Nurse-led peri-operative care for cataract surgery under topical anaesthesia

Patients undergoing cataract surgery at Khoo Teck Puat Hospital (KTPH) benefit from a shorter surgery date, reduced bill size and faster recovery period. This is the result of a three year pilot collaborative project by the hospital’s Departments of Ophthalmology and Visual Sciences, Nursing and Anaesthesia.

Specially trained nurses monitor patients whose cataract surgeries are performed under topical anaesthesia through the use of eye-numbing eye drops. The monitoring nurse also constantly hand-holds and reassures the patient so he can follow the doctor’s instructions and lie still during the procedure. Patients are carefully screened and selected for this procedure to optimise safety and quality. Only patients with no serious medical conditions are offered treatment under this programme.

Compared to conventional regional anaesthesia (which involves injection around the eye and monitoring by an anaesthetist), the cost of the cataract surgery is reduced by about 13%. The recovery after surgery is also shortened without the need for an eye pad cover.

Featured in this issue are three projects that won the inaugural Patient Care Excellence Awards 2016 organised by Alexandra Health System (AHS). Read on to find out how these projects aim to provide the best care possible for patients.
Faster recovery for colorectal cancer patients

Compared to younger patients, elderly patients who need to undergo surgery are at relatively higher risk of complications after major surgery. This is due to existing health conditions, functional disability and frailty. As such, the Geriatric Surgery Service (GSS) was initiated in 2007 by the KTPH General Surgery Department to care for this group of patients and help them recover well and without complications so that they can maintain quality of life.

The “Start-to-Finish” (STF) programme, an initiative under the GSS, was developed to improve elderly surgical patients’ functional outcomes. Under this programme, suitable patients spend two weeks before the surgery undergoing ‘prehabilitation’, where they are taught strengthening exercises, undergo nutritional intervention, and education. This enables them to better withstand the stress of surgery and recover faster. After discharge, patients continue to undergo rehabilitation either at the outpatient clinic or at home.

Fifty-seven elderly patients who had to undergo colorectal resection were selected for the STF programme. They were compared against 60 similar patients who were not on the programme. While patients in the latter group had an average hospital stay of 11 days, patients in the STF group had a significantly shorter hospital stay of eight days. All the patients who underwent prehabilitation also achieved full functional recovery.

### “Start-to-Finish” programme

**2 WEEKS BEFORE SURGERY**
- Rehabilitative exercises
- Dietary changes

**AFTER SURGERY**
- 8-day hospitalisation
- Return to previous lifestyle & activities

---

**Increase in speed of recovery after surgery**

3-4 days
Shorter queues for medication

Patients who used to wait up to an hour to collect their medication can now do so within 30 minutes, after a new initiative by the pharmacy department and clinics. The Capsule, a redesigned medication processing and bill collection flow at the Outpatient Pharmacy, eliminates multiple waiting points. Instead of having patients wait for their prescriptions and taking it to the pharmacy themselves, prescriptions are sent electronically from the clinic to the pharmacy for faster processing. The new flow reduces patients’ waiting time and increases productivity at the pharmacy.

79% of patients are now able to collect their medication in under 30 minutes compared to just 60% in the past. In addition, 22% collect their medication in under 10 minutes compared to 13% previously.

About Patient Care Excellence Awards

Launched in April 2016, the award aims to recognise projects or studies done to provide the best care possible to patients by AHS employees. A total of 168 entries were received, and 86 were shortlisted for Quality Convention 2016.

Quality Convention is a forum held once or twice a year since 2001. It is a platform for industry thought leaders to share their experiences with healthcare professionals and administrators from AHS.
Thank you for your continuous support!

Alexandra Health System has topped the Ministry of Health’s Patient Satisfaction Survey (PSS) for the tenth time!

The PSS is conducted yearly to assess patients’ satisfaction with public healthcare institutions (HCIs) in Singapore, and identify areas of improvement, so as to continue to enhance the quality of healthcare services provided. HCIs were assessed in seven categories – doctors, nurses, allied health professionals, care coordination, facilities, waiting time, and billing issues.

Garnering an overall satisfaction score of 90.8%, KTPH was the only public healthcare institution to pass the 90 point mark. This is also an improvement of 4 percentage points from the previous year.

Chief Executive Officer (CEO) Mrs Chew Kwee Tiang attributed KTPH’s success to the efforts put into coordinated team-based care. For example, AHS has streamlined the procedures for hip fracture patients. These patients are cared for by a trans-disciplinary team. In addition, it takes about 10 to 12 days in acute hospital before transfer to community hospital for rehabilitation. With the link bridge between KTPH and Yishun Community Hospital (YCH), patients can be safely and quickly transferred. In this way, patients can be moved from the more resource intensive acute setting and free up beds to admit more patients.
Across the board, satisfaction of public healthcare institutions increased to 85.9%, the highest since the annual PSS was implemented in 2005.

