which can increase the risk of cancers such as breast cancer. Studies have also shown that fat, particularly if stored around the waist, encourages the body to produce 'growth hormones'. Having high levels of these hormones is linked to a greater risk of cancer.

One of the easiest ways to check if you are a healthy weight is by measuring your Body Mass Index. This calculates whether you are in the healthy weight range for your height, so it is a useful guide for most adults. A healthy BMI for men and women is between 18.5-24.9. For cancer prevention, you should aim for the lower end of this range.



Try to be as lean as possible throughout life without being underweight, by avoiding excess weight gain at all ages. Losing even a small amount of weight has health benefits and serves as a good starting point for those who are currently overweight or obese. An especially effective strategy of maintaining a healthy weight is to engage in regular physical activity and to limit consumption of high-calorie foods and beverages.

2. Adopt a physically active lifestyle

Being active is thought to reduce cancer risk largely by improving energy metabolism and reducing circulating concentrations of estrogens, insulin, and insulin-like growth factors. Scientific evidence also indicates that physical activity may reduce the risk of several

types of cancer, including cancers of the breast, colon, and endometrium, as well as advanced prostate cancer.

Therefore, adults should engage in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity activity every week, or an equivalent combination, preferably spread throughout the week. Likewise, children and adolescents should follow suit and engage in at least 1 hour of moderate- or vigorous-intensity activity each day, with vigorous-intensity activity at least three days a week.

Moderate activity is anything that gets your heart beating a bit faster and makes you breathe more deeply – like brisk walking. There are plenty of easy ways to build this type of activity into your daily routine, so you do not need to set aside half an hour each day to exercise. Shorter bouts of activity are just as beneficial as it is the total time that is important. Vigorous activity means raising your heart rate so

The food pyramid is a good general guide to developing and consuming a healthy diet, which is proven to be more effective in cancer prevention than dietary supplements.

Being active is thought to reduce cancer risk, largely by improving energy metabolism and reducing circulating concentrations of oestrogen and high levels of growth hormones.



that you warm up, start to sweat and feel out of breath. If you want to make vigorous activity a regular part of your life, it is important to find something that is fun and accessible such as jogging or team games such as football and netball.

Sedentary behaviour such as sitting, lying down, watching television and other forms of screen-based entertainment should be limited or even better, replaced by intentional physical activity which can have many health benefits.

3. Consume a healthy diet, with an emphasis on plant foods.

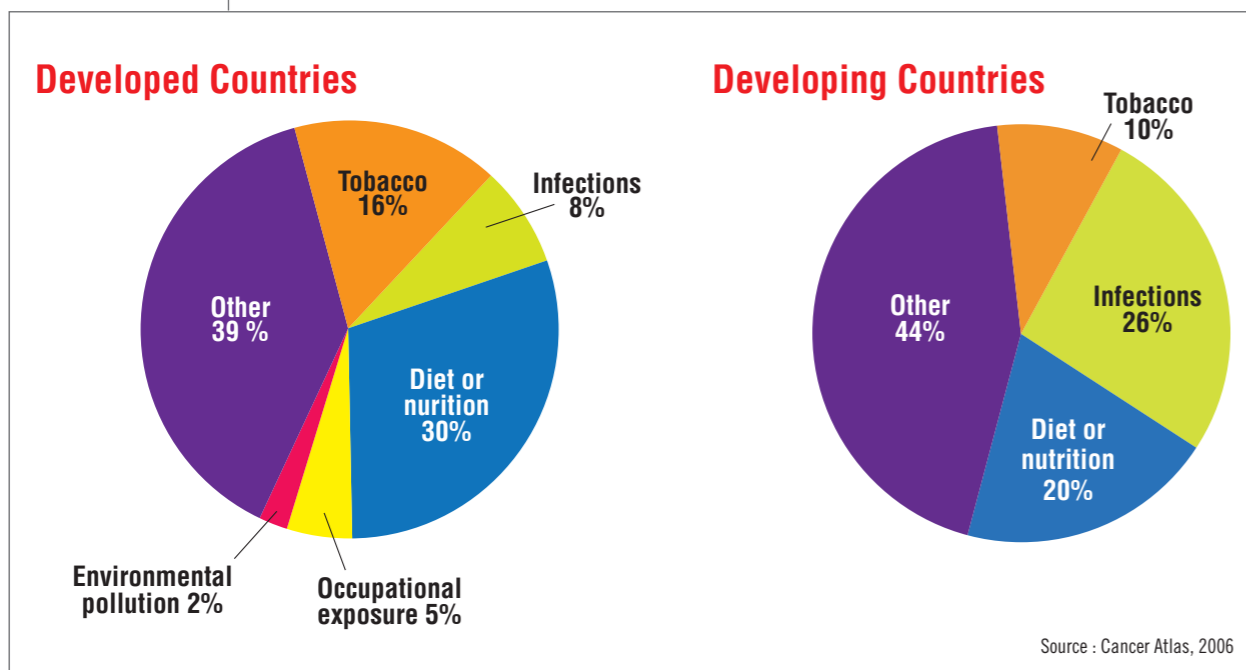
Studies have shown that individuals who eat more processed and red meat, potatoes, refined grains, and sugar-sweetened beverages and foods, are at a higher risk of developing or dying from a variety of cancers, and that consuming a diet that contains a variety of fruits and vegetables, whole grains, and fish or poultry and fewer

red and processed meats is associated with lower risk.

Until more is known about the specific components of diet that influence cancer risk, the best advice is to consume a mostly plant-based diet while a special emphasis should be placed on controlling total caloric intake to help achieve and maintain a healthy weight.

With this in mind, adjust your diet by choosing foods and beverages in amounts that help achieve and maintain a healthy weight, such as limiting consumption of processed meat and red meat, selecting whole grains instead of refined grain products and eating at least two and half or more cups of vegetables and fruits each day. Also, limit consumption of energy-dense foods, which are foods high in fats and/or added sugar and/or low in fibre, and avoid sugary drinks as these can contribute to weight gain. Salty foods and foods processed with salt high in sodium should also be restricted.

Proportion of cancer causes by major risk factors and level of economic development.



While it is true that high-income developed countries have the highest cancer rates in the world, this is more due to the fact that these countries have better access to screenings and are better at diagnosing and recording new cases of cancer than developing countries. Similarly, countries with lower life expectancy also have lower cancer rates as cancer is a disease that often targets older people.

Conversely, it has been documented that cultures which adopt the Western lifestyle of an unhealthy diet, heavy consumption of tobacco and alcohol and lack of physical activity have an increased likelihood of developing the cancers more widespread in Western societies. Therefore, it is vital that precautions and lifestyle changes are implemented to lower the possibility of getting this disease.

It is important to realise that cancer transcends cultural barriers, so that the necessary lifestyle adjustments for prevention are implemented, thus ensuring good health and eventual cancer eradication.

Palliative Care With Compassion

Dr Lum Wan Heng on Oncology and his role in treatment

THE word ‘cancer’ brings with it a sense of repugnance and despair, the more so when one is diagnosed with this dreaded affliction. Images of drastic surgery and debilitating chemotherapy come to mind and fear of imminent death inculcates a sense of hopelessness. It is no respecter of age or gender, race or status, and every part of the body is susceptible to the risk of tumour. Cancer is an illness that grips not only its immediate victims but also greatly affects other family members also trying to cope.

