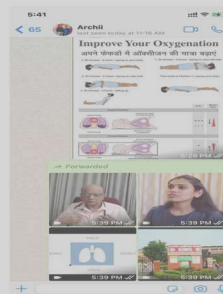




राजकीय आयुर्विज्ञान संस्थान, उत्तर प्रदेश
Government Institute of Medical Sciences, Uttar Pradesh



Innovation 2023-2024



GIMS, Greater Noida

"In the years to come, triumph will go to the centers that know who they are and how to indulge with the forces that are shaping our world. GIMS intends to be among the forefront."

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Faecal Fistula Wound Manager Dressing



2

A faecal fistula is an abnormal connection or passageway that forms between the intestines and another organ or the skin, allowing faeces to leak out of the intestines into the surrounding tissues or outside the body. It can be caused by various conditions such as Crohn's disease, diverticulitis, or surgical complications. Treatment typically involves addressing the underlying cause and may require surgical intervention.

Faecal fistula is always difficult to manage due to high cost of treatment and high cost dressing. There is always a risk of skin excoriation, skin maceration and bed smell.

We at GIMS made a wound manager dressing with available cheap material. Due to this innovative wound manager patient managed well and early discharge was possible.



Figure Faecal Fistula Wound Manager Dressing

Impact:

GIMS' Dressing for Fecal Fistula: **Big Impact | Small Cost**

Lowers treatment cost from 10000/- to 500/- with affordable dressing material
Improves patient care with better skin protection and reduced odor.

Contribution: Department of Surgery





Neonatal ICD tube with under-water seal bag system

Neonatal ICD is a procedure used to drain fluid or air from the chest cavity in newborn babies. For neonates specifically designed, small-sized chest tubes and under underwater seal drainage system are needed Which are not easily available and are usually very costly. So we at GIMS made a cost-effective ICD tube and Drainage system with an underwater seal bag using an available suction catheter set, fluid container and IV set.



Impact:

Neo natal ICD tube with under water seal bag: **Big Impact | Small Cost**

NICD (improved chest drainage for newborns) is cheaper than commercial options, potentially improving access to care.

DJ stent after CBD exploration & repair



4

We have started laparoscopic CBD exploration followed by DJ stent placement and primary closure of CBD over it without any complications. conventionally after CBD (common bile duct) exploration T-tube or CBD stent is placed. But at GIMS we used DJ stent after exploration of CBD. which is effective also without any complication post operatively. this the cost-effective alternate compared to CBD stent & T tube.



Impact:

GIMS' DJ Stent: **Big Impact | Small Cost**

Cost Effective, Freely available.

Contribution: Department of Surgery



Innovation: - Cost-effective makeshift of VAC dressings



Patients with large non-healing ulcers/ dirty wounds need serial debridement and regular dressings which is cumbersome for patients and also time-consuming, vacuum assisted closure dressings are proven to be effective for this, but conventional VAC systems cost Rs. 5000 - Rs. 10,000 per/VAC, which last for up to 1 week, but with our make-shift VAC, this cost is cut down to 500/VAC, which also last for 5days -7 days helping poor patients with comparable results to conventional VAC.



Impact:

GIMS' Cost effective makeshift of VAS dressing : **Big Impact | Small Cost**

Usual cost of VaC dressing is around 5000-10000 Rs weekly. But with our make shift cost around 500 Rs. Published also

Contribution: Department of Surgery





Hamstring insertion preserving graft for ACL reconstruction

This is innovative technique which provide ACL reconstruction by using hamstring graft with intact tibial footprint insertion and requires only single implant for femoral side fixation. This technique is economical and biological as compared to conventional ACL reconstruction. This was published in journal of orthopaedic report .