KTPH got the thumbs-up from patients for overall experience, and scored particularly well in the areas of competency and professionalism of our nurses, post-discharge follow-up, and explanation of payment methods.

As the population ages, we are seeing more patients with multiple chronic conditions at our A&E. Besides treating and caring for them in our hospital, our community care team visits these patients at home post-discharge. Doing so, we help them cope well and better care for themselves. The challenge for us is to keep the population in the North healthy such as through health screenings in the community and extending our services beyond the hospital. This set of results is a boost to the hard work of all our staff. Thank you for your support and continued trust in Alexandra Health System.

Mrs Chew, CEO, KTPH

We also maintained our high ratings for clean, well-maintained, and easy-navigable facilities.

However, the results of the PSS also showed that there is still much room for improvement in the areas of waiting time for doctors, appointments, and beds, which were also a common problem for other healthcare institutions.

Mr Chew shared, “We are encouraged by the feedback from our patients and their caregivers in the latest patient satisfaction survey. In public healthcare, our load will remain high, and the survey has indicated various areas where we are not as good as we should be. We will continue to improve to provide our patients with a level of care good enough for our own mothers.”

As the population ages, we are seeing more patients with multiple chronic conditions at our A&E. Besides treating and caring for them in our hospital, our community care team visits these patients at home post-discharge. Doing so, we help them cope well and better care for themselves. The challenge for us is to keep the population in the North healthy such as through health screenings in the community and extending our services beyond the hospital. This set of results is a boost to the hard work of all our staff. Thank you for your support and continued trust in Alexandra Health System.”

Mrs Chew, CEO, KTPH
Melatonin linked to pain-relief in women

Women going for wisdom tooth extraction may suffer less pain and anxiety if they take the alternative medicine supplement Melatonin before the surgery.

Pain after wisdom tooth surgery can be moderate in severity and in younger patients, the pain is worsened by anxiety before surgery.

As part of scientific research and to improve patient care, KTPH doctors from the Anaesthesia and Dental departments studied the use of melatonin on pain relief and anxiety reduction in a group of patients scheduled for all four wisdom teeth extraction under general anaesthesia. Melatonin is a hormone that is found naturally in the body and synthesized supplements are used as an alternative medicine for sleep disorders and other problems.

A prospective blinded randomised controlled trial was performed in 76 patients at KTPH. The patients received either 6 mg of oral melatonin or an identical-looking placebo 90 minutes before surgery. Anxiety levels were measured before the operation and pain scores were taken at multiple intervals after the operation.

The results showed that female patients who received melatonin had a faster rate of pain and anxiety reduction over time compared to the placebo group. Interestingly, no such effect was demonstrated in male patients, suggesting a different effect caused by gender.

“Melatonin premedication may be a useful agent to relieve anxiety and pain in certain patients who need dental surgery,” said Dr Edwin Seet, Head of Anaesthesia, KTPH and lead author on the research.

“This is also the first study where preoperative melatonin has demonstrated a hypothesis-generating gender-biased effect and may pave the way for future research.”

This clinical trial by Dr Seet, Dr Sylvia Tay, Senior Consultant, Dental Surgery and Dr Liaw Chen Mei, Consultant, Anaesthesia, won the Singapore Medical Journal Best Research Paper Award 2015. Dr Seet received the award at the Singapore Medical Association Annual Dinner 2016 in May.
Diabetic Muslims can fast safely during Ramadan

Despite a large Muslim population throughout the world, the effect of fasting during Ramadan on diabetes patients remains relatively understudied.

A group of researchers from KTPH’s Clinical Research Unit aimed to study the metabolic impact of Ramadan fasting on Type 2 diabetes patients in Singapore. Changes in dietary intake, body composition and metabolic profile of this group of patients were investigated.

A group of 29 Southeast Asian Muslim patients with Type 2 diabetes were recruited for the prospective cohort study conducted at KTPH’s Diabetes Centre. All patients received pre-Ramadan education from physicians on diabetes management during the fasting period, including frequent monitoring of blood glucose levels, acute management of hyper- and hypoglycaemia, and appropriate adjustments in dosage and timing of medications, while dietitians provided nutritional advice. During the fasting period, participants charted their blood glucose reading 5 times a day to guide their diabetes self-management.