As one of KPJ’s few practising oncologists, Dr Lum Wan Heng has been with the **KPJ Damansara Specialist Centre** for the past four years. Since joining the field of oncology as a medical officer in 1997, he has seen his fair share of what cancer can do to patients and the care they need. *Care for Life* examines this branch of medicine through the eyes of an expert.



Oncology not only requires Dr Lum to administer chemotherapy but he also makes sure his patients get the necessary palliative care and are comfortable.

COMPANION ON A DIFFICULT JOURNEY

By his own admission, Dr Lum’s heart belongs to the technical side of oncology, especially when handling the radiation machine to conduct surgeries. But that is not to say that he disregards the human element. Far from it. More than anything, he understands and emphasises that palliative care is a big part of the field.

“Palliative care means that I have to walk with the patient until the end of the road and hold their hand when they need me to. Even though I fell in love with the technical side, everything else comes together with it, both good and bad.”

Counselling the patient and consoling the family is the most difficult part of his job, especially when the cancer is stage three or four, when a cure is no longer a viable option. He accepts this role as the bearer of bad news but admits that varying reactions makes delivering the message.

“Some patients can accept it but more often than not, most (at least 90%) cannot. So you must change the way you talk, you must be gentle and consider the feelings of the patient, try to gauge what is happening, what they are thinking about. You must be there to counsel, to hold their hand.”

UNDETERMINED PATIENT FREQUENCY

“With many private centres in Kuala Lumpur offering oncology services, patients who have the means to do so actually go ‘shopping around’.”

This practice makes it difficult to keep track of what cancers are on an upward or downward trend for any particular age group. However, Dr Lum notes that it is orthodox for patients to seek second, sometimes third opinions and he feels that they have every right to do so.

SERIOUS BUSINESS

All types of cancer are serious. From stage one to stage four, the danger of relapse always exists, though because it is terminal, stage four is the worst as it puts patients in dire straits. Dr Lum identifies cancer being incurable as the biggest misconception in his field. “If the patient comes in early, at stage one, stage two or even sometimes stage three, cure is still a possibility.”

Dr Lum puts the preference for natural medicine down to an underlying fear of chemotherapy. In fact, it baffles him that patients don’t mind going under the knife for surgery to remove tumour-affected breast or uterus but are utterly against chemotherapy.

IMPORTANCE OF EMPATHY

“The most important thing in oncology, for any doctor who decides to choose this as a career, is being able to feel for the patient.”

A strong emotional core is essential as patients are at their most vulnerable. It is next to impossible to detach oneself from their emotional and physical pain as well as highly detrimental to the patients if their doctors are emotionless. The treatment journey may take up to four or five years, sometimes more, and oncology doctors often find that they have developed a strong bond with their patients. Dr Lum says this is good because it allows doctors to understand their patients. But it comes with a heavy burden.

“The most difficult part is when a doctor says ‘We’ve done our best, time for oncology to take over.’ It is a great responsibility to bear. To counsel a young lady while knowing that she is going to die, is not easy. Unfortunately, it comes with the field.”

FAST FACTS

Dr Lum Wan Heng – Clinical Oncologist at KPJ Damansara Specialist Hospital has successfully found the balance between his technical expertise and caring nature that patients respond to. Here are some of his credentials:

- 2002-2004 – Attachment under Department of Radiotherapy and Oncology in Queen Elizabeth Hospital Hong Kong
- 2005 – Attached to Putrajaya Hospital in Surgical Department
- 2008 – Hospital Kuala Lumpur – Oncology and Radiotherapy Department
- August 2008-present – Clinical Oncologist at KPJ Damansara Specialist Hospital

The Gift Of Better Health

KPJ's Medical Packages

AS one of Malaysia's premier healthcare providers, KPJ Healthcare Berhad has brought over 30 years of industry excellence to the nation and now, extends this distinction to the world at large with a comprehensive array of medical packages. Designed to suit a range of lifestyles and income brackets, taking care of one's health has never been easier with an assortment of healthcare choices that are both affordable and efficacious.

LEADERS IN HEALTHCARE

Since its inception in 1981, KPJ Healthcare Berhad has cemented its reputation as one of the nation's leading medical providers as well as a national market leader, with a network of local and foreign private healthcare facilities. Comprising more than 20 private specialist hospitals located in major towns across Malaysia and several others overseas, KPJ Healthcare is constantly transcending the boundaries in its quest for corporate and service excellence.

With over 800 medical professionals and close to 8,000 supporting healthcare personnel comprising a team of nurses, radiographers, technicians and management specialists, the group's highly qualified staff are well positioned to meet the needs of patients from diverse cultures and backgrounds. KPJ hospitals are equipped with the most sophisticated in medical technology and offer a comprehensive assortment of services across a range of medical disciplines, including angiograms,

cardiology, oncology, neurosurgery and diet counselling among others.

BETTER HEALTH...GENERALLY

General Executive Screening

KPJ Healthcare Berhad's General Executive Screening (GES) services encompass a wide range of routine medical check-ups, which include physical examinations, blood pressure gauging, blood and urine screening as well as chest X-rays and tests to determine Body Mass Index and vision functioning. Conducted at KPJ's Premier Screening and Wellness Centre, these tests are overseen by a team of professionals that embody the ultimate in courtesy, patient confidence and care – a new standard in general healthcare.

The centre also offers Premier Well Woman and Premier Well Man packages, with the former geared towards providing women with a pap smear, breast examination, and breast and pelvic ultrasounds in addition to GES services.

From left to right: From regular health screenings to eye care, from cancer detection to geriatric services, KPJ Healthcare has various medical packages to meet the specific needs of its patients.





The package catering for men on the other hand provides prostate cancer screening, urine flow-rate monitoring and a prostate ultrasound alongside services included in the GES package. With an emphasis on maintaining patient privacy, patients can rest assured that their most intimate medical concerns will be attended to with tact and sensitivity.

A BEAUTIFUL LIFE

Plastic & Reconstructive Surgery

As procedures ranking high in most medical tourist destinations, aesthetic treatments and cosmetic surgery are a booming market – with Malaysia leading the way in terms of affordability. The country's warm climate and tropical environment makes it an ideal choice for those seeking recuperation in discreet, tranquil surrounds. In order to keep pace with growing demands for such procedures, KPJ Healthcare introduces its comprehensive and competitively-priced Plastic & Reconstructive Surgery package – merging choice with quality.

The group's reconstructive surgeons boast international accreditation and employ the highest in ethical, safety and

technological standards, in addition to keeping abreast with the latest in cosmetic trends and advancements. Many have helped to dramatically improve the quality of life of those injured in accidents or suffering congenital birth defects.

From delicate, high-precision surgeries such as skin and bone grafting to more simple aesthetic procedures like face-lifts, KPJ Healthcare's highly-qualified team of specialists ensure that each is performed with the utmost care and detail. Breast augmentation and reduction, rhinoplasty and abdominoplasty are among the procedures offered, with more intensive ones meriting a longer hospital stay than others.

