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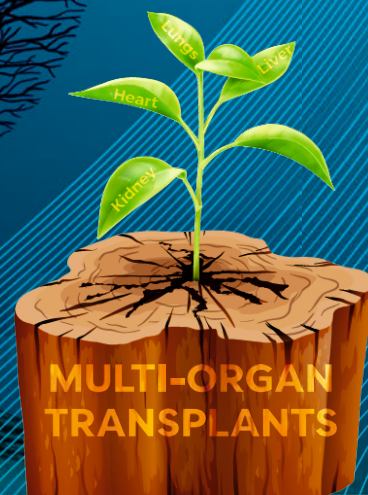
Editorial Board:

Dr. Vimal Kumar Govindan
Dr. Pavai Ganesan
Dr. Varunn

✉ psgmedipulse@psgimsr.ac.in

🌐 www.psghospitals.com

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Dr. ANUJA S. PANICKER

*Professor in Clinical Psychology,
Dept. of Psychiatry Co-ordinator,*

Motherhood is traditionally seen as an epitome of unconditional love, generosity and resilience. Mothers balance multiple responsibilities during different phases of their lives not only as a mother, but also as a daughter, granddaughter, sister, wife, daughter-in law, neighbor, friend, along with handling their daily responsibilities of home and work as well. In this process of adapting to the different challenges of motherhood, mothers often compromise not only on their physical health, but on their mental health as well.

In India, common mental health disorders have been found to affect approximately 15-20% of women being in the period of pregnancy or after delivery. Maternal mental health difficulties can be secondary to multiple causes including biological factors (e.g. physical health, genetic), psychological factors (e.g. personality, low self confidence, tolerance capacity, confusion, fear) and social factors (e.g. financial, work, family related difficulties). These frequently go unnoticed and untreated, often with long-term consequences. Maternal

mental health difficulties affect not only the mother, but also her child's development in physical, psychological and social domains, which in turn has a negative impact on the overall family functioning.

What can we do to support maternal mental health? Look out for signs of stress in mothers - in any stage of motherhood, including physical symptoms (e.g. headache, stomachache, sleep & appetite disturbances)- which are not explainable by organic causes and psychological symptoms (e.g. overthinking, becoming irritable over trivial issues, mood changes, reduced interest in activities). Once identified, family members can be encouraged to give a helping hand for support. Encourage them to talk openly about their problems, look after their physical health and fitness, follow a proper food and sleep routine, remain connected with family and friends, practice relaxation techniques, refocus onto any activity of their interest. Still if they are unable to manage their difficulties, don't hesitate to refer to a mental health professional for further evaluation and management.

A happy and healthy motherhood lays a strong foundation for a family. We naturally expect mothers to give unconditional love and care. However, we all, not only as health care professionals, but also as family members, friends, colleagues and members of society have a social commitment to prioritize mental health along with physical health and support them through their journey of motherhood.

In order to spread this awareness message

among patients, patient attenders, staff and health care professionals of PSG Hospitals, the Hospital Counselling Center (HCC) observed Maternal Mental Health Week from 1st May - 5th May 2024, under the theme Thaimai -2024: Unarvum Mananalamum. In this regard, the Hospital Counselling Center organized a panel

discussion on 'Motherhood and Mental Health: A Transformational Journey' and also conducted psychoeducational poster sessions, skit by Hospital Counsellors, awareness cards, flash focus- interactive sessions and group therapy with patients and attenders.

