



FAISALABAD INSTITUTE OF CARDIOLOGY



2014



EDITORIAL

The awareness of cardiac diseases among the community has been increased with the establishment of Faisalabad Institute of Cardiology, Faisalabad in this region. There is enormous increase in influx of patients in this institute. It was thought to be a disease of rich and elderly but now it has been observed among all ages at socio-economic group. This institute is striving very hard to diagnose and treat the coming patients and send them back in the main stream to support their family and nation at large.

Faisalabad Institute of Cardiology, Faisalabad is one of the national major Cardiac Centre offering comprehensive cardiac services from diagnostic to open heart surgery. It is offering dedicated specialist care and unique range of services at the forefront of research, thousands of patients benefited from the cutting edge of its services.

The department of Continuous Medical Education has always playing a fundamental role in new ideas and innovative changes to the field of medical education. The CME Programs of the institute are planned to refresh the knowledge and skills of the postgraduates, doctors, general practitioners and awareness about the cardiac disease prevention at school and university level.

We encourage our paramedics and community to inculcate the knowledge regarding Basic Life Support. The purpose of these programs to raise the awareness level among the common people about their health and cardiac disease, at large. The institute will welcome the feedbacks and suggestions from the general population for the betterment of services as regard with the up gradation of the patient care.

Director,
Department of Research & Medical Education ,
FIC, Faisalabad.

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INTRODUCTION

Faisalabad Institute of Cardiology, Faisalabad is third specialized autonomous institute for heart disease was established on Tuesday 13th November 2007. This 202 bedded tertiary care cardiac institute provides 24/7 cardiac diagnostic and treatment facilities to Faisalabad and other adjoining areas along with cardiovascular emergency care, backup cover facilities like PCI and cardiac surgeries etc.

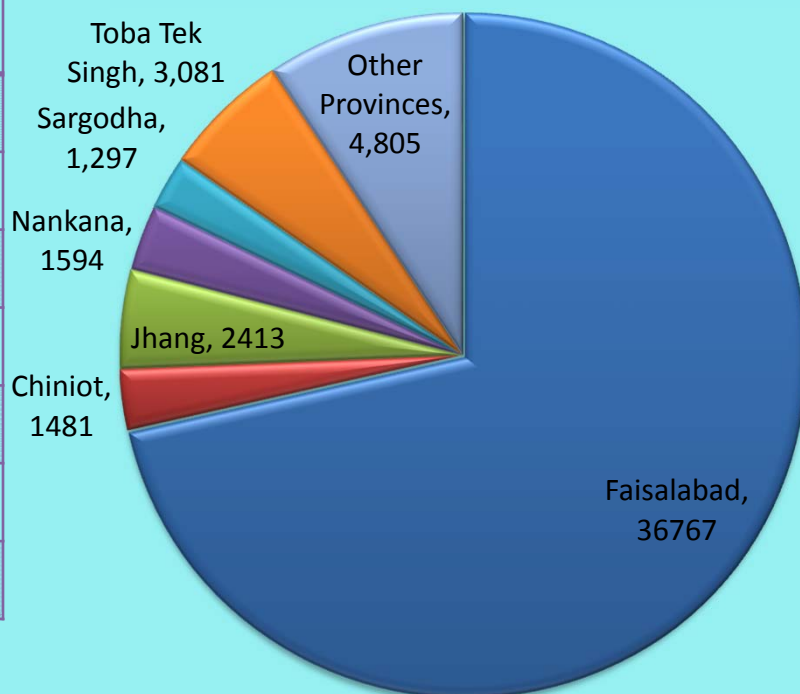
This institute is recognized by Pakistan Medical & Dental Council on 9th May 2011 for Post Graduate Programs whereas accreditation with CPSP for FCPS took place on 10th June 2011. Institute was affiliated to University of Health Sciences for Postgraduate (M.S Cardiac Surgery, M.D Cardiology and Diploma in Cardiology) and undergraduate (B.Sc. Hons. Cardiac Perfusion).

The objectives of this institute are:-

- ☐ Provide cardiac diagnostic and treatment healthcare facilities of highly specialized nature.
- ☐ Train medical, paramedical and staff nurses to provide optimum cardiac care.
- ☐ Provide research facilities in the field of Cardiology and Cardiac Surgery.
- ☐ To facilitate post-graduation training programs in collaboration with CPSP and UHS.
- ☐ Become a center of initiating public health awareness programs to prevent cardiac diseases.
- ☐ Provide advanced cardiac life support training to medical personnel and Basic Life support programs (BLS) training at community level to save precious human lives.

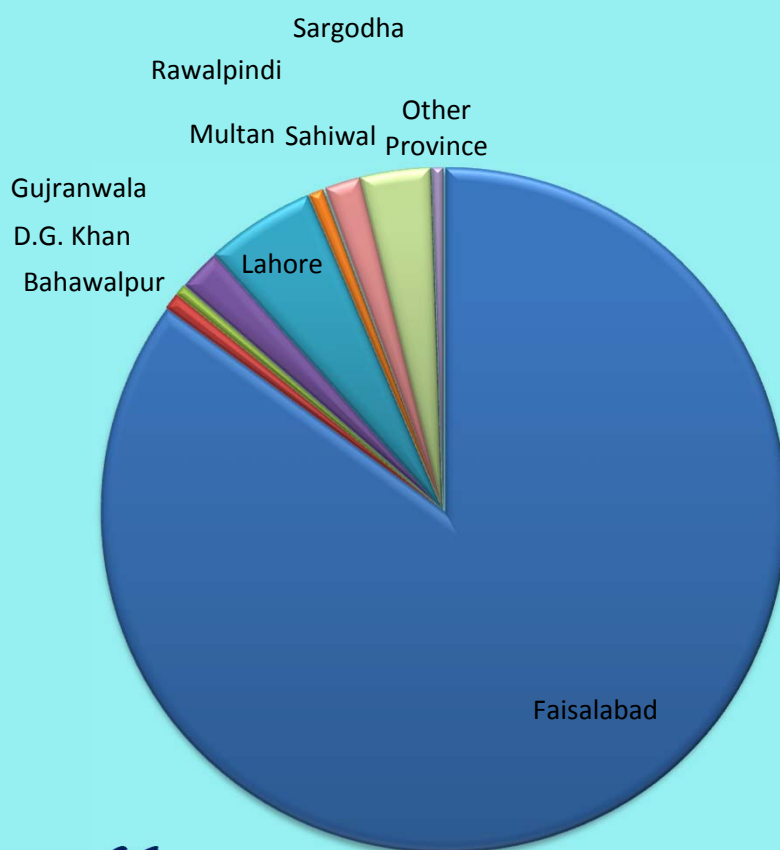
DISTRICT WISE REGISTRATION OF NEW PATIENTS AT FIC

Faisalabad	36767
Toba Tek Singh	3081
Jhang	2413
Nankana	1594
Chiniot	1481
Sargodha	1297
Other	4805
Total	51438



DIVISION WISE REGISTRATION OF NEW PATIENTS AT FIC

Faisalabad	43742
Lahore	2668
Sargodha	1724
Gujranwala	1031
Sahiwal	882
Bahawalpur	413
Multan	367
Dera Ghazi Khan	274
Rawalpindi	65
Other	272
Total	51438



EXECUTIVE DIRECTOR/ HEAD OF CARDIAC SURGERY

Prof. Dr. Raja Parvez Akhtar (FRCS) is a renowned cardiac surgeon, currently serving as the Executive Director and Head of Cardiac Surgery Department at the Faisalabad Institute of Cardiology, Faisalabad. He has immense experience in conducting off-pump and on-pump CABG and valvular heart surgery, as well as managing congenital heart defects. He has contributed towards research and post-graduate training in cardiac surgery and has over 30 national and international publications.



"As Executive Director, leading a team charged with the responsibility to establish this institute as one of the finest providers of cardiac healthcare in the country, it brings me great pleasure to report the continued success and advancement of the Faisalabad Institute of Cardiology, Faisalabad.

Our accomplishments represent the devotion of our staff, as well as the invaluable contributions of individuals within our community. Without their help, all this would be impossible.

2014 marked a year of unprecedented success. It is remarkable to reflect on the achievements of the past year, which contributed to the creation of an unparalleled environment for the delivery of comprehensive cardiac care. After accreditation with PM&DC, UHS Lahore and CPSP, we have started Basic Life Support training programs for medical and paramedical staff, as well as for the general public. Attainment of PC-I for residential block and three echocardiography machines in 2014 will enable us to strengthen our resources, providing greater opportunity for patient care.

Expansion of 48 bedded Emergency Block started in 2014 with the support of Friends of FIC and it will be completed by the end of 2015 (Inshallah).

I am humbled by the generosity of our community for helping develop institutional resources. In particular, I would like to pay gratitude to our Board of Management, and especially the Chairman, Kh. Asim Khurshid, for their inestimable counsel."

In 2014 total number of patients treated for no cost in OPD = 218766, at the cost of Rs. 175.013M.

The Emergency Department is totally free of cost and 10895 patients were admitted in 2014. The total cost was Rs. 87.16M.

Number of Angiographies = 3803, at the cost of Rs. 28.903M.

Number of Angioplasties = 789, at the cost of Rs. 90.735M.

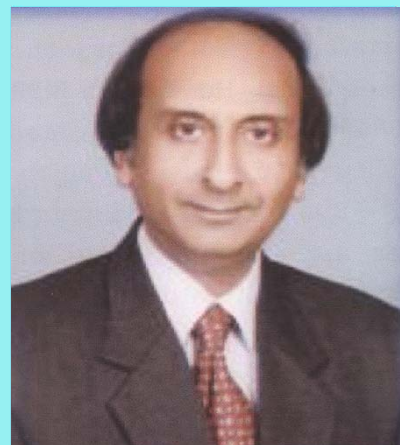
HEAD OF CARDIOLOGY

Dr. Mohsin Nazir is Chief of Cardiology Department at Faisalabad Institute of Cardiology, Faisalabad. He did his MBBS from Quaid-e-Azam Medical College, Bahawalpur in 1982, passed his FCPS in Medicine in 1991 and did his Postgraduate training in Cardiology at Punjab Institute of Cardiology, Lahore and passed FCPS in Cardiology in 1999.