SURGICAL EXCELLENCE

Surgery

A similar set-up applies to KPJ Healthcare's Surgical specialties which run the gamut of ENT, Urology and Neurological services, with less invasive procedures such as colonoscopies warranting only a single night's stay while more extensive ones like laparoscopic appendectomies requiring almost a week of hospital stay.

With a range of stellar pre and post-op services, patients are guided through each step of the surgical process by caring, competent professionals. Close monitoring and regular follow-ups by the surgical and critical care teams at KPJ Healthcare ensure that patients are guaranteed a speedy recovery in comfortable surroundings.

STELLAR SCREENING SERVICES

Additional Screening

KPJ Healthcare offers Osteoporosis Screening to catch the disease in its earliest stages. In addition, an optional Blood Screening package is offered as a valuable diagnostic tool for cancer detection.

Tailored to both men and women and embodying the ideal that prevention is better than cure, the package focuses on male cancer markers in the prostate, liver, pancreas and stomach areas in addition to whole-body screening. Female cancer markers are concentrated on detecting ovarian and breast cancers alongside a full-body screening.

THE HEALTH OF YOUR HEART

Cardiac Care

KPJ Healthcare's Cardiac Centres feature the latest in monitoring and treatment infrastructure, and are staffed by a team of high-calibre professionals who are on hand to attend to patients' every need, ranging from bypass operations to angioplasty.

In support of maintaining a healthy heart, the Premier Well Man and Well Woman Heart packages includes physical examinations by KPJ Healthcare's leading cardiologists and coronary angiographies, in addition to a comprehensive series of tests for blood and urine screening, as well as vision and lung function testing among others.

Guided to fulfil its mission for corporate and service excellence, KPJ Healthcare Berhad holds true to its core values of safety, courtesy, integrity, professionalism and continuous advancement – and continues to pave the way for healthcare greatness.

From left to right: From routine medical check-ups to major surgeries, KPJ hospitals are equipped with the latest cutting-edge medical technology and qualified team of doctors, surgeons, nurses and technicians to provide patients with the best in healthcare services.

A Testimony to Care

AS Malaysia's leading private healthcare provider, KPJ Healthcare Berhad has not only established a reputation on the local front, its hospitals and services are also sought after by medical tourists as well as expatriates. In this issue, *Care For Life* meets expatriates from America and Oman to discover their reasons for choosing KPJ as the choice to better healthcare.



On With The Show!

HAVING the main star fall ill on the job is every filmmaker's worst nightmare. For American writer, producer, director and founder of Maverick Media – Michael Helfman, the fate of his company's first feature film seemed uncertain when one of his leads went down with a 39.5 degree fever.



Helfman, along with his cast and crew were at a remote jungle area in Sarawak for two weeks, filming scenes of the upcoming adventure-thriller, *The Borneo Incident*. "There was a scene where one of my actors, Mitch Ross, had to put mud on his body. Because of that, he received hundreds of bites from mosquitoes," Helfman recounted. Seeing the reddish marks all over Ross' skin, Helfman knew that the actor needed immediate medical attention. In spite of the urgency, getting to a hospital in Kuching would require a seven-hour commute, comprising a two-hour boat ride and a five-hour drive.

"By the time we reached the city, Mitch was very ill and I feared it may be Dengue fever," said the director. Having worked as a media consultant in Malaysia for quite some time, Helfman was not unfamiliar with the reputation of KPJ hospitals and he decided to have Ross admitted to Kuching Specialist Hospital. Much to his relief, the doctors at the hospital discovered that Ross' condition was not Dengue but a viral infection from contaminated food, "Mitch was immediately given a shot and put on an IV drip. Within a couple of hours, his

condition stabilised, and just after a one-night stay at the hospital, he was restored to full health."

In fact, thanks to the capable doctors and nurses at Kuching Specialist Hospital, Ross was back in the jungle the following day. "Shortly after Mitch was discharged, we went back to filming and he was doing back-flips off a 10 metres cliff!" said Helfman.

Speaking on his experience at Kuching Specialist Hospital, Helfman could not think of a better healthcare provider in Malaysia. "The doctors, nurses and staff at the hospital are very helpful, professional and efficient and the care and attention they provide patients are on par with the best hospitals in the world," he said.

The Borneo Incident, which features an international cast, and includes local talents such as Henry Golding, Fay Hokulani, Daphne Iking and Carmen Soo, is set to be released in theatres by the last quarter of 2012.

Previous page: The Borneo Incident producer, Michael Helfman, with his crew at the filming location in Sarawak.

Benchmarking Excellence



KPJ Healthcare has won the Healthcare Service Provider of the Year Award at the 2011 Frost and Sullivan Malaysia Excellence Awards, in recognition of their leadership in the private healthcare industry. Deeply committed to consistently delivering world-class medical services, they have become the benchmark for healthcare provision in Malaysia.

With an international reputation for excellence, KPJ Healthcare attracts discerning patients such as Mr Abdulatif Al-Riyami, and his nephew, Mr Mohammed Al-Riyami.



A WARM CONVALESCENCE

Abdulatif leads a very active life that exposes him to nature's elements. While riding in an open four-wheel drive in Oman, beset by cold wind and rain, he experienced a pain in his arms. It spread to the rest of his body and eventually became so bad that it rendered him immobile. Diagnoses by the Oman Police Hospital and the Oman Royal Hospital did not confirm any major problems – there was nothing wrong with his nerves, bones, spine, or even his muscles.

Yet the pain persisted, so his nephew Mohammed began searching for second opinions. An engineer by trade, Mohammed made many friends during extended periods of working in Malaysia. He spread the word that his beloved uncle was seeking second medical opinions, and a Malaysian associate highly recommended the KPJ Tawakkal Specialist Hospital.

"Malaysia is like a second home to me. I come here quite often actually, for two to four days in a row each time. I love the food and people," says Mohammed. "I was not familiar with KPJ. I was more familiar with Prince Court Hospital because I've passed it while heading

to and from KLCC. This was my first KPJ visit and I am very pleasantly surprised."

When googling KPJ while in Oman, he read their mission statement and learned about their doctors. Impressed by their dedication to excellence as well as the international qualifications and extensive experience of their Orthopaedic doctors, KPJ Tawakkal Specialist Hospital became a choice option for a second diagnosis. Then after receiving a phone call from a KPJ medical officer who detailed the hospital's services in perfect Arabic, the deal was sealed: Tawakkal it was.

Upon their arrival at the KPJ Healthcare Tawakkal Specialist Hospital, they were warmly greeted by the very medical officer to whom Mohammed had spoken. A lot of planning had been done beforehand, so the meetings with doctors were not delayed. They were updated regularly on the process of the diagnosis until the final results. Mohammed and Abdulatif were very pleased with the initiative and professionalism shown by the medical officer who had been allocated to them.

Fortunately, his attending specialist Dr Abu Salim found nothing majorly wrong with Abdulatif. His nerves, muscles and spine were all okay, and after the check-up, he and his nephew flew to Kuching for a brief, one-night holiday. There, Abdulatif enjoyed a hot jacuzzi.