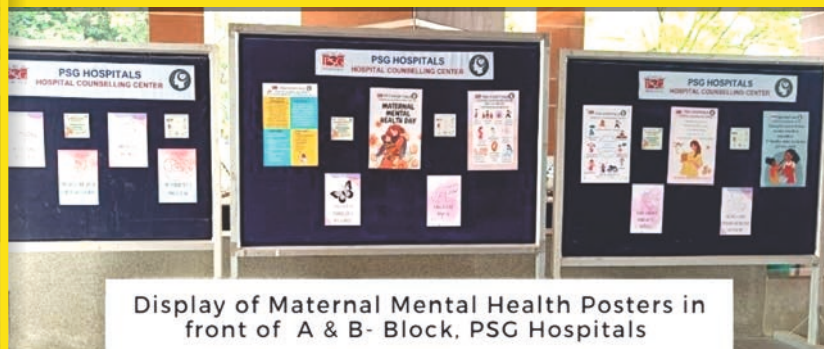
MATERNAL MENTAL HEALTH



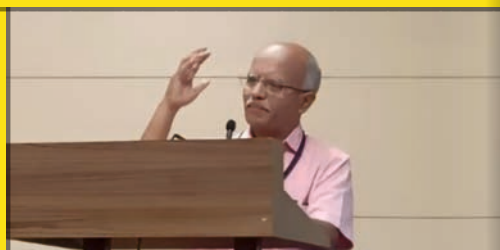
FLASH FOCUS - interactive session with patient and patient attenders in OG - OPD, A Block, PSG Hospitals



'Thaimai 2024 - Unarvum Mananalamum' - Program conducted for Health Care Professionals and Staff



Display of Maternal Mental Health Posters in front of A & B- Block, PSG Hospitals



Curtain Raiser -
Dr. G. Raghuthaman, Professor & Head, Dept. of Psychiatry



'Thaimaiyin Sollapadatha kathaigal'- skit by Hospital Counsellors



Panel Members: Dr. Seetha Panikkar, Dr. Jothilakshmi K., Dr. Lalitha N., Dr. Karthigai Selvi S.
Moderator: Dr. Anuja S. Panicker



Felicitation -
Dr. T.M. SubbaRao, Principal, PSGIMSR



Group Psycho education session at ZC ward, B - Block, PSG Hospitals

AN UPGRADED DIALYSIS UNIT IN PSG HOSPITALS

The kidneys play an indispensable role in removing waste and toxins from our body. Approximately 1,200 milliliters of blood flow into both kidneys every minute, accounting for 20% of the blood pumped by the heart. Hence, about 1,700 liters of blood are purified daily. The kidneys filter waste products from the blood and produce urine, which is then transported to the bladder through the ureters and eventually expelled from the body. Additionally, they produce hormones related to bone health and blood production.

DIALYSIS - AN INDISPENSABLE LIFE SUPPORT

When the kidneys fail to eliminate sufficient waste and excess fluids from the blood, or when kidney function drops to 10-15%, it is termed as kidney failure or kidney damage. Kidney failure can be of two types- acute kidney injury and chronic kidney disease. Acute kidney injury is caused by sudden severe dehydration, toxins, over the counter medications, autoimmune disease associated kidney diseases, sudden blockage in the urinary tract, low blood pressure, severe injuries, burns, or sudden blood loss. Diabetes (high blood sugar) and hypertension (high blood pressure) are the most important causes of end stage kidney disease. Dialysis is performed to treat these conditions.

Hemodialysis is a process of removing waste products and excess fluids from the body with

the help of a machine. In hemodialysis, two needles are placed in a vein – one for drawing blood and another for returning the blood back to the patient. This blood from the patient is continuously pumped through the machine to a filter called dialyzer. This dialyzer is used to remove waste products and excess fluids from the blood, maintain acid-base balance and electrolyte balance.

PSG Multi-Specialty Hospital has been providing quality medical services incorporating various innovations and technologies. Dialysis treatment has been conducted in the Nephrology Department since 1986. The dialysis center, already operating with about 30 beds, offers dialysis under the Tamil Nadu Government's medical insurance scheme, ESI, and other medical insurance plans. The upgraded dialysis center, now located in 'A' block with more than 10 advanced facilities, is noteworthy.

ENHANCED DIALYSIS FACILITIES

- 15 beds.
- Seated dialysis provision.
- TV / Tablet/Bluetooth/Music system for each bed.
- 2:1 nurse / dialysis technologist-to-patient ratio,
- Standardized purified water.
- Hem dialysis.
- Hemodiafiltration.