He was appointed as Associate Prof. of Cardiology at Faisalabad Institute of Cardiology, Faisalabad in 2010. he remained Head of Cardiology Department from November 2010 to September 2012 and then again from August 2013 to date.

Dr. Mohsin has extensive experience in all aspect of clinical and interventional cardiology, he is keenly interested in training and grooming of postgraduate students and is a supervisor/examiner for CPSP in Cardiology since 2003.

He is deeply interested in research and evidence-based medicine and has several original papers to his credit.





PERFORMANCE AT A GLANCE FAISALABAD INSTITUTE OF CARDIOLOGY

CARDIAC SURGERY

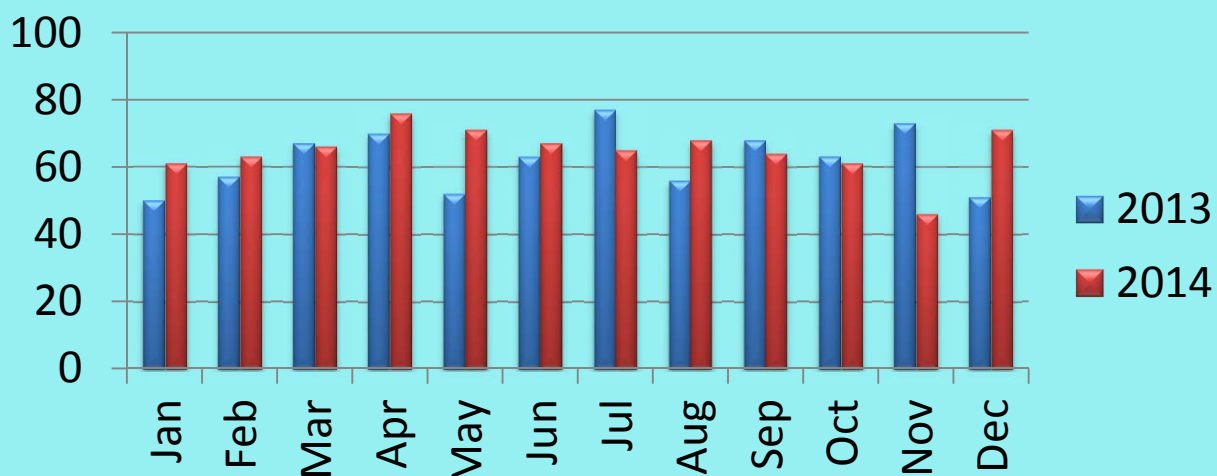
CARDIAC SURGERY & CARDIOLOGY WARDS

Cardiac Surgery and Cardiology wards are situated on the 2nd and 3rd floor respectively. They consist of 30 general beds, 09 Semi Private rooms and



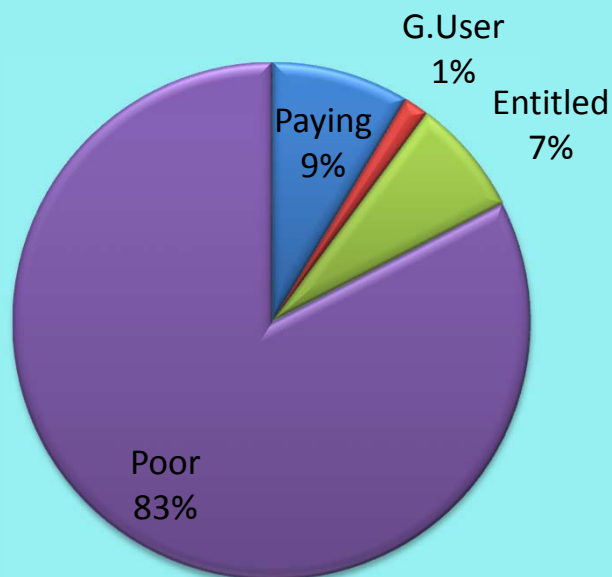
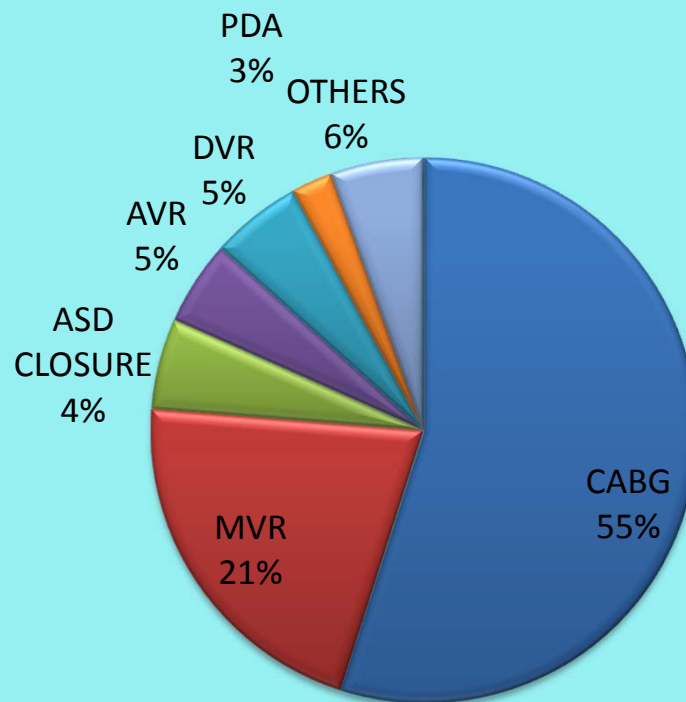
05 VIP Suites. These are centrally air conditioned and equipped with wards comfortable adjustable beds with medicine trolley and seats for attendants.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	50	57	67	70	52	63	77	56	68	63	73	51	747
2014	61	63	66	76	71	67	65	68	64	61	46	71	779



CARDIAC SURGERY

CABG	MVR	ASD CLOSURE	AVR	DVR	PDA	OTHERS	Total
428	166	42	39	42	19	43	779



CABG: CORONARY ARTERY BYPASS GRAFTING | MVR: MITRAL VALVE REPLACEMENT | ASD: ATRIAL SEPTAL DEFECT
 AVR: AORTIC VALVE REPLACEMENT | DVR: DOUBLE VALVE REPLACEMENT

OUT PATIENT DEPARTMENT

OUT PATIENT DEPARTMENT

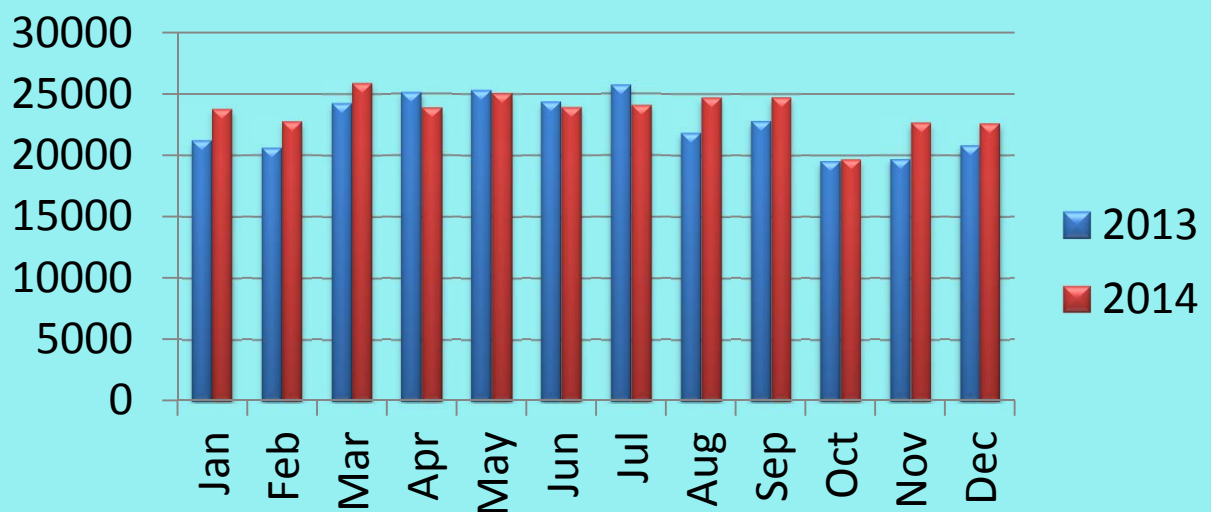
(OPD)

The out patient team of FIC is working hard to set a clear standard, resulting in. In 2014, 283842 patients visited OPD for consultation, investigations and admission . Apart from that 218766 patients received free medicines worth Rs. 175.013 million. Consisting of 10 OPD clinics which are providing service to around 1000-1200 patients per day and the Cardiac patients are being treated after complete check up. Its location is lofty, and well lighted at every point, and affords comfortable seating accommodation for the patients in order to avoid and



inconvenience on part of the hospital administration. The Out Patient Department's philosophy is to provide friendly but efficient service, which should minimize the patients wait for the consultation, treatment or investigations. However, increase in the OPD patients and short of space for clinics for patients and clinics demand for a new OPD Block. We also provide the and a INR clinic.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	21228	20617	24273	25133	25338	24376	25732	21857	22819	19546	19707	20819	271445
2014	23775	22756	25902	23881	25094	23919	24081	24729	24747	19685	22671	22602	283842