At the end of Ramadan, the results showed that fasting conferred improvements to blood glucose levels and a modest but significant reduction in body fat mass for diabetics, especially women. The study also allowed researchers to identify the various needs of diabetic patients during the Ramadan fasting period.

The researchers concluded that appropriate patient education, blood glucose monitoring and adjustment of medication dose and timing can allow Muslim patients with Type 2 diabetes to fast safely during Ramadan.

Led by Dr Ester Yeoh, Consultant, General Medicine, this study was published in the Annals Academy of Medicine Singapore 2015 and won the Gold Best Paper Award in 2016.

IN SUMMARY

Pre-Ramadan Education
- Monitoring of blood glucose levels
- Acute management of hyper- and hypoglycaemia
- Dosage and timing of medications
- Nutritional advice

Diabetes Self-Management During Ramadan
- Charting of blood glucose reading 5 times a day

Post-Ramadan Results
- Improvements to blood glucose levels
- Significant reduction in body fat mass
- Various needs of diabetic patients during Ramadan identified

Conclusion
With medical guidance, it is possible for Muslims with Type 2 diabetes to fast safely during Ramadan.
Why bed rest often isn’t best!

If you are admitted at KTPH for an acute illness or operation, don’t be surprised if our healthcare professionals get you out of bed as soon as your doctor says it is safe.

“Many patients and relatives think that bed rest is best so patients are reluctant to get out of bed and their relatives reinforce it. On the contrary, too much bed rest actually slows down recovery and can cause complications,” says Ms Chen Ziyan, Occupational Therapist, KTPH. Such complications include decreased muscle strength and blood flow, pressure sores and constipation.

Prolonged bed rest may result in patients losing their ability to dress, shower or use the toilet on their own, leaving them more disabled than when they were first warded. This loss of independence is known as hospital acquired disability. It affects about 3 in 10 older Singaporeans who are hospitalised.

Fear of pain can be an issue, especially after surgery, but patients are given pain relief so they can move comfortably once allowed out of bed by the doctor. Patients are also supervised by a nurse, physiotherapist or occupational therapist the first few times they get out of bed to ensure they are safe and their tubes and drips don’t get caught or dislodged. Once patients gain confidence, family members can accompany them as they move around.

“Even small steps such as getting out of bed to sit in a chair to watch television and using the toilet make a difference. The more patients do for themselves, the more independence they retain, and the easier it is for them and their families when they go home,” adds Ms Chen.

Please see the opposite page for tips on preventing hospital acquired disability.

### COMPLICATIONS OF PROLONGED BED REST

**RESPIRATORY**
- Chest infection
- Pulmonary embolism

**PSYCHOSOCIAL**
- Depression
- Anxiety
- Confusion
- Loss of self-esteem

**CARDIOVASCULAR**
- Deep vein thrombosis
- Postural hypotension

**SKIN**
- Bed sores

**MUSCULOSKELETAL**
- Loss of muscle strength
  - 1-3% loss of muscle mass/day
  - Contractures
  - Reduced endurance

**BLADDER AND BOWEL SYSTEM**
- Incontinence
- Urinary tract infection
- Constipation
Get moving & prevent hospital acquired disabilities

The best way to stay independent when hospitalised is to start moving as soon as your doctor says you are allowed out of bed.

If you are wearing a green wrist band, you are at risk of falls, so press the call bell and ask the nurse for help when following this advice:

**FOR PATIENTS**
- Sit in a chair for meals or get out of bed when visitors are around
- Engage in leisure activities such as taking regular walks, watching TV and reading
- Use the bathroom instead of bed pans
- Participate in daily self-care activities

**FOR CAREGIVERS**
- Take your relative for a walk outside or to the TV lounge – always tell a nurse before taking them out of the ward
- Bring in assistive aids such as reading glasses, walking aids and hearing aids
- Encourage them to participate in activities and exercise with the therapists
- Bring in books, games and activities from home to keep your relative’s mind active during their hospital stay

**REMEMBER**
Always consult your nurses and doctors to confirm whether you are allowed to get out of bed.
Diabetes: Living well, coping well, loving life!

Diabetes Health Fair
In conjunction with World Diabetes Day 2016
7 - 9 Nov 2016 (Mon - Wed)
11am to 3pm
Main Lobby, Khoo Teck Puat Hospital
90 Yishun Central, Singapore 768828

Daily events
- Health screening
- Know your medicines!
- Beat your sweet tooth!
- Gum disease and diabetes
- Caring for your kidneys
- Are you diabetes (SMART)2D?