The warm waters made him feel very well, even taking away most of his pain. Mohammed added, "I think the jacuzzi's heat helped a lot to ease tension in his muscles. In Oman, people shower but have no time for a long bath, so it was something my uncle had never tried."

GREAT EXPECTATIONS

Mohammed himself is in good health but had an executive check-up just in case. He also had an Orthopaedic doctor examine his left knee which had been operated on a year earlier.

He was very impressed. The doctor faced a challenge because Mohammed had left



his X-rays behind in Oman. The examination began with testing his knee for reflexivity and to pinpoint the exact area and extent of the problem. According to Mohammed, the diagnosis was spot-on. He even agreed to have an MRI-scan performed instead of an X-ray, as recommended by the doctor.

"I could give you a very positive SWOT analysis of Tawakkal hospital – I'm an engineer after all", said Mohammed. They both also had an immunisation update and Mohammed joked that while the injections were not painful, KPJ's courteous, pleasant and gentle staff made a lasting positive impression on them.

This was Abdulatif's first visit to Malaysia, but it certainly will not be his last. Not only has he fallen in love with KPJ Healthcare Berhad's excellent medical service and warmth, but the prickly king of fruits – the durian – has taken his fancy, and his appetite for the fruit became a source of amusement to his nephew and also the hospital staff.

Abdulatif and Mohammed spent their last day in Malaysia visiting friends, associates, shopping and enjoying the local cuisine. Mohammed concluded, "I recommend Malaysia as a great holiday destination to all my friends and family back home. And I will also recommend Tawakkal Hospital and KPJ Healthcare to anyone who needs medical attention".

Previous page: Abdulatif Al-Riyami, Mohammed's uncle experienced pain in his body that the doctors at KPJ Tawakkal Specialist Hospital successfully diagnosed and treated.

Above: Mohammed was very impressed by the excellent services at KPJ Tawakkal Specialist Hospital as well as Malaysia as a holiday destination.

FUTURE CHAMPIONS of Healthcare



While some youths concern themselves with parties and gadgets, students at the KPJ International University College of Nursing and Health Sciences (KPJIUC) look beyond this in pursuit of their passions for the good of others. This issue, *Care for Life* interviews five ambitious youths determined to make their mark on society.

Intent on providing the best medical services for the country, KPJ Healthcare Berhad set up an education facility in 1991 in Nilai to train fresh high school graduates for a career in nursing and health sciences. 20 years later, the college has come a long way, collecting The BrandLaureate Award for Education in Nursing in 2008 and being established as a University College in 2011.

With excellent in-house facilities, and over 600 medical specialists as knowledge experts, it is no doubt that the university is equipped to nurture quality intellectual talent. And with convenient campus housing alleviating the problem of finding accommodation as well as the fantastic job prospects at KPJ hospitals, students from all over the region such as Philippines, Indonesia and even Sri Lanka are applying for the first-class education that KPJ offers.

FLORENCE MARIKAN

Diploma in Nursing

Named after the revered English nurse Florence Nightingale, it comes as no surprise that Florence Marikan is President of the Student Body at KPJIUC. This aspiring young nurse travelled a long way from Kuching, Sarawak to pursue her education.

“After high school, I discussed my future with my parents and they advised me to take up nursing. When I saw the advertisement for KPJIUC, it was settled. Although I was initially indifferent to nursing, once I started the practical courses, I began to really enjoy them. So in a way it is God’s way of telling me that this is what I’m meant to do,” she said.

Despite being far away from home, Florence enjoys the challenges of being a nursing student. The perks of being President of the Student Body also help in enriching her experience. “During the month of Eid, the Student Body visits orphanages to spend time

with the children. We’re also working towards a similar programme during Deepavali and Chinese New Year when we share our cultural experience via traditional food and practices,” she said.

The diverse group of students at the university has opened her eyes to the various cultural lifestyles and the history of the world. “It’s great because we all get to hang out and grow together, and it’s not just through studies,” Florence said happily. She added that “recently, the university organised subsidised trips to Gunung Ledang and Broga Hill. It was great fun and we had the opportunity to do activities outside class.”

Florence loves photography and is not afraid of taking on new challenges. When asked about her first experience with a patient’s death, she explained that it is part of the profession. Once a doctor confirms the death, the nurses will then take over by sponging the body and dressing the patient according to his or her religion. “Sometimes we feel sad, but it is our role as nurses to be composed, and provide support for the family,” she said.

On looking ahead, she plans to obtain a Doctorate in Nursing, being inspired by one of her lecturers in the university, Puan Rashidah. “I plan to go as far as I can in this field as there are so many things that I still want to know,” she said.

NIK MOHD NIK IKRAM

Diploma in Physiotherapy

At the age of 23, Nik Mohd Nik Ikram journeyed from his home town in Kelantan to chase his ambition. His thirst for education was not just based on his own aspirations, but in the memory of someone who was very dear to him.

“A couple of years ago, my grandfather was hospitalised due to a knee injury, and soon after he passed away,” he explained. “That was when I decided

that I must try to do something to help others in need. Looking back, I am proud to say that I made the right decision for my life," he said.

Nik Ikram's love for sports and team work has led him to specialise in Physiotherapy or PT. This is a branch of healthcare that deals with individuals of all ages to help them reach their maximum potential of physical fitness. "I once cared for a 54 year old patient who could not even stand. After intensive therapy that lasted for two weeks, he was able to walk. Realising that I helped him achieve that felt amazing," he said with a grin.

Though the distance has made it hard for him to be with his family, the education he receives at KPJIUC is more than fulfilling. "My lecturers inspire me. I've specialists from India lecturing me and sharing with me their knowledge of the field," Nik Ikram said. "The study environment here has made us all into one big family. I've no hesitation in meeting my

teachers to discuss with them topics that I want to learn – or just share a joke!"

The Nilai campus, like its sister campuses in Johor and Penang, is situated comfortably in a town area with the convenience of a city and the serenity of a village town – much like Nik Ikram's home up north. "I travel back home during semester breaks. The public transportation here is good and students are able to go across the country during holidays," he said. "The area is peaceful and there's not much hustle and bustle, just a lot of young children playing around and parks where we can do sports. It's a pleasant place to study."

FAIZUL AL-AZWAN

Diploma in Nursing

Faizul Al-Azwan simply laughs when strangers question about his decision to become a male nurse. "People don't know, but male nurses are actually the special ones," he said playfully. "We're

Nik Mohd Nik Ikram demonstrating a physical therapy exercise on a fellow student under the guidance of his teachers.



helpful when it comes to carrying heavy equipment – or heavy patients! Sometimes, male patients specifically request male nurses. Plus, male nurses are a minority so we're very appreciated and there's no discrimination at all," he said.

Initially, Faizul wanted to become an accountant. "It's almost a polar opposite – numbers and biology, but I like them both. Another weird thing is that I used to like *Bahasa Malaysia*, a more art-based subject, when I was in school. Now, I'm doing Nursing which is basically science based," he said. Having found his calling in nursing, he is not hesitant to share his vision of the future, "I want to be a lecturer or instructor. Teaching is a rewarding occupation and I'd like to share what I know and reach out to as many people as possible."