ECHOCARDIOGRAPHY

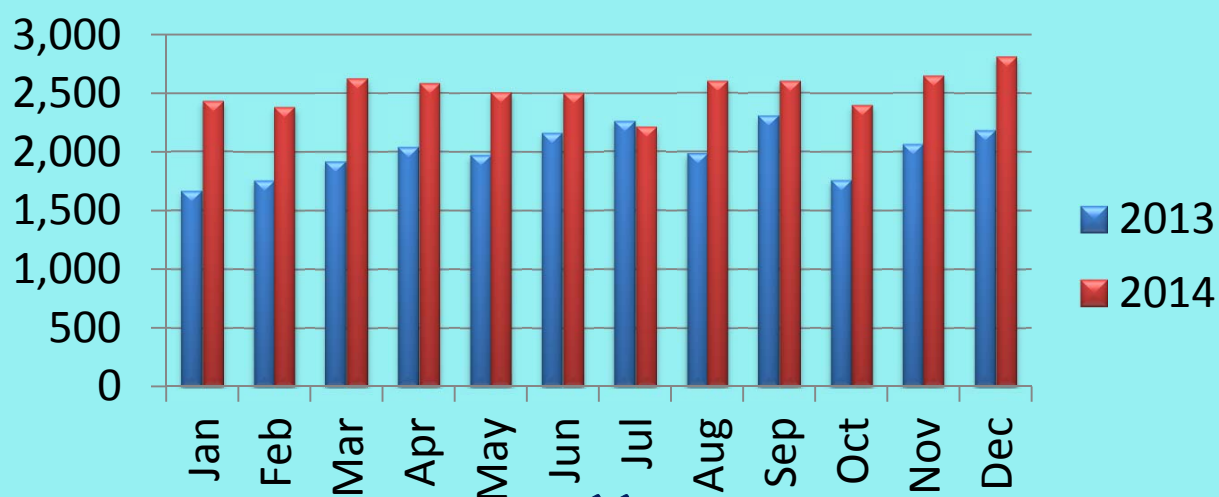
ECHOCARDIOGRAPHY

There are two sophisticated color Doppler echocardiography machines (GE Vivid-7) and one portable echocardiography machine (NEMIO) for Emergency & ICU Patients. Over 12,000 examinations are performed annually to evaluate the structure and function of the heart muscles and valves in detail, minimizing the need for invasive testing. Following echocardiography examinations are performed:-



- Transthoracic adult and pediatric echocardiography
- Transoesophageal echocardiography
- Dobutamine Stress echocardiography
- Contrast echocardiography
- Fetal echocardiography

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	1,665	1,759	1,920	2,041	1,974	2,163	2,258	1,987	2,308	1,760	2,066	2,184	24,085
2014	2,429	2,383	2,626	2,584	2,509	2,503	2,211	2,601	2,601	2,398	2,647	2,812	30,304



EXERCISE TOLERANCE TEST

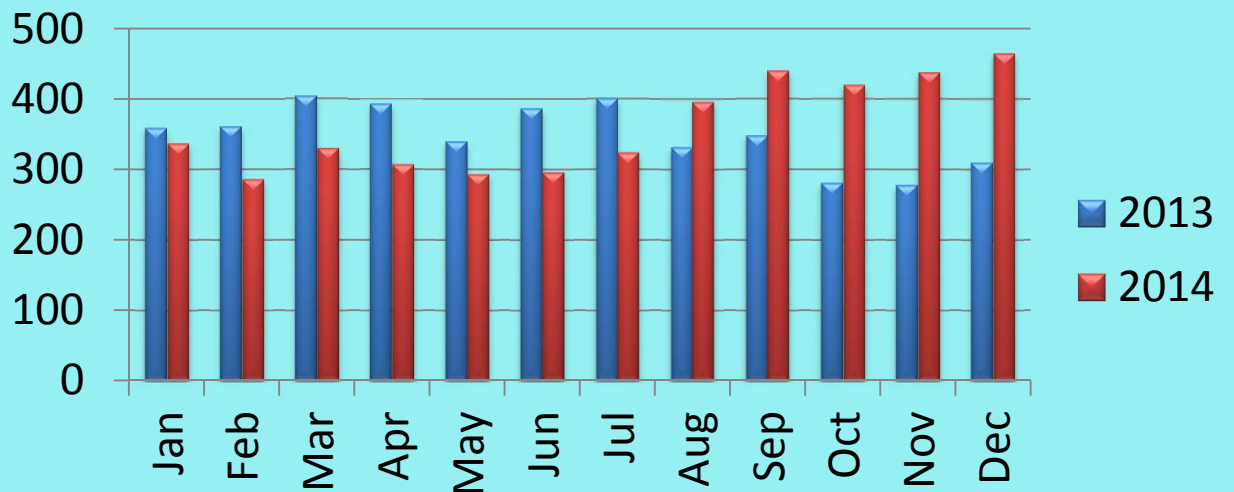


ETT/ELECTROPHYSIOLOGY DEPARTMENT

ETT Section consists of 2 latest treadmills ETT Machines (Quinton Stress) with automatic blood pressure apparatus. The section performs 25 tests per day under supervision of the Doctor In charge and highly trained Medical Technicians.

EP Section has ability to carry out six, 24 hour Holter Monitoring and two 48 hours monitoring. We also have facility for 24 hour blood pressure monitoring.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	359	361	404	393	340	387	401	332	348	281	278	310	4194
2014	337	286	330	307	293	296	324	396	440	420	438	465	4332



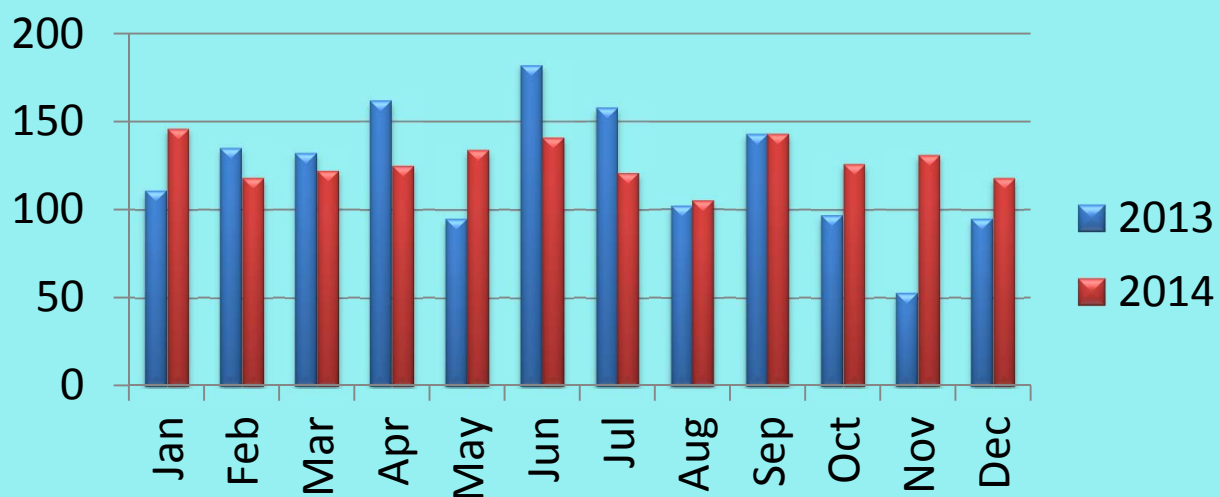
NUCLEAR CARDIOLOGY DEPARTMENT



NUCLEAR CARDIOLOGY

The department is equipped with a state of the art Dual Head dedicated cardiac SPECT Gamma camera system (Cardio MD III). We perform stress and resting nuclear imaging for evaluation of coronary blood flow, myocardial function, and myocardial viability in patients with coronary artery disease and other cardiac conditions. The department performs around 90 myocardial perfusion scans per month, using both physical and pharmacological stress techniques. All ancillary requirements for cardiac nuclear test like Tread mill and bicycle ergometer, radiation protection/safety equipment is available.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	111	135	132	162	95	182	158	102	143	97	53	95	1,465
2014	146	118	122	125	134	141	121	105	143	126	131	118	1,530



EMERGENCY

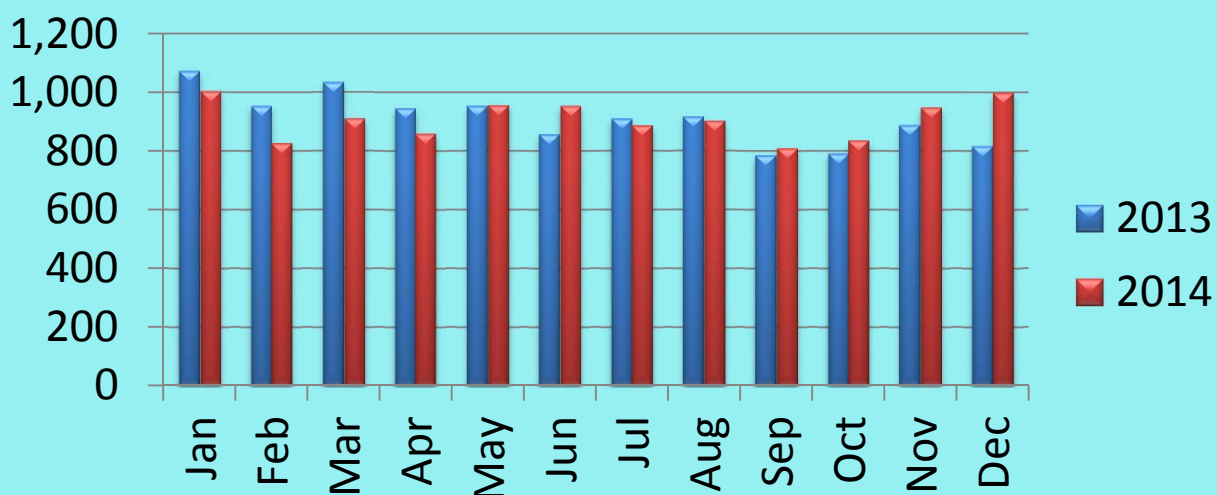


EMERGENCY DEPARTMENT

FIC's innovative Emergency Ward is unique in Faisalabad both in design and technology, fulfilling the diverse adult care, ambulatory and critical care situations as well as providing 18 bedded emergency ward with bedside cardiac monitoring, central oxygen supply. It has a 4 bed resuscitation ward where invasive procedures are performed. There is also a 2 bedded ICU with complete ventilatory support. All other equipment required for the treatment of cardiac emergencies like defibrillators and temporary pacemakers are also available. Those in life-threatening, critical-care situations are always given top priority. We try our best to keep everyone apprised of an estimated time for treatment.