EXCLUSIVE DIALYSIS UNIT

Dr. G. Venu, Head of the Nephrology Department, explains that PSG Hospital has been performing dialysis for over 35 years, conducting more than 2,000 dialysis sessions per month. To meet patient needs, a specialized dialysis unit with enhanced facilities was recently inaugurated.

“This unit is designed to provide patients with a new experience, unlike regular dialysis. It has ample space with 15 beds, including seating dialysis facilities (2 chairs). Additionally, each bed is equipped with a TV, tablet, Bluetooth, and music system, enhancing the patient's

mental well-being. Counseling sessions are provided regularly to prevent mental fatigue. Diet counseling is also given to enhance their nutrition and physical well being. Moreover, there is a 2:1 nurse-to-patient ratio, with nurses and dialysis technologists available on duty around the clock, ensuring continuous monitoring of patients. Doctors team comprising of Nephrologists Dr. G. Vasanth, Dr. S. Arivazhagan, Dialysis Medical Officers Dr. Catherine, Dr. G. Anusuya, Senior technicians Mrs. Duraiammal, Mrs. Julie Mercy are available in ensuring proper treatment and care of patients,” explains Dr. G. Venu.



DEPARTMENT OF OBESITY AND METABOLIC SURGERY

The 10th Support Group Meeting organized by the Department of Obesity and Metabolic Surgery at PSG Specialty Hospital, Coimbatore, was a notable event held at the Y-Block Arena within the hospital. This gathering brought together participants who had undergone bariatric surgery to share their weight loss journeys, aiming to inspire and support others considering or having had the procedure.

The meeting was highlighted by a keynote address from Dr. Bhuvaneswaran, the Director of PSG Special Hospital. Adding a touch of celebrity to the event, small-screen actress Lakshmi attended as a special guest, drawing significant attention and interest.

One of the unique and engaging aspects of this meeting was a costume design class specifically tailored for bariatric surgery patients. This creative session was led by Gynecology Consultant Dr. Jayanthi Sri Perumal and Lalitha Gautam, the founder of Mrs. Coimbatore Footies. The participants competed in this class, showcasing their designs and efforts, with Aa Kyor standing out as one of the winners, receiving gifts in recognition of their creativity.

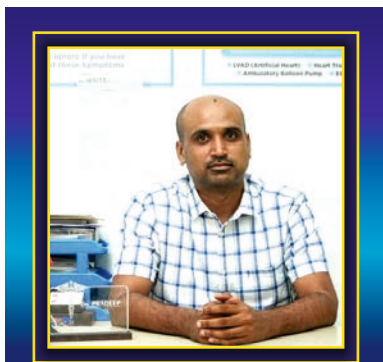
Dr. Karthikeyan, the Gastroenterologist and Head of the Obesity and Metabolic Surgery Department, along with Dr. Balamurugan, underscored the importance of these support group meetings. They emphasized that such events are crucial for aiding patients' recovery and managing their ongoing health effectively.

The event concluded with a comprehensive panel discussion on the quality of life after bariatric surgery. This panel featured a diverse group of medical specialists, including surgeons, nurses, nutritionists, and patients who had undergone the surgery. They provided a holistic discussion on post-surgery life and care, addressing various aspects of recovery and long-term health management.

Overall, the 10th Support Group Meeting was a well-rounded event that successfully provided support, education, and a sense of community for individuals involved in bariatric surgery. It highlighted the collaborative effort of medical professionals and patients in enhancing post-surgery quality of life and offered a platform for sharing valuable insights and experiences.



HEART TRANSPLANTATION IN CHILDREN



Dr. PRADEEP

*Consultant - Cardiothoracic &
Vascular Surgery*

Heart failure in children, an unforgiving disease can be due to intrinsic disease in the Heart muscles or Viral infections affecting the Heart muscles or uncorrectable congenital malformations in structure of Heart. Any of these can result in inefficient pumping of heart resulting in heart failure.