In his spare time, Faizul likes hanging out with his close friends and playing games. He is also the Vice President of the male hostels in the university. "Of course nursing has its stressful moments. It's about attitude as much as knowledge, but as long as you know how to properly juggle studies and a healthy social life, it's not much different from any other course," he said.

"My first practical experience was in 2009 at KPJ Seremban Specialist Hospital, and my patient had just come out of surgery. I was very nervous. However, with support from the people around me, I've grown more confident," he said. "What I like about KPJ International University College is that it also helps us grow as a person, not just a medical student. The good syllabus is one thing, but the environment is also nice."

Faizul conducts study groups during semesters and takes part in modules for the hostels he is in charge of. The university also holds an annual Sports Day in which everyone in the campus participates, combining team work and fitness. Far



Ariyati bt Djamil's love for technology and science prompted her to take up a Diploma in Medical Imaging course. Here, she handles medical imaging equipment, proving that girls and technology are a good combination.

away from his home in Kuching, Sarawak, he added that life as a hostel student has contributed to his independence and maturity. "I feel more responsible now, and I look forward to going the distance in my career," he said.

ARIYATI BINTI DJAMIL

Diploma in Medical Imaging

Calm and composed, Ariyati has no reservations talking about her passion for the course. "I love technology and learning how to apply it in medicine is something I find very interesting."

Hailing from the southern state, Johor Bahru, this 20 year old enjoys her course in Medical Imaging, commonly referred to as X-Ray. In its wider scope, medical imaging also covers Magnetic Resonance Imaging (MRI) and ultrasound, something Ariyati takes pleasure in learning. For her, KPJIUC's laboratories, library and information technology facilities are a treasure trove of references.

An avid lover of research, development and mechanics, Ariyati also keeps up with the latest news on medical technology. "Earlier in the year when there was a big nuclear crisis in Japan following its tragic tsunami, I noticed how everyone was suddenly scared of radiation. People were walking around with umbrellas to avoid the rain and wearing face masks. What people don't realise is that they are exposed to radiation everyday," she said.

A CALL TO CARE



"KPJ International University College helps us grow as people, not just as students."

Faizul Al-Azwan

"I love technology and learning how to apply it in medicine is something I find very interesting."

Ariyati binti Djamil

"Mixing compounds and medicine is very thrilling for me, even more so when I know that it's done to help someone in need."

Vishaleny

"I really enjoyed the practical courses once I started them. So in a way it is God's way of telling me that this is what I'm meant to do."

Florence Manikam

"I decided that I must try to do something to help others in need when my grandfather passed away shortly after being hospitalised."

Nik Ikra

The radiation, known as 'background radiation', is present with all magnetised and electronic equipment and surprisingly, in food. "To reduce exposure, it's simply a matter of not using your technology so much. I know it's hard, but people have to take certain precautions for their own benefit. As radiation is invisible but highly dangerous in large doses, it's important to be wary," she said.

In the lab, Ariyati relates how medical workers have to wear a lead shield in order to protect themselves from radiation. As a student, she wears a meter around her neck that measures the amount of radiation she receives in a day. "It's fun because we get to use specialised equipment and as I like science, this is my forte," she said. "KPJIUC offers sufficient laboratory services and specialised equipment for the course."

As for her plans for the future, Ariyati intends to become a lecturer. KPJIUC collaborates with the University of South Australia (UniSA) for a degree program in Nurse Education/Teaching. "The pursuit of knowledge is very important. The medical field is very reliant on technology and the more we advance, the more we achieve. It's beneficial on so many

levels. I make sure I constantly update myself on new breakthroughs," she said with a smile.

VISHALENY SUBRAMANIAM

Diploma in Pharmacy

Inspired by her brother, who is a doctor in a medical centre in Sabah, Vishaleny Subramaniam decided to apply her interest in chemistry to the field of pharmacy. This 20 year old grew up in busy Kuala Lumpur, with a penchant for knowledge and a love for mixing elements.

"The most common misconception about pharmacy is that people think it's all about pills," she said. "Pharmacists actually do a lot of work. We organise the medication and its amount, catalogue, disperse and correct prescriptions. Basically we're responsible for the drugs, making us indispensable to the medical sector."

A special part of pharmacy that Vishaleny loves is preparing medicines. "If we're out of stock, we have to concoct the drug from various components as we've been taught. This is where the real crazy chemistry comes in," she joked. "Mixing compounds and

medicine is very thrilling for me, even more so knowing that it's done to help someone in need."

As KPJIUC gives practical training sessions every semester, she is familiar with the scenarios of her career. "KPJ has a number of large and diverse branches not just in the country but internationally as well. The range of experience we get here as students is really amazing because we are exposed to a lot of elements from the very beginning of our studies."

Vishaleny also noted that in KPJIUC, hospital representatives come to the college to interview students for future employment instead of the other way around. In ensuring their graduates are the best professionals in their chosen fields, KPJ trains students thoroughly throughout their studies and scholarship grants are also available depending on the students' attainments.

"As long as you put your mind to it, you really can do anything," Vishaleny said. Tall and lithe, she loves dancing and taking part in athletics in her spare time. Her studies have not stopped her from pursuing her hobbies and she plans to continue majoring in pharmacy for her future career. "With the support of my family and friends and thanks to the opportunities here in KPJIUC, I'm sure I can realise my dreams," she said happily.

As shown by these young students, KPJIUC's mission to be the centre of excellence for nursing and allied health education is definitely being realised. The confidence and charisma portrayed by its students, coupled with professional lecturers and quality facilities has made KPJIUC a premier place to pursue an education in healthcare.



Caring from the Heart

The nurses of KPJ Johor Specialist Hospital

There is more to the nursing profession than assisting doctors and facilitating medical procedures. To the nurses of **KPJ Johor Specialist Hospital**, the job is also about being reliable, empathetic and caring towards patients in times when emotional support is needed. In fact, for these nurses, it is the caring spirit that motivates them to put their best foot forward in providing patient care each day of their lives.



ASHWINI NAIR TAMORDARAN
Registered Nurse-in-Charge,
Oncology Centre

As the one who oversees the department that cares for cancer patients, Ashwini believes that a strong knowledge foundation is important for nurses. "I love caring for patients. Because we deal with the very ill at the oncology centre, knowledge of the anatomy and physiology of the human body is a must," she said.

Having been with KPJ Johor Specialist Hospital for the past seven years now, Ashwini was proud to have been given the opportunity to extend her passion for caring when she was appointed to be in charge of department. "As the Registered Nurse-in-Charge, I now have the added responsibility of seeing to patients with financial problems and ensuring their situation does not interfere with their access to treatment," said Ashwini.

SUHANA BINTI SABRAN
Senior Staff Nurse, Women and Baby Centre,
Nursery Intensive Care Unit

Since she graduated from nursing college in 1995, Suhana has worked in the Nursery Intensive Care Unit (NICU). Her choice to build a nursing career that centres on caring for mothers and their newborns is driven by her own inherent maternal instincts.