Emergency treatment/management at FIC is free of cost for all. In 2014, 10895 patients were seen at the cost of Rs. 87.16 Million.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	1,073	954	1,034	947	954	857	910	916	786	791	889	817	10928
2014	1004	827	911	860	956	954	887	902	810	836	949	999	10895



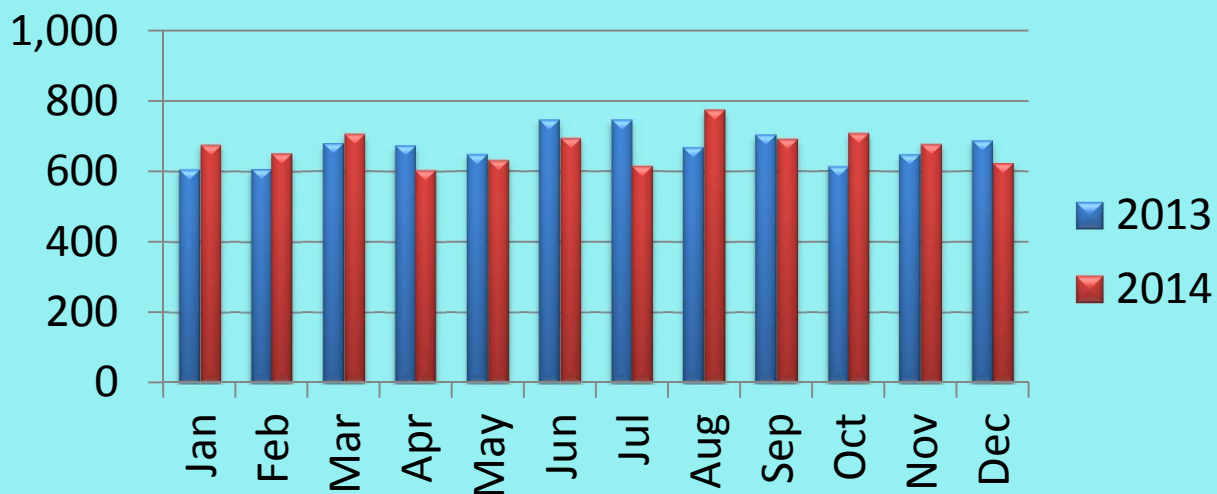
INDOOR



INDOOR DEPARTMENT

Indoor consisting of male and female wards, two CCUs and emergency ward.
Last year almost 8055 patients were admitted and managed

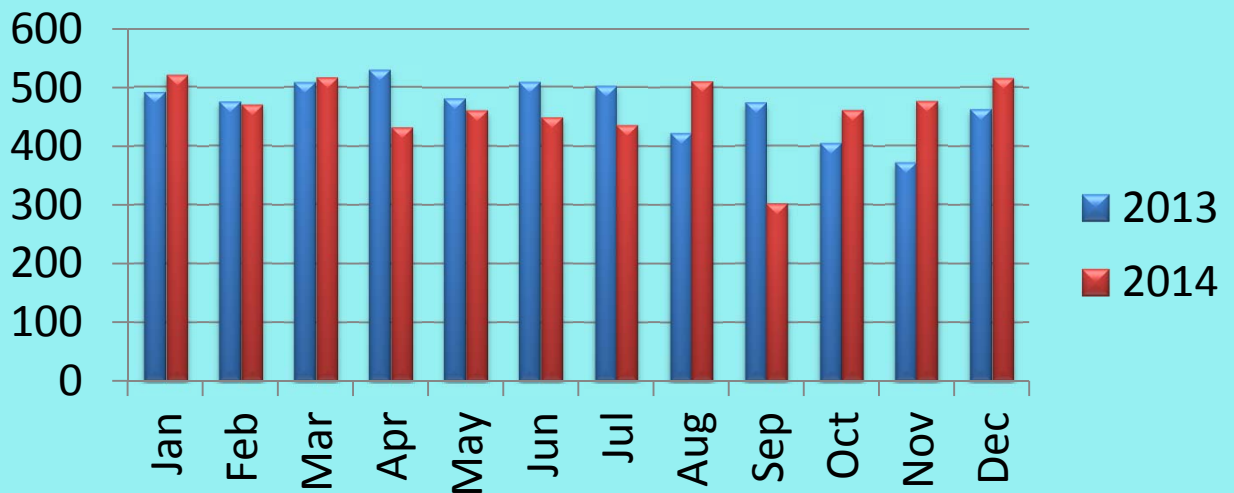
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	606	608	680	675	648	746	746	669	704	614	649	687	8032
2014	676	652	706	604	631	694	615	776	692	708	678	623	8055



INTERVENTIONAL CARDIOLOGY

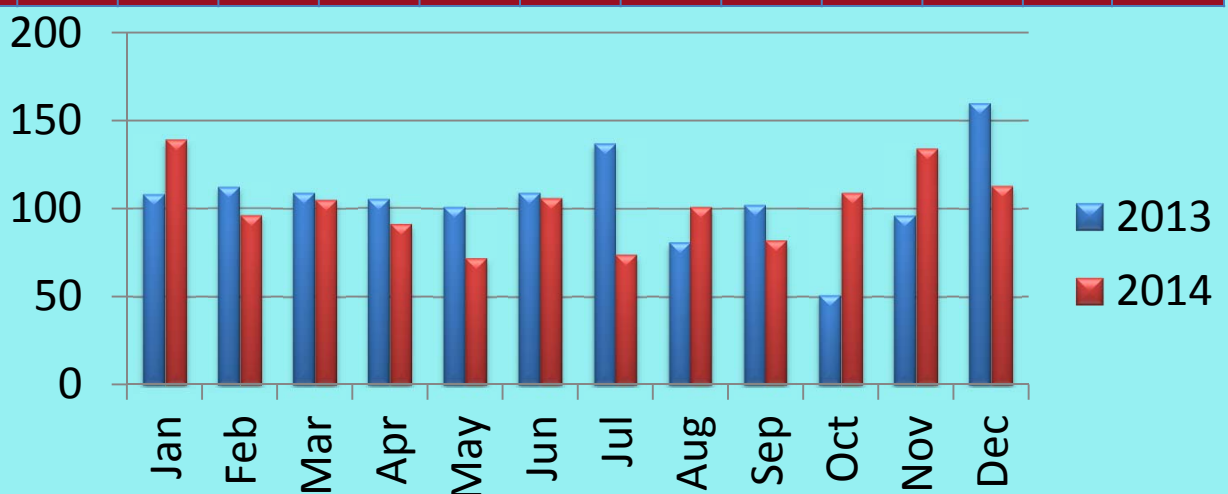
ANGIOGRAPHY

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	492	475	509	530	481	509	503	423	474	405	372	463	5636
2014	521	470	517	432	461	449	436	511	302	461	476	516	5552

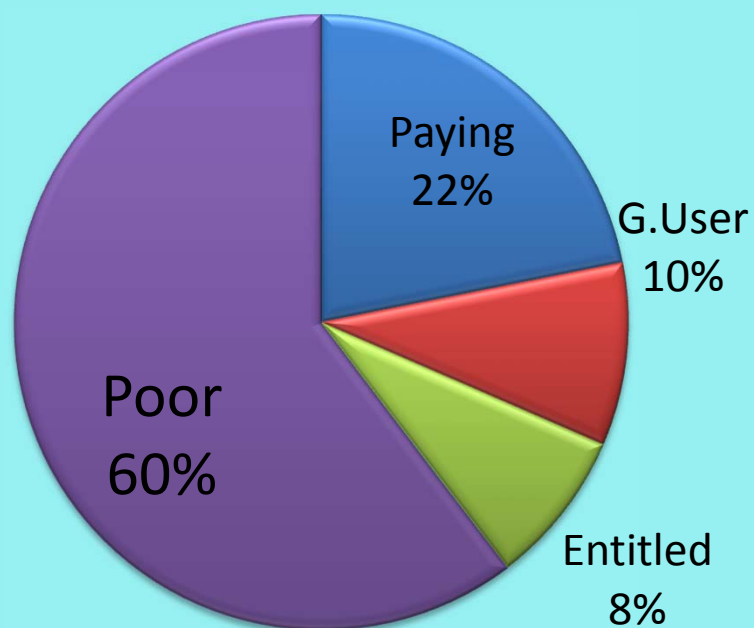


ANGIOPLASTY

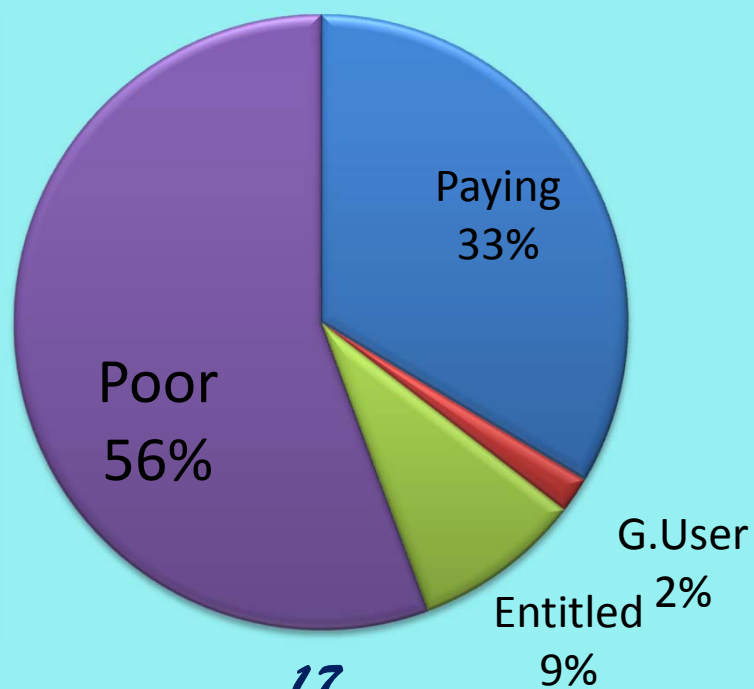
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	108	112	109	105	101	109	137	81	102	51	96	160	1271
2014	139	96	105	91	72	106	74	101	82	109	134	113	1222