Highlights of the Day
7 Nov, Mon
- Mind matters
- Keeping low blood sugar away
8 Nov, Tue
- Weight matters
- Diabetes & my feet
9 Nov, Wed
- Xercising to X diabetes

Partners
Abbott Diabetes Care  ACCU-CHEK  BD  Boehringer Ingelheim  Centocor  Glucerna  Medtronic  MNS  NKF  SMI TECH (ASIA) PTE LTD
KTPH staff recognised for outstanding care

For many, working in healthcare is more than a job – it is a calling and staff often go the extra mile to offer care and comfort to the sick and infirm. The annual Courage Fund Healthcare Humanity Awards recognise outstanding healthcare workers across Singapore for their selfless dedication to patient care. This year, two staff members from KTPH received the award.

TOH HAI MOY
Senior Nurse Clinician, KTPH

Hai Moy has served as a nurse for 38 years is currently an Advanced Practice Nurse, specialising in respiratory care. Hai Moy is a motherly figure to both her patients and colleagues, often going beyond her duty to render care as a nurse. For example, every three months, she visited a bed-ridden patient’s home out of working hours to change the patient’s feeding tube. Hai Moy did this for 10 years until the patient passed on, each time paying for the items out of her own pocket. Hai Moy has been on medical missions overseas and is a regular volunteer in Singapore with the Mobile Clinic Service for Foreign Workers.

“I am humbled and thankful for the privilege to serve people in need beyond my profession, not forgetting the God who has taught me great things!”

A/PROF PHILIP YAP LIN KIAT
Senior Consultant and Director, Geriatric Centre, KTPH

An exemplary clinician scientist, A/Prof Philip Yap runs a thriving dementia clinic that diagnoses and manages patients over the course of the disease. A/Prof Yap is relentless in his pursuit of care excellence for his dementia patients. His days are often long and he would stay on late into the evening, calling relatives and talking to them personally. His patients and their relatives are appreciative of the compassion he shows to them, encouraging them in their long, arduous journey. A/Prof Yap has groomed teams of caregivers across the island to expand on the support for people with dementia. His time is also spent in various local volunteer programmes helping nursing homes manage patients with late stage dementia.

“I’ve gained more from serving my patients than I have given to them; it’s a privilege to be a healthcare professional. Indeed, it’s in giving that we receive, and in losing ourselves that we find ourselves.”
Patience and support key to service excellence

Mok Chee Peng, Senior Medical Social Worker (MSW), KTPH, regularly meets patients and family members after office hours so he can take the time to listen and understand their needs.

In May, Mr Mok was awarded the PS21 Star Service Award in recognition of his service excellence.

AHa finds out more about Mr Mok and what motivates him to go the extra mile.

For how long have you been an MSW?
"I qualified as an MSW in 2005 and started specialising in renal social work two years later. I now see about 35 to 40 new and review patients with kidney disease and kidney failure every month.

Why did you specialise in renal social work?
It’s a challenging specialty where I feel I can make a real difference. Kidney failure has a huge impact on patients’ lives – from their physical and psychological well-being to their social and financial situations.

What kind of patients do you work with?
At present, my youngest patient is 19 years old and my oldest is 74 years old. Kidney failure affects the whole family because of the financial and practical support required, so I try to link them up with services to match their needs. I also help to resolve differences between patients and their family members – sometimes patients don’t want to go for dialysis but their family members insist they do and vice versa.

What makes your day?
It’s so heartening to see patients take care of themselves, value their life and make the most of it in spite of being on dialysis. For example, I’ve dialysis patients who have continued to work and support their own family members. Seeing the difference my help has made to patients’ lives makes all the long hours worthwhile and receiving a simple ‘thank you’ from patients is very rewarding.

What health tips have you learnt through your job?
Look after your kidneys! Prevention is better than dialysis, so go for health screening and regular check-ups especially if you have diabetes or high blood pressure. If you have kidney problems, talk to the doctors and your family members early on so everyone knows what to expect when they plan treatment options.
**KTPH labour leader who goes the extra mile**

Nurse Clinician Mary Chan can usually be found caring for patients on Ward B87 at KTPH, but her care and concern are also felt by her colleagues. Sister Chan is an active member of the Healthcare Services Employees’ Union (HSEU), both within the KTPH branch and at the national level, where she has been involved in helping to support back-to-work initiatives for women.

Within KTPH, Sister Chan is known for addressing issues on the ground with compassion and fairness. She pays great attention to mentoring and nurturing younger branch leaders and is always the first to help whenever they encounter difficulties.

In recognition of her positive contributions to HSEU and fellow workers, Sister Chan was honoured by the labour movement with a May Day Comrade of Labour Award 2016 by the National Trades Union Congress (NTUC). The May Day Awards are bestowed on persons and companies that have made significant contributions to the Labour Movement.