Impact:

Hamstring insertion preserving graft for ACL reconstruction:
Big Impact | Small Cost

Contribution: Department of Orthopaedic





Knee Preservation Surgeries

These are alternative to knee replacement surgeries. These surgeries are performed using wide armamentarium of external and internal fixation techniques for both tibial and femoral deformities at GIMS. These include multitude of procedures around the knee in physiologically active patients with spared lateral compartment of knee. These surgeries aim to rectify malalignment, incongruity and instability in OA knee patients who fulfill inclusion criteria like age < 70 yrs, mono compartmental arthritis with or without patella femoral arthritis, BMI < 30, absence of inflammatory arthritis and available range of motion between 10* to 90* at knee



Impact:

Knee Preservation Surgeries

Big Impact | Small Cost

Contribution: Department of Orthopaedic

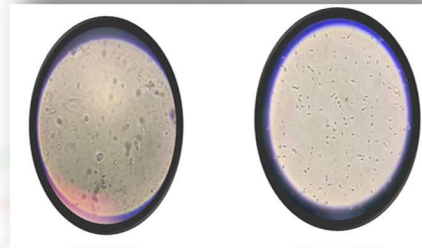




Successful establishment of Level I ART clinic at GIMS

Infertility management, a least priority area in government health facilities, OBG department GIMS has taken lead in establishing ART-Level-1 center with IUI facilities (Artificial Reproductive Technology Level-1 center with Intrauterine Insemination facilities) to ensure high quality, affordable treatment to infertile patients in government set up.

With a success rate of 35%, GIMS ART- Level-1 center is all set to serve the needy with all latest diagnostic and therapeutic facilities- Ultrasound guided IUI, Hysteroscopy & Laparoscopy, HSG, USG, semen analysis, hormonal profile etc.



Impact:

Big Impact | Small Cost

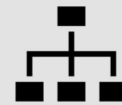
Parenthood is no longer a dream, your search ends here!!

Affordable, latest, evidence-based management accessible to all!!

Contribution: Department of Gynaecology



Implementation of 5S



With the increasing burden of population and limited resources, one of the biggest challenge is to provide quality service in government health setup. The quality gets compromised due to organizational deficits. The resources are limited, by restructuring the organizational infrastructure a better use of available resources is possible, which will improve the quality of services provided to the end users.

The 5S approach is a simple and effective tool of management which reduces waste through organized workplace leading to improved quality service. 5S is one of the Japanese technique which nourishes quality culture and motivation amongst the workers. It is a low cost program which can be effectively used to bring about visible changes in the quality of service.

The 5S is derived from Japanese words Seiri, Seiton, Seiso, Seiketsu, Shitsuke



Figure 1 : Technicians motivated to keep their workplace clean Figure 2 : : Files arranged systematically Figure 3 Placing 5S poster for information dissemination Figure 4: Data Entry Operator desk before & After 5S implementation Figure 5: Home location marked for equipment implementation Figure 6: Files arranged systematically with the 5S Figure 7: Workstation after 5S implementation Figure 8: SOP displayed in working area Figure 9: SOP displayed in working area

Impact:

5S for Improved Quality in Government Healthcare **Big Impact | Patient Safety**

Challenge: Growing populations and limited resources strain government health services, compromising quality.