ANGIOGRAPHY CATEGORY WISE



ANGIOPLASTY CATEGORY WISE





PAEDS. ANGIOGRAPHY



RADIOLOGY DEPARTMENT



RADIOLOGY DEPARTMENT

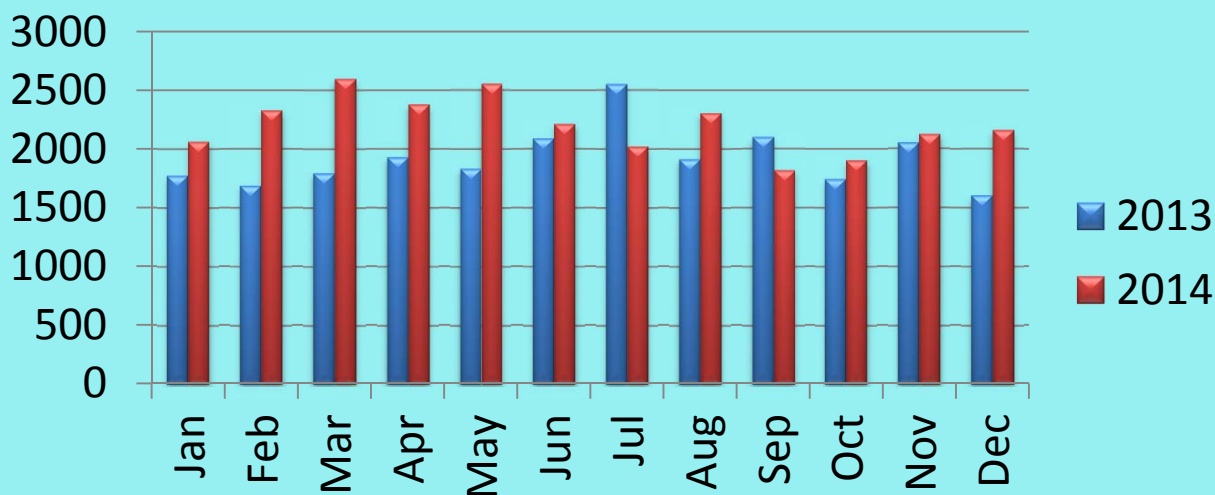
The Department offers utmost quality in imaging, accuracy in reporting with minimum waiting times. In addition to all types of conventional radiography, the department is also capable of performing any fluoroscopic-dependant special radiological procedures. The procedures are performed under the direct supervision of senior, experienced and qualified Radiologists.

The Department is equipped with the latest Doppler machines for peripheral vascular studies.

All types of conventional, abdominal, small parts sonography are performed.

US guided biopsies/aspirations are routinely done with a high level of target accuracy and post-procedure care. The Radiology Department at FIC now gains another dimension in digital imaging by acquiring the most-modern Computed Radiography system, The KONICAL REGIUS-190.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	1775	1688	1795	1930	1834	2089	2552	1914	2099	1743	2052	1605	23076
2014	2063	2326	2597	2378	2555	2210	2022	2306	1817	1902	2121	2158	26455



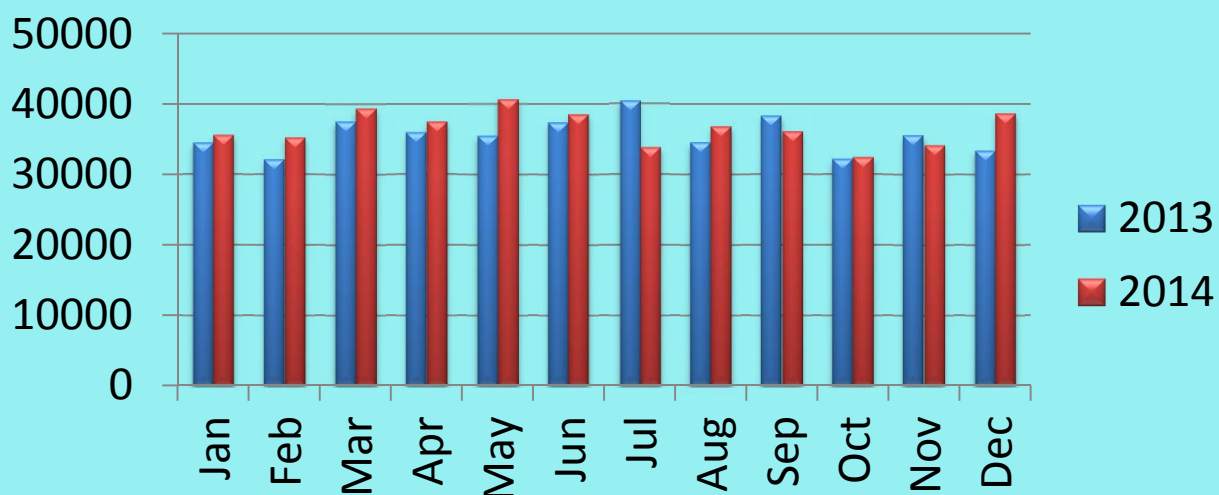
PATHOLOGY DEPARTMENT



PATHOLOGY DEPARTMENT

The Pathology laboratory of FIC is equipped with a wide range of modern automated analyzers in chemistry hematology, immunology and micro biology sections. Highly experienced laboratory scientific officers are working under the supervision of qualified pathologist. Meticulous quality assurance procedures are followed to ensure accuracy, reproducibility of results and to minimize repeat run. The FIC is committed to provide a swift, accurate and dependable diagnostic laboratory investigation services. The laboratory tests are highly affordable and competitive.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2013	34469	32095	37568	35926	35514	37417	40422	34577	38299	32166	35613	33405	427471
2014	35545	35191	39410	37434	40697	38559	33806	36839	36051	32407	34167	38669	438775



COMMUNITY PROJECTS

**TOPIC: CORONARY ARTERY PREVENTION, & RHEUMATIC FEVER
PRESENTED BY: DR. FAISAL ALI**



COLLEGE OF FASHION DESIGNING



UNIVERSITY OF SARGODHA

**TOPIC: CORONARY ARTERY PREVENTION ,
PRESENTED BY: DR. HAMID SAEED &
DR. FAISAL ALI**



G.C UNIVERSITY, FAISALABAD

BASIC LIFE SUPPORT (BLS) COURSE



Certified Trainers of BLS at FIC

1. Dr. Shahid Abbas
2. Dr. Muhammad Yasir
3. Dr. Faisal Ali
4. Dr. Muhammad Asim Saddique
5. Miss Noreen Shafique
6. Miss Asma Tabassum

Assistant Prof. of Cardiology
Assistant Prof. of Cardiology
Consultant Cardiologist
Medical Officer
Charge Nurse (ICU)
Charge Nurse (ICU)

WORLD HEART DAY



HONORARIUM



SPORTS FESTIVAL



FIC EAGLE'S won the Cricket Tournament in 2014

WALK ON CLEANLINESS DAY



PLANTATION DAY



MAINTENANCE WORK



BEST EMPLOYEE OF THE YEAR



Best Employee of the Month January 2014
Ibrar Hussain (Dispatch Rider)



Best Employee of the Month February 2014
M. Umar Gill (Laundry Manager)



Best Employee of the Month March 2014
Akram Masih (Sanitary Worker)



Best Employee of the Month April 2014
Naveed Ahmed (Driver)



Best Employee of the Month May 2014
M. Ilyas (Plumber)



Best Employee of the Month JUNE 2014
Faheem Iqbal (Computer Operator)



Best Employee of the Month July 2014
Chaman Zia (Chowkidar)



Best Employee of the Month August 2014
Raza Miran (Junior Clerk)



Best Employee of the Month September 2014
Fozia Parveen (Jr. Technician Surgical Technology)



Best Employee of the Month October 2014
Muhammad Nadeem (Computer Data Operator)



Best Employee of the Month November 2014
Raheela Barkat (Receptionist)



Best Employee of the Month December 2014
Lubna Sabir (Sanitary Worker)

GROUND BREAKING CEREMONY OF NEW EMERGENCY DEPARTMENT (MUHAMMAD ANWAR SAJJAD BLOCK)



By: Rana Sanaullah (Minister Law, Parliamentary affairs and
Public Prosecutions, Punjab)

LIBRARY



We have a state of the art library along with computers, internet, electronic & online books and journals.

The following reading material available in our library:-

Cardiac Surgery	35 Books
Cardiology	40 Books
Medicine	15 Books
Anesthesia	06 Books
Anatomy	06 Books
Online Books	15 Books
Islamic Books	50 Books
journals Available	20 Journals
A number of books of Radiology, Pathology, Physiology, Behavior Sciences and Dictionaries	