"Every mother-to-be hopes to have a smooth delivery and health baby, and it is very depressing for them and their family when things do not go as expected. Because nurses are normally the first people patients come in contact with before a doctor can attend to them, my job is to be there to console and comfort them," she said.

As a mother herself, Suhana truly empathises with the patients she attends to on a personal level. "Dealing with mothers and babies on a daily basis gives me great joy and satisfaction as a mother and a nurse. I am especially keen to educate first-time mothers so they are equipped with the right knowledge to care for their newborns," Suhana added.



ANAS FADHLI BIN SHAHRUDIN
Registered Staff Nurse, Cardiothoracic
Department, Cath Lab

Having only entered the nursing profession in July 2009, Anas quickly learned that nursing is both an art and science, and that one must be prepared to think outside the box when a situation calls for it. "The most unforgettable experience for me, so far, was once being called in the middle of the night to assist in an emergency case. Normally, my work is done during the day," he recalled with a smile.

For Anas, whose duties include assisting cardiologists and vascular surgeons in carrying out procedures like echocardiogram, stress test and angiogram, nursing is as much about creative thinking as having factual knowledge. "Although it is important that we know our science, and there are instances where we have to improvise. While assisting doctors in performing surgical intervention.



AZRANI AHMAD ALI
Registered Staff Nurse, Operation Theatre

With 11 years of experience as an OT nurse, Azrani still finds satisfaction in seeing the positive impact surgery has on the life of patients. "We see the difference and know that we play an integral part in helping them recover post-operation and consequently changing their lives for the better," she said with pride.

Furthermore, she also enjoys the challenge of continuous learning. "Changes are constantly happening, and as an OT nurse, we must constantly update our knowledge of the latest innovations in the various disciplines as well as newly acquired technology and machinery," Azrani explained.

MANZULA PARAMASIVAN
Registered Staff Nurse, Haemodialysis Centre

"Being a nurse, the satisfaction we derive from caring for patients can't be measured in terms of monetary value. It is a great feeling when you see patients who have arrived sick leaving in vibrant health. I have had patients whom I've attended to stopped by to visit me when they return for check-ups after being discharged, bringing along their family members and personally expressing their gratitude to me!" Manzula said.

Despite being fairly new to nursing – with only 2 years of experience – Manzula knew from the start that she had found her calling. "Nursing is a very unique, intuition-based line of work. The most important aspect, however, is that one must have the caring spirit," she concluded.

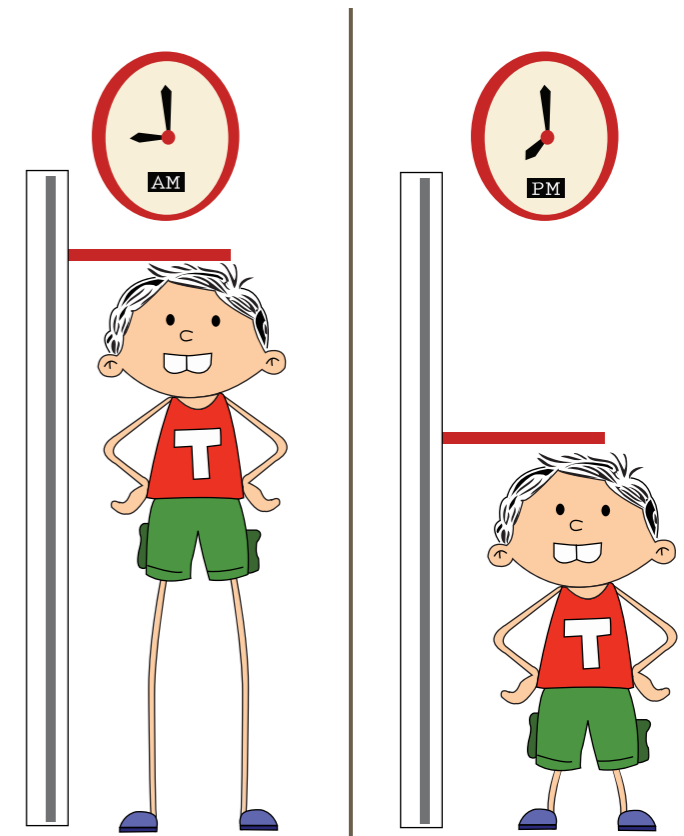


There is no doubt that nurses play a major role in the overall experience of patients and consequently, their well-being. Understanding this crucial responsibility, KPJ Johor Specialist Hospital nurses play their part with passion and dedication.

Whether it's fascinating health facts, quizzical brain teasers or jokes that are bound to leave you in stitches, the *Funny Bone* proves that all things medical related need not be dull.

We are about 1 cm taller in the morning than in the evening. The cartilage between our bones get compressed with all the sitting, standing and moving the whole day, and that's why one feels taller in the mornings.

In 1815, French chemist Michael Eugene Chevreul discovered the first link between diabetes and sugar metabolism when he found that the urine of a diabetic was identical to grape sugar.



Calling an Ambulance

A man, after being hurt, calls 999 for help:

Man: Operator, operator, call me an ambulance!

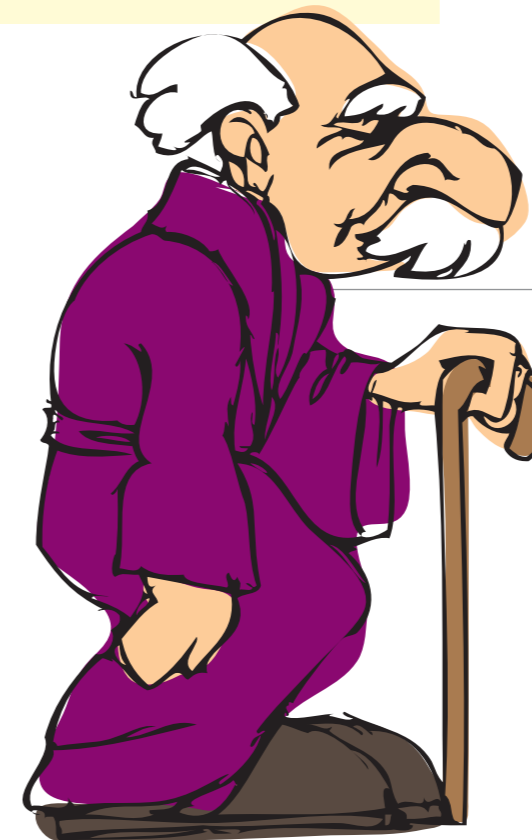
Operator: Okay, sir, you're an ambulance!

Would you give us a sample?

A senior citizen goes for a medical test with his wife tagging along. "I want a stool sample and a urine sample" the doctor says.

"What is it he's asking?" the old man asks his wife.

"He's asking for your underwear" She replies.



Worry-Free Treatment Centre

Beyond the Doors of the Haemodialysis Centre



HAEMODIALYSIS – a process of removing waste products and excess water from blood when the kidneys fail to function – is one of the treatments patients with chronic kidney failure rely on for overall well-being and a better quality of life. Because it is a lifelong procedure, for many patients, being told they have to undergo haemodialysis can be quite an emotionally trying period of adjustment for themselves and their loved ones.