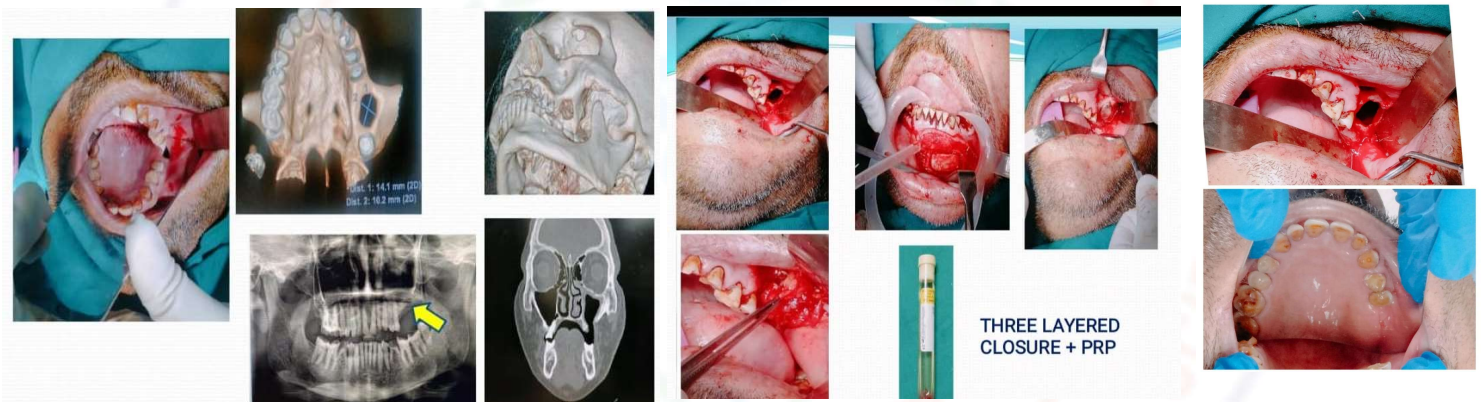
Solution: 5S, a low-cost Japanese approach, can improve efficiency and service quality in these settings.

Contribution: Department of Biochemistry

New technique of closure of oro – antral fistula with platelet rich fibrin



Usually, an OAF <2 mm in diameter closes spontaneously, but when there is more than >3 to 4 mm of defect, the opening persists and requires surgical closure with flap . In our case size of oro-antral fistula was 14 x 10 mm which was very huge and only flap closure would not be sufficient to close it without recurrence. So we planned to operate in which three layered closure with cortical graft from chin + platelet rich fibrin + buccal pad of fat along with buccal advancement flap. In follow up visit his fistula is completely healed and his problem is solved. (PRF, or platelet-rich fibrin, is the next generation treatment of platelet concentrate. PRF is a fibrin matrix comprised of platelet cytokines, growth factors, and cells used to help promote wound healing.)



Impact:

New technique of closure of Oro – antral fistula with platelet rich fibrin

Big Impact | Patient Care

Contribution: Department of Dentistry

Innovative Pharmacovigilance and Adverse Drug Reaction Monitoring Centre

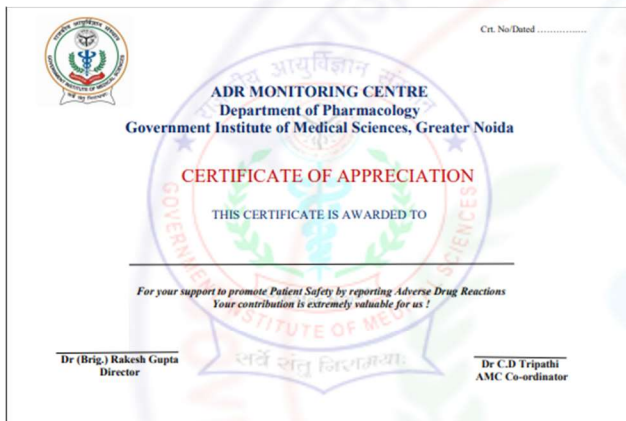


Streamlined Reporting Process: Recognizing the importance of timely ADR reporting, the center has established a dedicated mobile number (9899292633) for easy and convenient reporting. This initiative aims to encourage healthcare professionals and the public alike to promptly report any adverse reactions associated with medications.

Report all Adverse drug event through Medicines and Medical devices to the ADR Monitoring Centre (AMC), Department of Pharmacology Contact No.

9899292633

GIMS, Greater Noida, U.P.



Incentive Mechanisms: To incentivize maximum participation in ADR reporting, the centre offers monthly incentives:

- Certificates of Appreciation: Acknowledging the efforts of individuals who contribute to ADR reporting.
- Bonus Attendance for Students: Encouraging student involvement by offering additional attendance credits.
- Compensatory-Off for Faculty: Providing faculty members with compensatory time off as a token of appreciation for their dedication to pharmacovigilance.