Heart as a vital organ responsible for distributing heart to all the other organs of the body. When as a pump it fails other organs too fail gradually. The reflections of heart failure can be seen in other organs at much earlier stage. In children it can result in poor weight gain repeated lung infections, lethargy etc., Many times the Heart failure is over-looked in general examination by the paediatrician and picked up by only echo cardiogram. Once the children is diagnosed, the child is managed by a heart team comprising of pediatrician, Heart failure specialist and Heart Transplant surgeon. Today's advanced drugs are effective in controlling the symptoms and at times there's reversal of damage in the Heart muscles due to viral infections too. Children are frequently followed up in the Heart failure clinic to identify

their response to the drugs. When their response to anti-failure medications are poor and worsening of symptoms, the children are put in the Heart Transplant waiting list. The Bottle neck in any Pediatric Heart Transplant program is availability of suitable donor. In Pediatric Heart Transplantation, a cadaver dependent program, getting size matched brain dead donor and holding the child alive until transplantation are the tough challenges. Prolonged waiting period is one reason waiting list mortality is very high in children. The other reason is unlike in adults option of supporting the failed heart in children using mechanical pump is limited. As most of the mechanical pump in the market is designed for adults.

Pediatric Heart transplant an epitome of experience, expertise and team work is a benchmark for any cardiac surgical unit. Our recent consecutive Heart transplant in a 4 year and 13 year old children in a week's time has given new life and hope to two families. The 4 year child had a cardiac arrest during his waiting period and was brought back to life after 45 minutes of resuscitation. He came to our unit when he was 3.5 yrs old and weighing 9 kg. He was also complicated by having only one functioning kidney. After transplant his single mother thanked the whole team and hospital for giving her a new hope in her life. Knowing the impending doom, managing the 13 year old boy's depression was another big challenge what our team has faced.

As unfortunately the transplantation is dependent on somebody else's grief and loss. Understanding the prevalence and significance

of heart failure in children developing a mechanical device to support the failing children's heart is the need of the hour.

PSG's Heart Transplantation program headed by **Dr. Pradeep** is the Leading program in the

region and one of the best in the country. The survival rate is at par with any overseas high volume centres. Moreover the trust also has put the PSG animal lab and PSG tech team in ground breaking research on innovations in the mechanical management of heart failure.



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A PROMISE FOR OUR CHILDREN - VACCINATE THEM AGAINST CANCER



**Dr. SHRUTHI
NANJUNDAPPAN**
Consultant - Gynaec Onco

Human papillomavirus (HPV) causes significant morbidity and mortality in women and men. Human papillomavirus infection is associated with anogenital cancers (including cervical, vaginal, vulvar, penile, and anal) and oropharyngeal cancer. Human papillomavirus vaccines are among the most effective vaccines available worldwide, with unequivocal data demonstrating greater than 99% efficacy when administered to women and men who have not been exposed to that particular type of HPV.

How do HPV vaccines work ?

Like other immunizations that guard against viral infections, HPV vaccines stimulate the body to produce antibodies that, in future encounters with HPV, bind to the virus and prevent it from infecting cells. The current HPV vaccines are based on virus-like particles (VLPs) that are formed by HPV surface components. VLPs are not infectious because they lack the virus's DNA. However, they closely resemble the natural virus, and antibodies against the VLPs also have activity against the natural virus. The VLPs have been found to be strongly immunogenic, which

means that they induce high levels of antibody production by the body. This makes the vaccines highly effective.

Different vaccines in market :

Currently, there are four licensed HPV vaccines in India: one bivalent, two quadrivalent, and one nonavalent vaccine. Those that have been prequalified are being marketed in countries throughout the world. All three HPV vaccines protect against HPV types 16 and 18, which are together responsible for approximately 70% of cervical cancer cases globally. The nonavalent vaccine protects against nine HPV types (6, 11, 16, 18, 31, 33, 45, 52, and 58).