IT DEPARTMENT



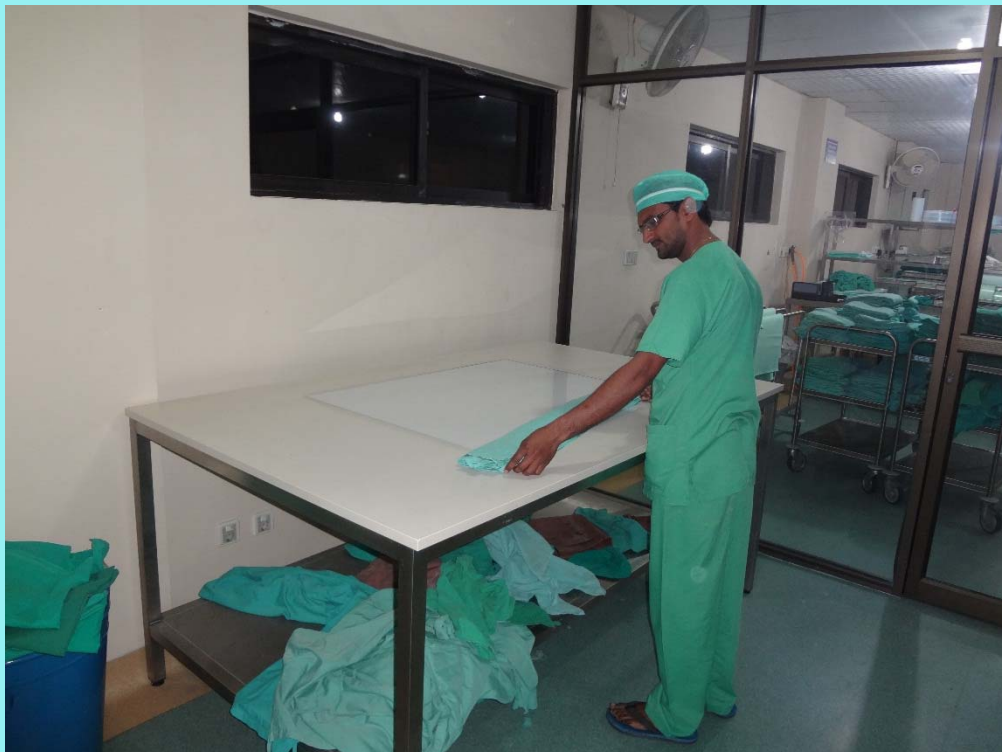
Information technology (IT) has the potential to improve the quality, safety, and efficiency of health care. The IT Department at FIC has developed an ERP Software which provides integrated access of patient Medical record like Registration, Pathology Lab results, Patient Indoor and out Door Visit History, OT Notes & other invasive and non-invasive procedures reporting. The Inventory Control, Purchase, Accounts, Payroll modules are also developed which helps administration in planning and further procuring necessary goods & services

ELECTRO-MEDICAL DEPARTMENT



LAUNDRY DEPARTMENT



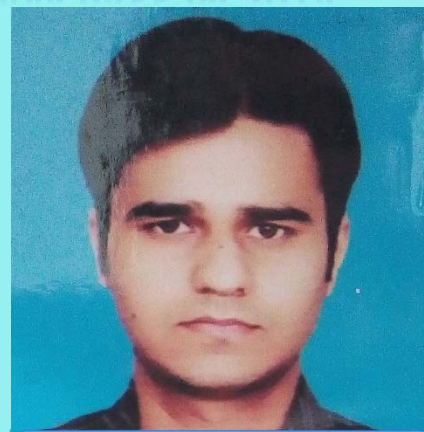


CONGRATULATIONS

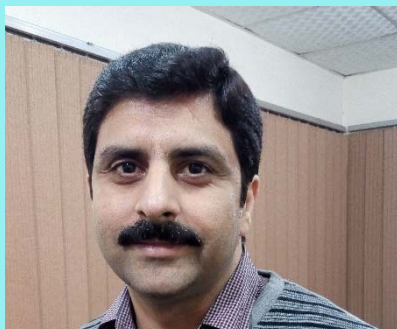
POSTGRADUATE EXAM PASS IN 2014



Hafiz Sajid ur Rehman
(M.S Cardiac Surgery)



Tasneem Ashraf
(M.S Cardiac Surgery)



M. Sajid
(M.D Cardiology)



Rana Mehdi Hassan
(Dip Card)

ON GOING POST GRADUATE PROGRAM

FCPS Cardiac Surgery	01
FCPS Cardiology	06
M.S Cardiac Surgery	07
M.D Cardiology	04
Diploma in Cardiology	14

VISIT OF SECRETARY HEALTH

Visit of Secretary, Dr. Ijaz Munir,
Govt. of the Punjab, Health Department



CATH. CONFERENCE



SOCIAL MEDICAL DEPARTMENT



ECHOCARDIOGRAPHY MACHINE DONATED BY HEART SAVER FOUNDATION



UNSUNG HEROS OF FIC



DRIVERS



ELECTRICAL DEPARTMENT



ADMIN STAFF



SECURITY STAFF



DEPARTMENT OF RADIOLOGY & PATHOLOGY



DEPARTMENT OF PHARMACY



DEPARTMENT OF STORE AND SERVICES

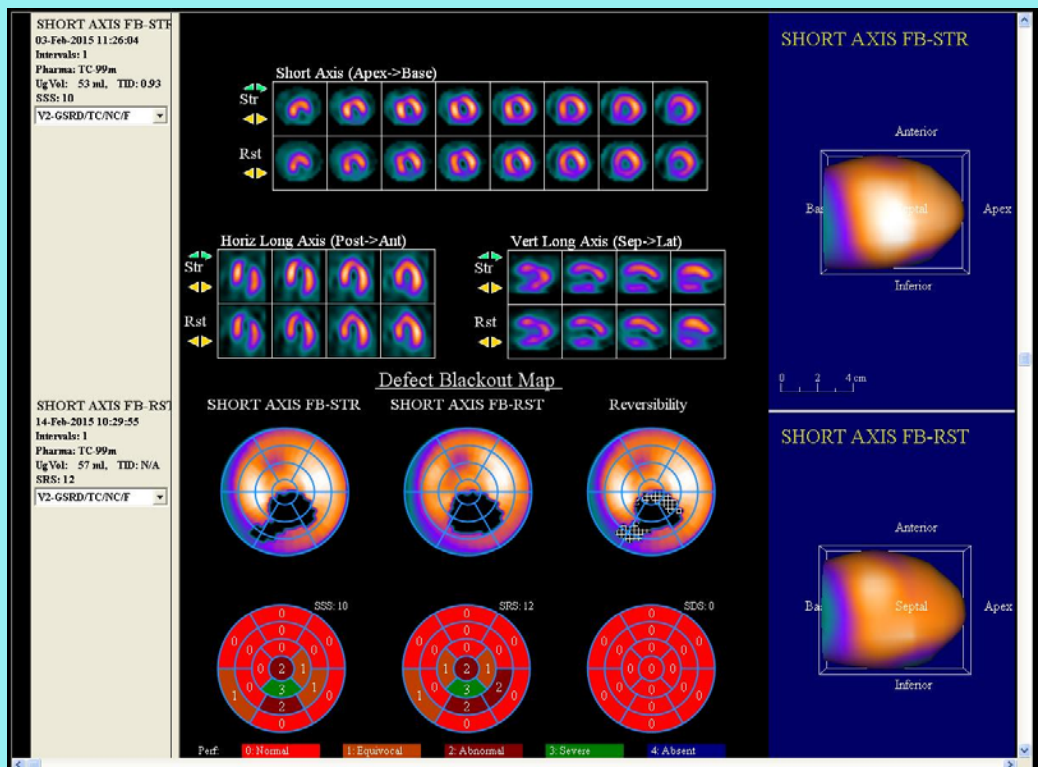




CSSD DEPARTMENT



NUCLEAR CARDIOLOGY DEPARTMENT



Thallium Scan

CARDIOLOGY DEPARTMENT



CARDIAC SURGERY DEPARTMENT



ADMINISTRATION



BSC CARDIAC PERFUSION



CARDIAC PERFUSION



ANESTHESIA STAFF



OPERATION THEATRE



OPERATION THEATRE STAFF



INTENSIVE CARE UNIT (ICU)



ICU ECHOCARDIOGRAPHY





MEHFIL-E-MILAD



CHRISTMAS

LIGHTING AT FIC ON 12TH RABI-UL-AWAL



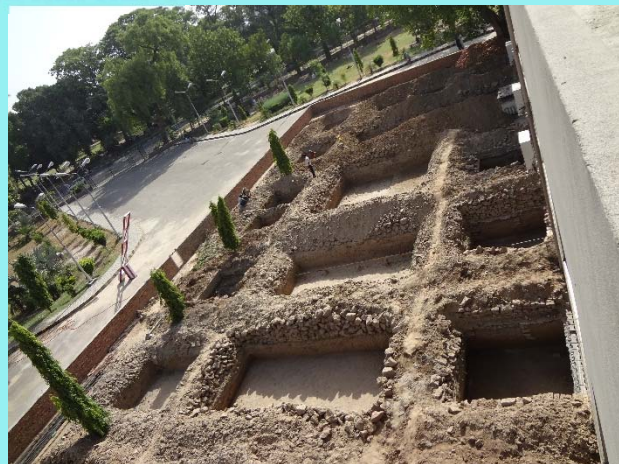
PROJECTS

PROJECT COMPLETED DURING 2014



AL-HAMEED MOSQUE FIC

ON GOING PROJECT



EXPANSION OF EMERGENCY DEPARTMENT

ON GOING PROJECTS

- Expansion of Emergency Department 18 beds to 60 Beds
- Construction of Hostels and Staff Residences (Phase-1)

UP COMING PROJECTS

DEVELOPMENT

- Maintenance & Repair of Main Hospital Building & Doctors & Nursing Hostels
- Construction of Hostels and Staff Residences (Phase-2)
- Provision of CT Angio Machine
- Provision of New Angiography Machine
- Establishment of Paediatrics Cardiology Department.
- Establishment of Preventive Cardiology Department.

ACADEMICS

- Research facilities in field of Cardiology and Cardiac Surgery.
- Train the post graduates in all cardiac specialties.
- Training facilities for nurses and paramedics.
- Nurses training workshops at Faisalabad Institute of Cardiology, Faisalabad.
- B.Sc. Laboratory Technology Course.

MOU SIGNED BETWEEN FIC AND GCU

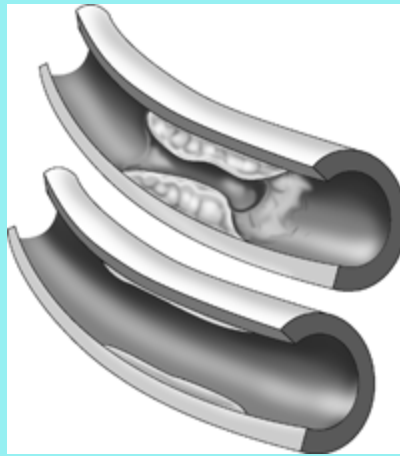


CORONARY ANGIOGRAPHY AND ANGIOPLASTY

GENERAL PUBLIC INFORMATION

Dr. Rehan Riaz (Senior Registrar)

Atherosclerotic heart disease (coronary artery disease) is the narrowing or blockage of the coronary (heart) arteries. Coronary arteries are shaped like hollow tubes through which blood can flow freely. Normally, the walls of the coronary arteries are smooth and elastic. Atherosclerosis occurs when the normal lining of the arteries deteriorates, the walls of the arteries thicken and deposits of fat and plaque build-up on the coronary artery walls, blocking or limiting the flow of oxygen-rich blood to the heart muscle.