**An eye for photography**

The photo on the right may seem like a swirly mass from outer space, but to the trained eye, it is a fine example of bullous retinal detachment.

For his photo, Albert Sim, a Senior Imaging Specialist at the Ophthalmology and Visual Sciences Clinic (Eye Clinic) at KTPH was recently awarded the BioCommunications Association Citation of Merit and Medical Education Award in the Still Media Division at the BioImages 2016 competition. The BioImages competition is an annual event that recognises the best visual media work in the area of life sciences and medicine.

Albert shared that the photo was taken from a 60-year old female patient and captured using a fundus camera. With few full reference images of retinal detachment published, he was proud to have gotten a good image that captured the sharpness and detail in the retinal folds and 3D effects clearly displayed.

Usually found huddled over various microscopes and cameras, his day-to-day today work consists of performing different types of eye imaging services for patients. The images that he captures enable doctors to document a patient’s diagnosis and assess the severity of the patient’s eye condition.

“You may be photographing the rare, one-in-a-million medical condition that will bring you fame tomorrow, but how is your patient feeling? Are they comfortable or in pain? Are they able to move as instructed? If you can first satisfy patients comfort levels, only then will you be on your way to an award-winning photograph.”

Albert Sim, Senior Imaging Specialist, KTPH
Building bridges with the community

After a long stay in the hospital it is often difficult to adjust back to the home environment, especially for the elderly. In order to help patients cope better at home after their discharge, YCH has designed care to help ease the transition between hospital and home.

A/Prof Muhammad Faishal Ibrahim, Parliamentary Secretary for Ministry of Education and Ministry of Social and Family Development, visited on 12 May 2016 to learn more about YCH and visit patients. He is also the MP for Nee Soon GRC (Nee Soon Central).

During his visit, YCH CEO Dr Pauline Tan shared with A/Prof Faishal the role YCH plays as a community hospital and its focus on rehabilitation, recovery and preparing patients for their journey back home. By collaborating with community partners, patients are also supported in their integration back into the community.

Can’t remember WHEN your next appointment is?

SMS: 8339 8279 ‘KTPH <space> NRIC/FIN’ to check when your next appointment is. eg. ‘KTPH S1234567A’

This service checks your next appointment(s) for the next 3 months. Service is available 24 hours daily. Standard SMS charges apply.
Lunchtime music to feed the soul

Inpatients had a boost to get out of their beds, and listen to uplifting music at KTPH main lobby on 20 April.

The performance by Singapore Chinese Orchestra also drew hospital staff as well as residents from the neighbouring Villa Francis Nursing Home for the Aged Sick.

The orchestra performed evergreen tunes from the 1970s and 1980s which had the audience clapping and singing along English, Mandarin, Cantonese and Malay songs.

The orchestra’s visit to KTPH was part of a tour to various public hospitals, bringing joy to inpatients who are unable to make it to the concert hall.

Patients and nursing home residents watched the performance at KTPH Main Lobby in wheelchairs to minimise the risk of them falling and hurting themselves in a public area.

Students brighten up patients’ afternoon

Students from Huamin Primary School brought music and movement to KTPH in May, brightening the day of patients unable to make it to the concert hall.

Students and teachers from Huamin presented a number of Performing Arts items such as dance, skit, angklung and guitar performances to the delight of residents from three nursing homes in the Nee Soon area and patients from KTPH and YCH.

Teachers also conducted music and visual arts workshops for the patients and residents. Both the Huamin staff as well as their students, also known as Huaminites, took part in this meaningful event in their bid to better the lives of others.

“I think it’s a good opportunity for the students to contribute back to society while showcasing their talents... It is also great to see the students having fun and bringing joy to the patients here.”

Miss Tan Hui Jun, Guitar Ensemble CCA teacher-in-charge
Our primary care partners are often the first point of contact for patients in the community. Here’s an easy guide on referring patients who are non-subsidised or under the Community Health Assist Scheme (CHAS) to Khoo Teck Puat Hospital.

Step 1
Prepare the below before calling KTPH
• Get patient’s full name, NRIC number, date of birth and contact number
• Check if patient has CHAS or PG card
• Prepare referral letter and CHAS cover note (for CHAS referral only)

Step 2
Call KTPH appointment hotline at 6555 8828
• Provide patient’s details
• Alert if patient has CHAS or PG card
• Advise which specialty you are referring your patient to
• Fax referral letter and CHAS cover note (for CHAS referral only) to KTPH

Step 3
Inform patient after confirming appointment details
• Name of Specialist Outpatient Clinic (SOC)
• Date and time of appointment
• To bring necessary documents for the appointment