Age of vaccination and their schedule:

The primary target group in most countries recommending HPV vaccination is young adolescent girls aged 9-14. For all vaccines, the vaccination schedule depends on the age of the vaccine recipient.

As per the December 2022 WHO Position on HPV vaccines, WHO recommends the following schedule :

- A one or two-dose schedule for girls aged 9-14
- A one or two-dose schedule for girls and women aged 15-20
- Two doses with a 6-month interval for women older than 21 (catch-up vaccination)
- A minimum of 2 doses and, when feasible, 3 doses remain necessary for those known to be immune-compromised and or HIV-infected.

Vaccine Safety :

Safety data for all three HPV vaccines are reassuring. According to the Vaccine Adverse Events Reporting System, more than 270 million doses of HPV vaccine have been distributed worldwide since 2006, and there are no data to suggest that there are any severe adverse effects or adverse reactions linked to vaccination.

PSG to create a cervical cancer - free future for our kids:

We, from the Department of Preventive and Community Oncology, have launched the "Yuva Shakti" project on International Women's Day, March 8th, 2024, where vaccination has been planned in three phases. The first phase is to vaccinate our hospital staff employees and their children. The second phase is to vaccinate all our PSG IMSR medical and paramedical (nursing/physiotherapy/pharmacy) students. The third phase is to vaccinate all of our PSG institutions, and the final phase is our extended community outreach program.

Thanks to Shri Jaganathan Sir, our directors Dr. Balaji & Dr. J.S. Bhuvaneshwaran, and Principal Dr. Subba Rao, who have been tremendously supportive from the very beginning to help us

roll out the vaccination program effectively. We have made available our own indigenous vaccine from Serum Institute Pune - Cervavac, which is almost half the cost of the regular vaccines in our hospital pharmacy. Also, the management has agreed to offer installments for the vaccination of our hospital staff.

The management has been magnanimous in providing the vaccination at a considerable cost and not at the MRP rate. Also, we have vaccinated 20 of our oncology staff on Women's Day to raise awareness and destroy the myths of this vaccine, which has been gratuitously provided by the management. The booster dose was given last week, which was complemented by the Cancer Care Foundation. None of our vaccinated staff have had any side effects or allergic reactions to the vaccination so far.

We have been organizing group lectures for all our nursing supervisors, team IT faculty, and hospital employees. Our medical college students were asked to fill out a questionnaire prior to our awareness talk to assess their knowledge, oversee the myths, and find out the rate-limiting factors regarding the vaccination. The response has been overwhelming, and we are eagerly looking forward to vaccinating all our students, staff, and children.

YUVA SHAKTHI



A LETHAL INTRUDER IN A CHEERFUL CHILD



Dr. AHAMED KABEER

Consultant - Paediatric Surgery

Airway Foreign bodies

Small Foreign bodies are critical in a child's airway. Most episodes of aspirated FBs occur



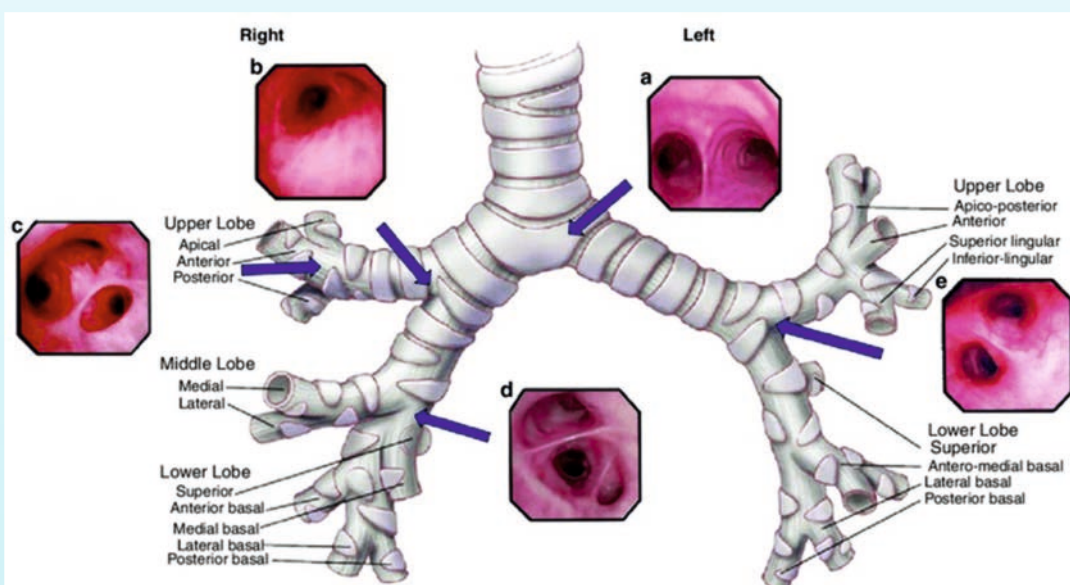
while eating or playing. Children often will cry or run with objects in their mouth. Overall, these