Without adequate blood, the heart becomes starved of oxygen and the vital nutrients it needs to work properly. This can cause chest pain called angina. When one or more of the coronary arteries are completely blocked, a heart attack (injury to the heart muscle) may occur.

Coronary angiography (Cardiac catheterization) is a test to find out which arteries supplying the heart have become narrowed. An angiogram uses X-rays to show 'route maps' of blood vessels and arteries in the heart. Angiograms also give detailed information about heart function as well as blood pressure, and oxygen levels in the blood as it passes through the heart.

Coronary angiography is used to:

Evaluate or confirm the presence of coronary artery disease, valve disease or disease of the aorta.

Evaluate heart muscle function.

Determine the need for further treatment (such as an interventional procedure or coronary artery bypass graft, or CABG, surgery)

Coronary angiography is performed by a specially-trained cardiovascular invasive physician and a cardiovascular team of cardiology fellows, nurses and technicians.

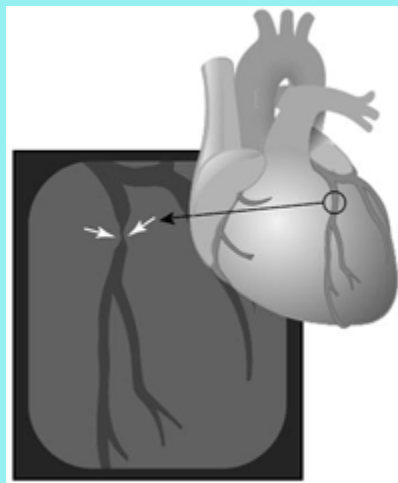
The procedure itself generally takes 30 minutes, but the preparation and recovery time add several hours.

Access into the femoral artery in the leg (or, less commonly, into the radial artery in arm) is created by a device called an "introducer needle". This procedure is often termed percutaneous access.

Once access into the artery is gained, a "sheath introducer" is placed in the opening to keep the artery open and control bleeding.

Through this sheath, a long, flexible, soft plastic tube called a "guiding catheter" is pushed. The tip of the guiding catheter is placed at the mouth of the coronary artery. The guiding catheter also allows for radio-opaque dyes (usually iodine-based) to be injected into the coronary artery, so that the disease state and location can be readily assessed using real time X-ray visualization.

The digital photographs of the contrast material are used to identify the site of the narrowing or blockage in the coronary artery.



Angioplasty is a procedure to expand narrow arteries that may follow on from an angiogram. It is a non-surgical treatment used to open narrowed coronary arteries to improve blood flow to the heart. The procedure starts out the same way as a cardiac catheterization. The angioplasty procedure usually consists of most of the following steps and is performed by a team made up of physicians, physician assistants, nurse practitioners, nurses, radiographers, and cardiac invasive specialists; all of whom have extensive and specialized training in these types of procedures.

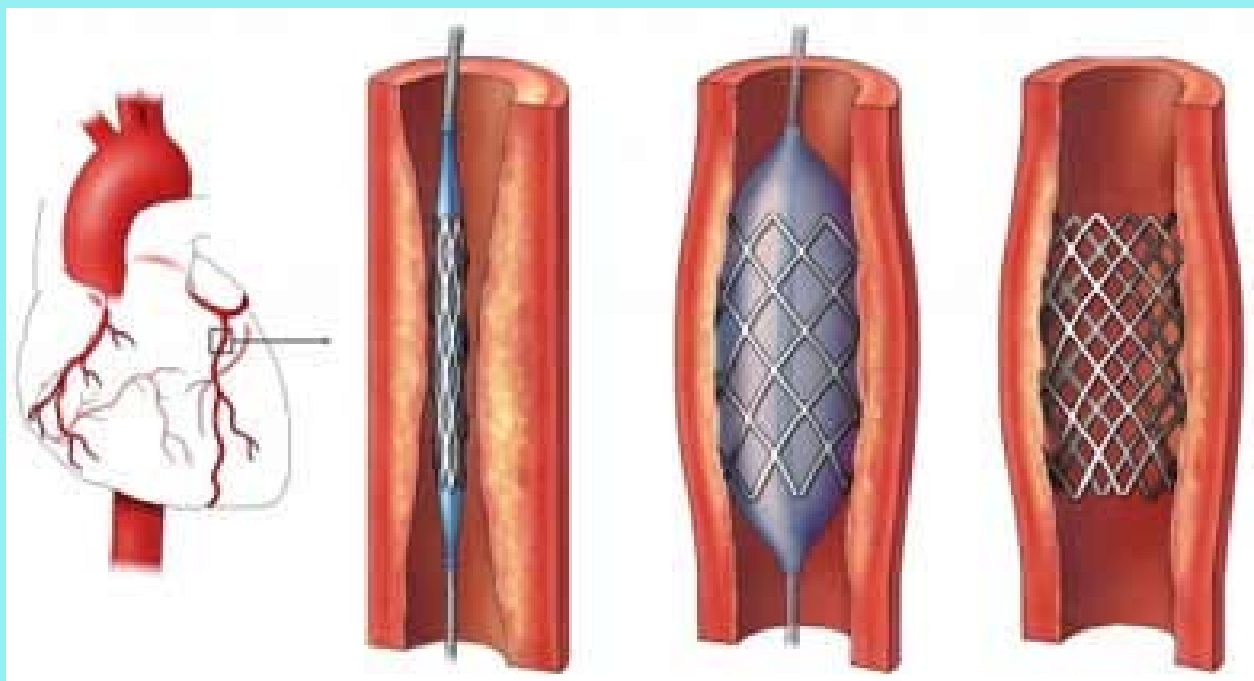
During the X-ray visualization, the cardiologist estimates the size of the coronary artery and selects the type of balloon catheter and coronary guidewire that will be used during the case. Heparin (a "blood thinner" or medicine used to prevent the formation of clots) is given to maintain blood flow.

The coronary guidewire, which is an extremely thin wire with a radio-opaque flexible tip, is inserted through the guiding catheter and into the coronary artery. While visualizing again by real-time X-ray imaging, the cardiologist guides the wire through the coronary artery to the site of the stenosis or blockage. The tip of the wire is then passed across the blockage. The cardiologist controls the movement and direction of the guidewire by gently manipulating the end that sits outside the patient through twisting of the guidewire.

While the guidewire is in place, it now acts as the pathway to the stenosis. The tip of the angioplasty or balloon catheter is hollow and is then inserted at the back of the guidewire—thus the guidewire is now inside of the angioplasty catheter. The angioplasty catheter is gently pushed forward, until the deflated balloon is inside of the blockage.

The balloon is then inflated, and it compresses the atheromatous plaque and stretches the artery wall to expand.

If an expandable wire mesh tube (stent) was on the balloon, then the stent will be implanted (left behind) to support the new stretched open position of the artery from the inside.



Angioplasty with stenting is most commonly recommended for patients who have a blockage in one or two coronary arteries. If there are blockages in more than two coronary arteries, coronary artery bypass graft surgery may be recommended.

Two broad categories of stents are bare metal stents(BMS) and Drug-eluting stents (DES): The difference between them is that the drug-eluting stents contain a medication that is actively released at the stent implantation site. Drug-eluting stents have a thin surface of medication to reduce the risk of restenosis.

After the procedure plastic sheath is removed from the puncture site and firm pressure is applied to stop bleeding.

Some of the possible risks of angiography and angioplasty include:

Allergic reaction to the medication or contrast material used during the procedure

Irregular heart rhythm

Infection

Bleeding at the catheter insertion site

Continued chest pain or angina

Mild to moderate skin reactions (like sun-burn) from X-ray exposure

Kidney Failure

Heart attack, blood clots, stroke or death

Acute closure of coronary artery

Emergency coronary artery bypass graft (CABG) surgery

For most people, interventional procedures increase blood flow to the heart, diminish chest pain and decrease the risk of a heart attack.

Although an interventional procedure opens up blocked arteries, it does not CURE coronary artery disease. You will still need to reduce your risk factors and make certain lifestyle changes to prevent future disease development or progression.

To achieve the best results, you must be committed to leading a heart-healthy lifestyle. Your health care team can help you achieve your goals, but it is up to you to take your medications as prescribed, make dietary changes, quit smoking, exercise regularly, keep your follow-up appointments and be an active member of the treatment team.