Understanding patients' concerns, staff of the Haemodialysis services unit at **KPJ Damansara Specialist Hospital** aims to make the treatment process as pleasant as possible. *Care for Life* went behind the doors of the haemodialysis centre to find out how the dedicated nurses and support workers help the patients feel at ease.

IN CAPABLE HANDS

When the haemodialysis centre opens at 9am, and before the first patient comes in, the staff nurse on duty will go to the Reverse Osmosis (RO) room and check that the settings on the machines are correct to ensure proper water purification.

This is the first and most important step, because the process of haemodialysis involves drawing out blood from the body, passing it through a dialyser – a filter containing thousands of small fibres capable of cleansing the blood of waste products – and then mixing it with the dialysis solution, a cleansing fluid known as dialysate. Since water will be combined with dialysate during the process and patients will be exposed to a vast quantity of water, extensive purification is critical because even the smallest trace of mineral contaminants can filter into a patient's blood.

"We check the RO room on a daily basis to ensure water is properly purified before being allowed to pass through the dialysis machines and thus, reaching the patients," said Neelavani – Staff Nurse and Unit Manager at the centre.

Previous page: Patients coming for haemodialysis at KPJ Damansara Specialist Hospital can have peace of mind, knowing they are in the care of capable hands.

Below: All staff appointed by the centre are well-trained to ensure familiarity with the machines used for haemodialysis procedure.



Besides ensuring the technicalities are taken care of, patient comfort is also given priority. The typical treatment routine for patients with end-stage kidney failure is three times a week, on alternating days, with each session lasting three to four hours. “When a nephrologist has confirmed the diagnosis and a patient is being prepared for haemodialysis, we normally start them on a gentle dialysis which lasts for only two hours. This is to ease patients into the routine before moving on to the full three to four hour session,” Neelavani said.

While the normal procedure is done with the patient seated on a reclining chair, those who are not comfortable in this position because of certain physical or health conditions will be allowed to lie down on a bed for their treatment.

In addition, to ensure all new staff appointed to the unit fully understand and become well-versed in the technology utilised in haemodialysis, the centre has several user-friendly models of the machines to train staff. “Although the models may vary, all our dialysis machines

operate on the same principles, providing patients with the very same treatment,” assured Mastura, a state registered nurse.

MINIMISING RISKS

It is common for haemodialysis centres to clean dialysers for reuse in subsequent treatments. While such practice is widely acceptable, it does put patients at the risk of blood-borne infections. However, KPJ Damansara Specialist Hospital, patients need not be concerned as this practice is not carried out. “All our dialysers are disposed of after a single use, and its practice is in compliance with the ISO standards that are mandated for all accredited hospitals,” said Mastura.

As an additional layer of precaution, the centre also contains two dialysis rooms reserved for Hepatitis B and C patients. “Before patients are sent to us, they are properly screened for HIV, Hepatitis B and C. We must know their condition, so those with blood-borne diseases are isolated,” Mastura added.

With such commitment to patient-care service excellence by the staff, it is no wonder that anyone walking into the haemodialysis centre at the basement floor of KPJ Damansara Specialist Hospital will find themselves amid a quiet and relaxing environment. The peaceful ambience is yet another example of KPJ Healthcare Berhad’s commitment to providing the best care for its patients – ensuring their hospital experience is as untraumatic as possible – truly caring for life.

Staff Nurse, Mastura Anwar, performing the regular morning check inside the Reverse Osmosis room. This daily routine ensures proper water purification



Getting More for Less

KPJ Lean Management

ALREADY with a reputation for quality and reliable healthcare services, KPJ Healthcare Berhad is about to take the next step by adopting Lean Management – a managerial system where the goal is to create more value for customers but using fewer resources.

By reducing waiting times and improving patient safety in the areas of focus, implementing Lean could contribute to improved efficiency, help develop leadership qualities among staff and enable better control of cost. Additionally, not only does Lean compliment one of KPJ Healthcare Berhad’s core values of continuous improvement, it also fits well with other quality control initiatives such as Innovative & Creative Circles, Accreditation by Malaysian Society for Quality in Health and ISO9001.

Lean was first introduced to KPJ Healthcare Berhad by local consultants. While it is an enlightening concept, there is a lack of local experience in implementing the Lean system in the healthcare sector. To overcome this hurdle, Datin Paduka Siti Sa’diah – Managing Director of KPJ Healthcare Berhad enlisted the help of Simpler Consulting, a consultation firm with vast experience in assisting healthcare organisations implement Lean in the United Kingdom and United States.

By adopting the Lean Management system, KPJ Healthcare Berhad seeks to improve the quality of their services across all its hospitals.



United in Excellence

Standard People's Practice (SPP) for Good Customer Service

Following Simpler's guidance, KPJ Healthcare Berhad initiated a concept pilot study for six months to demonstrate the potential benefits of applying Lean concepts in its hospitals, and gather the necessary data and evidence to develop a Lean business model that will be an expansion of the pilot. It will also create a framework for governance to ensure operational and clinical improvement.

With the pilot studies currently being carried out in KPJ Selangor Specialist Hospital and KPJ Tawakkal Specialist Hospital, some strengths and weaknesses have already been identified. It was noted that a more structured approach challenges staff to rethink current processes, and encourages them to learn. Lean also supports better interaction between management and non-management staff.

On the other hand, the pilot study raised the issues of team member imbalance and the fact that Lean was seen as a project rather than a mindset change.

Addressing the increasing need to reduce the financial burden on its customers, KPJ Healthcare Berhad's long-term plan is to expand and reinforce the implementation of Lean throughout all KPJ hospitals. The challenge now facing KPJ Healthcare Berhad is to create a work culture that allows Lean to become embedded in the organisation.

In the healthcare industry, apart from creating a good-feeling hospital environment, excellent customer service is an integral aspect that cannot be overlooked. There is no better way of fostering the kind of customer service practices that would be associated positively with a brand name than to cultivate a corporate culture that prioritises customer care.

One of KPJ Healthcare Berhad's core values of continuous improvement is to strive for greater service excellence by implementing the Standard People's Practice (SPP) initiative. "The goal of the SPP is to achieve uniformity in the corporate culture of all 20 KPJ hospitals," explained Tn Haji Ahmad Nasiruddin Harun – Senior General Manager of Group Business Transformation & Strategic Direction.

As the one who is called in whenever a new policy or initiative is implemented, Nasir (as he prefers to be known) said that SPP is just part of a bigger plan to create value for customers. "When the best experience that exceeds expectations is provided, value is created. Not only do satisfied customers return to us, they will also recommend KPJ hospitals to others. People are very particular when it comes to choosing a healthcare provider, so word-of-mouth recommendations work wonders in establishing KPJ as a reliable name in healthcare," he elaborated.

Nasir went on to explain that implementing the initiative includes gathering and reviewing feedback submitted by customers and patients using the feedback form, and addressing any issues that arise as soon as possible. "We operate on the principle of creating a pleasant experience. Therefore, the customer service must extend beyond the hospital grounds to ensure people choose KPJ hospitals. For instance, having a courteous person answering a phone call can sway a potential customer's decision in our favour," said Nasir.