young patients tend to have immature coordination of swallowing. The average age for fatal events is 15 months. 75% of aspiration events occur in those less than 4 years. However anyone can be a victim in a sub conscious state. As the airway passage is narrow the objects lodges

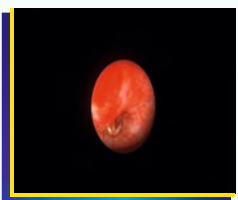
in its suitable position. A high index of suspicion is required to make the diagnosis in these young children. Boys are affected twice as often as girls.

Case report

7 year old Girl referred from other centre with alleged history of LED Bulb ingestion. This girl was noticed frightened and revealed the incident to her parents. She was taken to nearby medical centre and an X ray taken showed a radio opaque foreign body (Led Bulb) in the left lung field. Initial attempt to remove the FB failed as there was edema and congestion. The surgeons decided to perform a thoracotomy to retrieve the FB. A well-wisher of the patient proposed about our expertise service in pediatric surgery and referred to us for further management. On arrival the patient was hemodynamically stable maintaining saturation with room air. A repeat CXR showed the FB in the same location associated with some consolidation on the left base.



The patient was assessed by the anesthesia team and taken for emergency bronchoscopy



after explaining the risk also the cardiothoracic surgeon on backup. Initially, we used the rigid bronchoscope with optical aid. The challenge was poor vision due to prolonged intubation of the FB leading to edema. After an hour of battle we could able to retrieve the Led bulb succesfully using a long alligator forceps. During the post operative period the child received short course of antibiotics and steroids.

The follow up CXR after one month showed complete resolution of left lobe consolidation.

Common presenting symptoms include respiratory distress, stridor, and/or wheezing. A subtle change in voice or cry may be noted, yet many children will be asymptomatic. Many aspiration events go un witnessed. The shape of the foreign body can act an indicator for its final destination in the airway, as slimmer, sharper objects tend to travel further down the bronchial tree. FBs may completely obstruct the larynx or trachea leading to sudden death. Chronic lodgment will present with persistent

cough and atelectasis, recurrent pneumonia. Other late findings include the development of granulation tissue, strictures and perforation.

Investigation :

Following a detailed history Investigation usually turns to AP and lateral films of the neck and chest. Radiograph reveal hyperinflation or 'air trapping' in up to 60% of Children as the FB is acting as a one-way valve producing obstructive emphysema. In time, mediastinal shift may develop. Radiolucent FB remains a challenge as we have to relay on the history and clinical presentation.

It is also important to discuss with radiology in cases with radiolucent foreign bodies and minimal symptoms. Thoracic computer tomography (CT) has been proposed as a diagnostic tool for these cases, as well as for those with recurrent, treatment-resistant respiratory infections

The relief of foreign body airway obstruction may involve the consecutive use of multiple interventions, including encouraging the patient to cough, back blows, and abdominal thrusts. In skilled hands Rigid bronchoscopy is the gold standard tool to retrieve the FB's. In case of organic materials cryoextraction using bronchoscope is the recent advancement in this field.