Diet Plan

(CABG Patient)

رخشندہ ناز ڈائیٹیشن

وقت	غذا	مقدار
ناشتہ	جو کا دلیہ / کسڑ / سو جی کی کھیر / سا گودانہ	ایک پلیٹ
07:00 To 08:00 AM	اُبلّا ہوا انڈہ (زردی کے بغیر)	ایک عدد
	سادہ روٹی سالن کے ساتھ	ایک عدد
	دودھ کا ایک کپ بغیر ملائی کے	ایک گلاس
ناشتے کے بعد	ملک شیک / تازہ پھلوں کا جوس	ایک گلاس
10:00 To 11:00 AM	ہلکی دودھ پتی	ایک کپ
دوپہر کا کھانا	چکن کا شوربہ	چھوٹی ایک پلیٹ
01:00 To 02:00 PM	سلاد / سبزی کا سالن (نمک مرچ کم ہو)	ایک پلیٹ
	کالے پنے کا شوربہ	ایک پلیٹ
	دہی / رائتہ	ایک کپ
شام	بادام / اخروٹ	چار سے پانچ عدد
04:00 To 05:00 PM	سیب	ایک
رات	دال کا سالن یا سوپ	ایک کپ
07:00 To 08:00 PM	چکن سٹیم یا مچھلی (کم گھی والی ہو)	ایک پیس
	کھجور / دال چاول	ایک پلیٹ
سونے سے پہلے	دودھ بغیر ملائی کے	ایک گلاس
10:00 To 11:00 PM		

ضروری ہدایات

- 1- بازار کی تلی ہوئی اشیاء سے پرہیز کریں۔
- 2- گھی کی بجائے آئل کا استعمال کریں خاص طور پر زیتون کا تیل استعمال کریں۔
- 3- پانی اُبال کر استعمال کریں۔
- 4- بیکری کی اشیاء سے پرہیز کریں۔
- 5- ڈبے والے جوس کی بجائے تازہ جوس استعمال کریں۔

Diet Plan

(Low Fat Low Sugar)

وقت	غذا	مقدار
ناشتہ	گندم، جو کا دلیہ / ساگودانہ	ایک پلیٹ
07:00 To 08:00 AM	دودھ میں بنی ہوئی سویاں (بغیر چینی کے)	ایک پلیٹ
	انڈوں کی سفیدی	دو عدد
	سبز چائے کا قہوہ / ہلکی دودھ پتی / دودھ کا ایک	ایک کپ
	کپ بغیر ملائی کے	
ناشتے کے بعد	سیب	ایک عدد
10:00 To 11:00 AM	لیموں کا پانی (بغیر چینی کے)	ایک گلاس
	بھنے ہوئے یا ابلے ہوئے کالے چنے	ایک چھوٹی پلیٹ
دوپہر کا کھانا	تازہ سلاد / (مولی گاजर کھیرہ)	ایک چھوٹی پلیٹ
01:00 To 02:00 PM	کالے چنے کا شورپہ / ابلے ہوا لوبہ	ایک کپ
	اُبلے ہوئی یا کم آنچ پر پکی ہوئی سبزیاں	ایک چھوٹی پلیٹ
	سادہ روٹی	ایک عدد
	مچھلی / چکن / مٹن کا سالن بغیر چربی کے	ایک چھوٹی پلیٹ
	دہی / راستہ	ایک کپ
شام	سبز چائے کا قہوہ	ایک کپ
04:00 To 05:00 PM	چکن کباب	ایک عدد

رات	چکن، مٹن، مچھلی سٹیم یا سالن	ایک چھوٹی پلیٹ
07:00 To 08:00 PM	بغیر چھلکوں کے دالیں	ایک پلیٹ
	کچھڑی / دال چاول	ایک پلیٹ
سوئے سے پہلے	دودھ کا ایک گلاس اسپنول ڈال کر (بغیر بلائی	ایک گلاس
10:00 To 11:00 PM	(کے	

ضروری ہدایات

- 1- روزانہ 8 سے 10 گلاس پانی پیئیں۔ کھانے سے 15 منٹ پہلے یا کھانے کے ایک گھنٹہ بعد پانی پیئیں۔
- 2- روزانہ 20-25 منٹ سیر کریں۔
- 3- کھانے کے اوقات اور مقدار کا خاص خیال کریں۔
- 4- کھانا پکانے کے لیے سرسوں، زیتون یا کینولا کا تیل استعمال کریں۔
- 5- چینی اور میٹھی اشیاء کا استعمال نہ کریں۔

Diet Plan

(High Cholesterol Patient)

وقت	غذا	مقدار
صبح	گندم جو کا دلیہ / ساگودانہ / دودھ سویاں، مکس فروٹ سلاڈ	ایک پلیٹ
07:00 To 08:00 AM	اُبلایا ہوا انڈہ (زروری کے بغیر)	ایک عدد
	براؤن بریڈ	ایک عدد
	سیب	ایک عدد
	دہی بغیر ملائی کے	ایک کپ
صبح کے بعد	کوئی سا بھی پھل	ایک عدد
10:00 To 11:00 AM	لیموں پانی	ایک گلاس
	بادام	چار سے پانچ عدد
دوپہر کا کھانا	سادہ روٹی سبزیوں کے سالن کے ساتھ مچھلی یا مرغی کا سالن لہسن، دھنیہ، پودنیہ کی چٹنی	ایک عدد ایک چھوٹی پلیٹ ایک چھوٹا کپ
01:00 To 02:00 PM	دہی / راستہ	ایک کپ
شام	سبز چائے کا قبوہ	ایک کپ
04:00 To 05:00 PM	ترش پھل (چکوتڑہ، انگور، مالٹا، مسمی، انار)	ایک عدد

رات	مچھلی، مرغی، ٹیم سالن یا قیمہ	ایک چھوٹی پلیٹ
07:00 To 08:00 PM	دال چاول یا کس دالیں	ایک پلیٹ
	براؤن چاول سبزی کے ساتھ	ایک پلیٹ
سوئے سے پہلے	دودھ کا ایک کپ بغیر ملائی کے اسپنول ڈال کر ایک گلاس	
10:00 To 11:00 PM		

ضروری ہدایات

- 1- زیادہ چکنائی والی اشیاء سے پرہیز کریں۔
- 2- ڈبے کا دودھ، ڈبے کا دہی، خشک دودھ، چھوٹا بڑا گوشت یا ڈبے میں بند مچھلی، آلو کی چپس، ڈبے میں بند پھل، میدہ، سفید آٹا، بنا سیتی گھی، نمکین میوہ جات، اچار، بیکری کی اشیاء، ٹافیاں، پیسٹری بسکٹ، ڈبے کا جوس، بادام، مونگ پھلی، اخروٹ اور کاجو وغیرہ
- 3- کھانے میں نمک کم استعمال کریں۔
- 4- روزانہ 15-30 منٹ سیر کریں۔
- 5- فریش پھلوں کا استعمال زیادہ کریں
- 6- کھانے کے اوقات اور مقدار کا خاص خیال رکھیں۔

Diet Plan

(Obese Patient)

وقت	غذا	مقدار
صبح	نہار پیٹ شہد اور لیموں کا رس ملا کر پانی پیئیں	ایک گلاس
06:00 To 07:00 AM		
ناشتہ	انڈوں کی سفیدی	دو عدد
07:00 To 08:00 AM	براون بریڈ	ایک عدد
	سبز چائے کا قہوہ	ایک کپ
	سیب	ایک عدد
ناشتہ کے بعد	بھلوں کا جوس (انار، چکوتڑہ)	ایک گلاس
10:00 To 11:00 AM	سبز چائے کا قہوہ / چائے	ایک کپ
دوپہر کا کھانا	سبز یوں کا سلاد	چھوٹی پلیٹ
01:00 To 02:00 PM	آلو پننے کی چاٹ	ایک پلیٹ
	براون آٹے کی روٹی کم گھی والے سان کے ساتھ	ایک عدد
	راستہ / پودینے کی چٹنی	ایک کپ / ایک چھوٹا کپ
شام	کوئی سا بھی ترش پھل	ایک عدد
04:00 To 05:00 PM	لیموں پانی	ایک گلاس

رات	چکن سٹیم یا مچھلی (کم گھی والی ہو)	ایک پیس
07:00 To 08:00 PM	سادہ روٹی	ایک عدد
	مکس والوں کا سوپ	ایک پلیٹ
	چکن کا ایک کباب	ایک عدد
سوئے سے پہلے	اسفغول کا چھلکا دودھ میں ملا کر پیئیں	ایک کپ
10:00 To 11:00 PM		

ضروری ہدایات

- 1- بازار یا بیکری کی اشیاء کا استعمال نہ کریں۔
- 2- زیادہ چکنائی اور نمک سے پرہیز کریں۔
- 3- کھانے کے اوقات اور مقدار کا خاص خیال رکھیں۔
- 4- روزانہ 20-25 منٹ سیر کریں۔
- 5- اپنی غذا میں تازہ پھل، پتوں والی سبزیاں، ریشے والی غذائیں زیادہ استعمال کریں۔
- 5- گوشت میں مرغی اور مچھلی کے گوشت کو زیادہ ترجیح دیں۔

Dr. Zia Ullah, Ex- Medical Superintendent Post out from
Faisalabad Institute of Cardiology, Faisalabad.
We wish him success in his new assignment



OBITUARY

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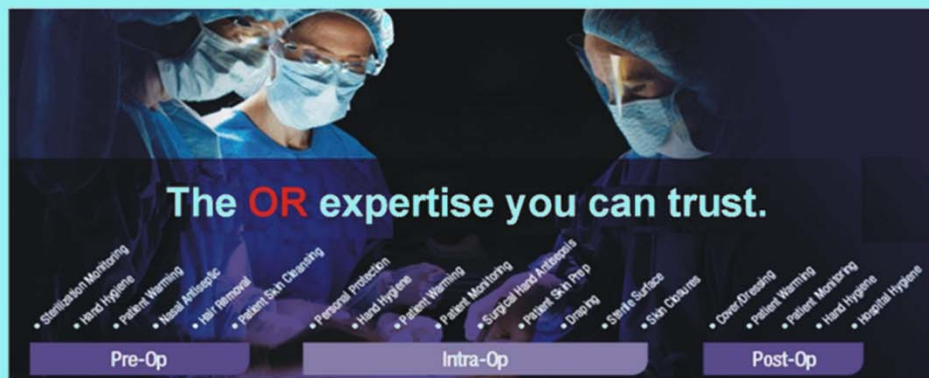
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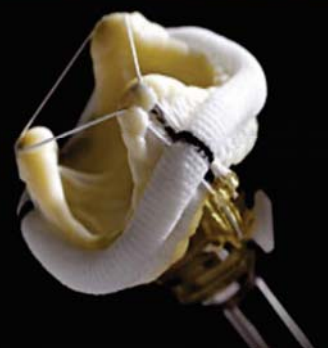
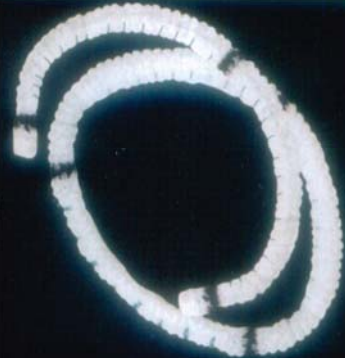


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