Simplified Reporting Tools: Understanding the importance of user-friendly reporting systems, the centre has introduced the Blue Slip—a simplified version of the Suspected ADR Reporting form. This streamlined tool aims to facilitate quick and efficient reporting, ensuring that vital information reaches the appropriate channels without unnecessary complexity.

Impact:

GIMS Pharmacovigilance Center Boosts Drug Safety **Big Impact | Patient Safety**

Easy reporting via dedicated mobile number and simplified forms.

Incentives like certificates and time off encourage healthcare professionals and public to report adverse drug reactions.

Contribution: Department of Pharmacology

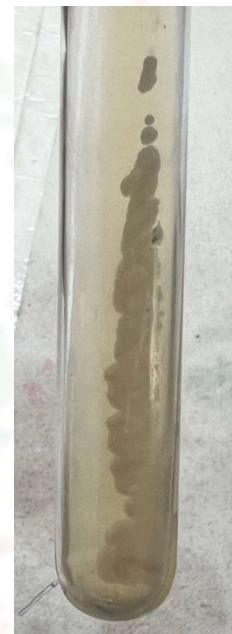




***Candida pelliculosa*: A rare fungus causing neonatal sepsis.**

Candida Species have also been reported to cause dacryocystitis via penetrating keratoplasty, fungal infections after cardiac surgery, and fungal hemorrhagic pancreatitis. Preterm infants with extremely low birth weights account for a majority of *C. pelliculosa* infections. A study conducted by Lin et al showed that the mean infection time was 18.5 days after hospitalization. Previous studies have shown an increase in frequency of outbreaks in paediatric and surgical intensive care units.

A lack of effective diagnosis and treatment may significantly increase the mortality rate among neonates and children. Many reports have been unable to identify a confirmed source of infection.



Impact:

***C. pelliculosa*: Rare Fungus, Serious Threat** **Big Impact | Patient Care**

Rare fungus emerging as a serious threat to newborns in intensive care, causing infections with high mortality rates. Requires better diagnosis and treatment methods.

Animated Video for OGTT Instructions



Department of Biochemistry, GIMS, Greater Noida has developed an innovative e-learning module to improve patient education and care. This module utilizes an animated video to provide clear and accessible instructions for pregnant women undergoing an Oral Glucose Tolerance Test (OGTT). This animated video module offers a visually engaging and informative approach to patient education.

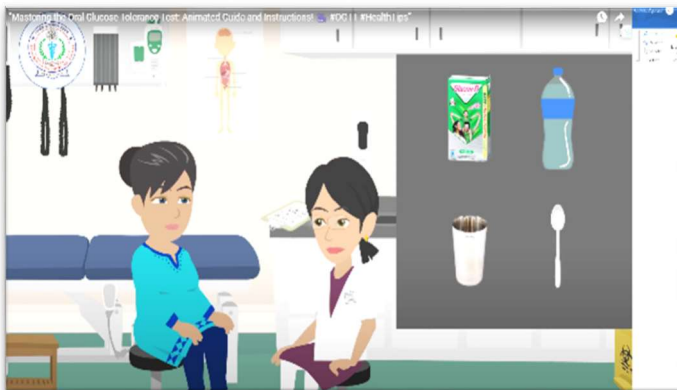


Figure 1: Explaining the OGTT test for expecting moms! Watch GIMS' new animated video to learn more.

The video explains the OGTT procedure, dietary restrictions before the test, and what to expect during the test. This format can improve patient understanding, adherence to test instructions, and ultimately, the accuracy of the OGTT Result OGTT results.

Video Access:

<https://www.youtube.com/watch?v=cnnwqDCM6dE&t=23s>

Impact:

GIMS' Animated OGTT Module: Educating Patients for Better Care

Big Impact | Patient Satisfaction

Engaging video improves patient understanding of the OGTT procedure.

Clear instructions can lead to better adherence to test requirements.

This may result in more accurate OGTT results for improved patient care.