Recognising that the healthcare industry is very people-centric, the main focus of SPP is the nurses, who make up 75 percent of the KPJ Healthcare Berhad workforce and are the ones patients interact with most. "The initiative requires that on top of performing their nursing duty, our nurses must be courteous and aspire to show compassion towards patients," Nasir said. Continuing, he added, "By demonstrating competency, courtesy and compassion, nurses are able to build rapport with patients thus gaining their trust."

Of course, trying to standardise 20 hospitals does come with its challenges. "Because KPJ Healthcare Berhad also acquires hospitals, which come with their own inherent corporate culture, it will take some time before the workforce absorbs the new policies we are introducing," Nasir explained. Apart from creating a good hospital ambience experience, the human element must not be neglected. "It is easy to standardise policies and procedures, but you cannot 'standardise' people immediately," he added.

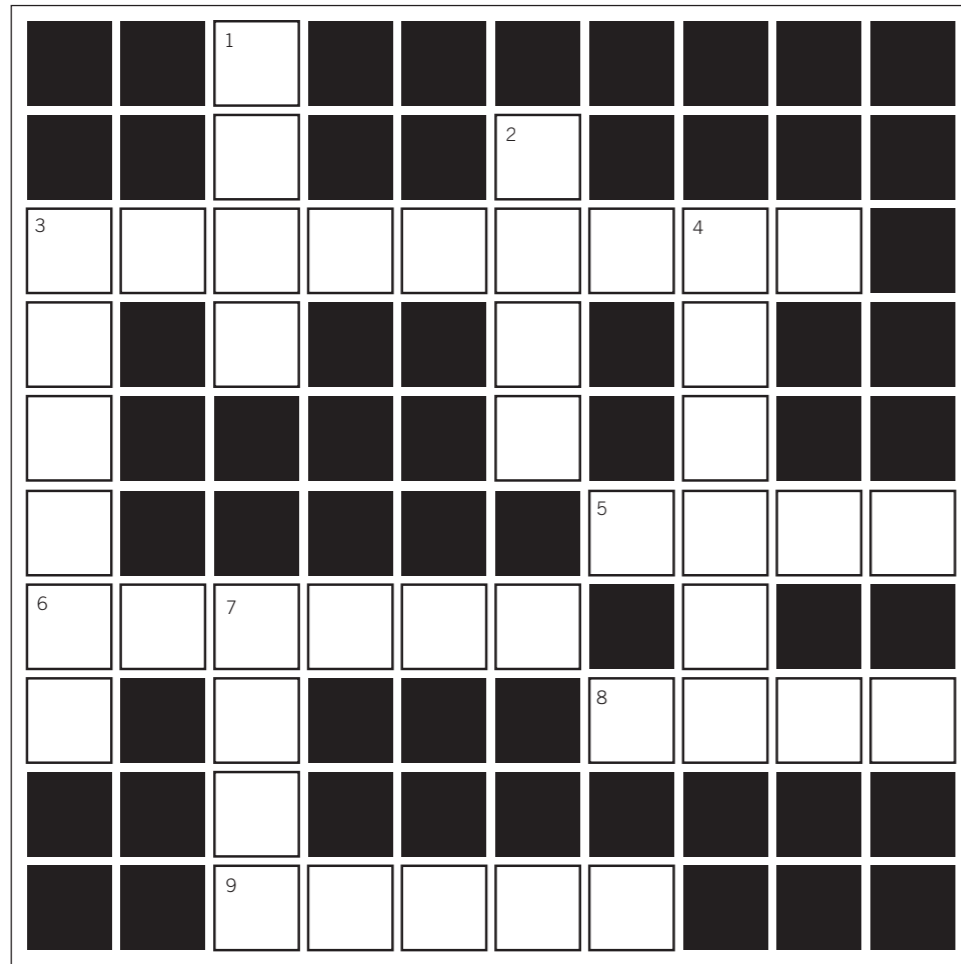
Although it may take time before all KPJ hospitals are on the same page, Nasir was optimistic that with the collaborative effort of all staff members, the SPP can propel KPJ Healthcare Berhad towards attaining its vision.



Tn Haji Ahmad Nasiruddin Harun – Senior General Manager of Group Business Transformation & Strategic Direction believes that with consistent implementation of tangible and intangible initiatives and combined with the cooperation from all levels of the workforce, the SPP initiative can gradually move KPJ Healthcare Berhad towards attaining its vision of becoming THE preferred healthcare provider.

"Our vision is to be THE preferred health care provider. It cannot be just a statement for the company; it must cascade down to every level of the workforce. Everybody, from the doctors and nurses to the security guards and cleaners, must aspire to be the 'preferred one' in their respective roles. Only then can the vision be achieved," Nasir concluded.

How much do you really know about all things related to health and medicine? Take our crossword puzzle to find out just how much. You might even learn a thing or two.



Across Clues

- 3. Special bed used in hospitals to transport patients.
- 5. Lie on your _____ if you want to look at the sky.
- 6. The organ that filters the blood.
- 8. You don't need to shout. I'm not _____.
- 9. An ear has cartilage, not _____.

Down Clues

- 1. Scientists are still searching for the ___ for cancer.
- 2. An ___ is a dull continuous pain.
- 3. It's a synonym for "cerebral accident".
- 4. It's the opposite of inhale.
- 7. Using the word "___" which now usually means "not smart," is now considered offensive when talking about people who can't speak. "Mute" is a more polite word.

Down Answers: 1. Cure 2. Ache 3. Stretcher 4. Exhale 5. Back 6. Kidney 7. Dumb 8. Deaf 9. Bones
 Across Answers: 3. Stretcher 4. Exhale 5. Back 6. Kidney 7. Dumb 8. Deaf 9. Bones



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1. The largest network of hospitals with a network of more than 20 hospitals in Malaysia and 2 in Indonesia
2. First healthcare provider in Malaysia to be listed in Bursa Malaysia's Main Board
3. Provides quality services through the strength of more than 800 medical specialists and 8,000 staff such as nursing, paramedic, pharmaceutical, technical and management services.
4. Turnover of RM1.65 billion and a market capitalisation of more than RM2 billion ending 31 December 2010
5. More than 2,500 licensed beds nationwide and 10 new sites have been identified to build new hospitals
6. Malaysia's first healthcare provider to introduce Islamic Real Estate Investment (REIT)
7. Innovative and creative approach through Malaysia's first network of charity clinics and hospital, Klinik Waqaf An-Nur and Hospital Waqaf An-Nur
8. An integrated healthcare company, supported by subsidiaries to provide complete and holistic healthcare services
9. KPJ was listed as Bursa Malaysia's Top 100 Companies in 2010
10. Winner of the Frost & Sullivan Healthcare Service Provider of the Year Award 2011
11. Winner of the Malaysian Institute of Directors' Innovative Leadership in Globalisation Award 2011 for the Healthcare Category
12. Received the award for The Best Performing Stock (Highest returns to shareholders over three years) from The Edge Billion Ringgit Club in July 2011
13. KPJ's education arm has been awarded University College status in 2011 and is now known as KPJ International University College of Nursing and Health Sciences (KPJIUC)