

## BOLLYWOOD BUZZ

## 'Juhi Chawla is a sweet person'

Ever since she came back from the US, Madhuri Dixit is having her kitty full with offers for films, TV shows and endorsements. Sreya Basu chats up with the actress in Mumbai on life, films and more

You will be seen in a woman-oriented film - Gulaab Gang - after a long time. Tell us something more about the film.

Well I don't know if I am allowed to speak on the film right now. But all I can say is Gulaab Gang is a very relevant film ... the unpleasant incidents that take place in small towns and the challenges that women and the society at large face every day, it's a comment on that.

How was it working with Juhi Chawla?

Juhi is a very, very sweet person. We had a great time shooting together.

Speaking of challenges faced by women, do you think Bollywood is no exception when it comes to giving women their due?

See, it happens many a times that when you enter this industry, people try to discourage you. There are people who will say, "You can't be a heroine" ... and this and that. So you have to fight all that. It's only when you believe in yourself that you rise from that depressing situation and take it up as a challenge and prove people that they were wrong.

So do you think, in a way adversities make women stronger?

Definitely. It's only when adversities come to your life that you get to know your strengths. Till that point you keep satisfied with yourself, your family and whatever you are doing. Also it's very important to maintain a sense of balance in life.

Who is your inspiration in life?

My mother (Snehlata Dixit) is my inspiration. After marriage, she came from a village to live in the city and there were a lot of differences in her surroundings. She is a vegetarian, while my dad (Shankar Dixit) used to love non-veg. She even adapted to that change so much so that she even started cooking non-veg food. She didn't give up her studies ... even after having four kids (Ajit, Bharati, Rupa and Madhuri), she did her MA in Hindustani classical music. I am just awe-struck when I see how she handles everything so perfectly.

What is the secret of your beauty?

It's dance. For me, dancing is healthy as well as spiritual. I dance nearly every day ... it's a great exercise and a great way to get rid of all tension. It calms you down and takes you to a different world ... it's a nice stress buster.

Is dancing for films easier than performing on stage?

A dance in film looks easy because we make it look effortless. But it doesn't mean we don't have to work for it; days of hard work and practice go into its making. We



have to get the moves right, then the expressions right and then the entire combination must fall in place to make it look appealing to the audience.

You are also doing Dedh Ishqiya with Naseeruddin Shah.

Yes. I am really honoured to get a chance to work with Naseerji. When good actors come together, the synergy is always wonderful. (TWF)

## DEFENCE

## Fifty years of MiG-21 in Indian Air Force

G V Joshi

On a day in the month of April in 1963, a thunderous cracking noise in the sky above the newly founded city of Chandigarh, broke the morning calm and baffled the citizens.

However, the technicians and officers of the Indian Air Force (IAF), based at Chandigarh, knew exactly what had happened.

After a long flight, the MiG-21 flown by Wing Commander Dilbagh Singh from Tashkent, in the then Soviet Union, (USSR) to Chandigarh IAF base had announced its arrival by breaking the sound barrier and creating a supersonic boom. It was this cracking noise that surprised Chandigarh citizens.

Its smooth touch down on the runway of Chandigarh airbase ushered the IAF into the supersonic age. To start with six MiG-21 jet fighters were imported from the U.S.S.R. These aircraft were first shipped to Bombay (now Mumbai) by ship in January 1963 after which they were assembled and flown to Chandigarh by the pilots. They formed the core of the squadron named "The first supersonic".

With a view to induct supersonic aircraft in the IAF with India had tried to buy the U.S. made supersonic F-104 Starfighter followed by French make Mirage-II. But both deals did not see the light of the day, due to a number of reasons, some political, some financial.

In the meanwhile the U.S.S.R. offered to sell its MiG-21 to India. In those days it was a first class jet fighter from the point of view of technology.

Further, its price was affordable and the Russia was also agreeable to transfer technology for manufacturing MiG-21 in India.

The deal for the MiG-21s was signed in August 1962 and two months later, seven Indian pilots, along with fifteen engineers went to Russia in October 1962.

The pilots were handpicked and besides Wing Commander Dilbagh Singh, consisted of well known names like Sqn. Ldr. M.S.D. Wollen, Sqn. Ldr. Mukherjee etc. among others. And all were specially qualified.

However, it took Hindustan Aeronautics Limited (HAL), Bengaluru Karnataka ten years for to commence production in full swing. During these ten-years HAL manufactured 160 MiG-21 jet fighters only.

Ever since the induction of the first MiG-21 in April, 1963, nearly 800 jet fighters of this variant have been inducted in the combat fleet of the IAF from time to time. Large proportions of these have been either phased out or have crashed. As of today, IAF has a complement of a hundred and fifty two MiG-21 jet fighters only which it proposes to keep in harness till 2017.

The Mikoyan-Gurevich MiG-21 is a supersonic jet fighter aircraft, designed by the Mikoyan-Gurevich Design Bureau in the Soviet Union. It was popularly nicknamed "Balalaika", from the aircraft's



resemblance to the Russian stringed musical instrument or equivalent of 'pencil' by Polish language by Polish pilots due to the shape of its fuselage.

The first flight of the MiG-21, made by Mikoyan-Gurevich OKB, was in 1955 and induction into the Soviet Union air force began in 1959. Russia retired its MiG-21s in the 1990s.

The MiG-21, despite its lack of sophisticated avionics, was agile and extremely uncomplicated to manufacture. This made it a valuable military export for the Soviet Union to many countries, more than 30 and in particular India and China.

Some 50 countries over four continents have flown the MiG-21, and it still serves many nations a half-century after its first flight.

It is the most-produced supersonic jet aircraft in aviation history and the most-produced combat aircraft since the Korean War, and it had the longest production run of a combat aircraft.

MiG-21 had played a stellar role during the Indo-Pak War of 1971. One MiG-21 demonstrated its powerful punch near the Kutch border by shooting down one Pakistani supersonic F-104 Starfighter in an aerial dogfight. Three more Pakistani F-104 Starfighters bit the dust before MiG-21 jet fighters in the next few days.

Intrepid pilots of MiG-21 jet fighters rushed to Dhaka by flying through the cordons of Pakistani anti-aircraft gunfire and destroyed the runway of Tejgaon airbase with intense and accurate bombing.

As the runway was rendered unusable, no Sabre jet stationed at that airbase took-off throughout that two-week war.

Nevertheless, as many as 380 MiG-21 jet fighters have crashed due to engine trouble or some other problem since 1972 killing many pilots who were deprived of just a few seconds to bail out of the stricken plane well in time. The number is going up. The last crash took place on June 7, 2013. Hence MiG-21 has also earned sobering notoriety as 'flying coffin' or 'widow maker'.

But veteran fighter pilots, call it the

"faithful, if highly-demanding, wife" that helped them to be truthful to their credo, "Fight to fly, fly to fight, fight to win", over the years. Some veterans say the MiG-21 was the "best" fighter of its time, serving in almost 40 air forces around the globe.

It is agreed by one and all of the veteran fighter pilots that the MiG-21 is tricky to handle, highly unforgiving. But to brand it as a "flying coffin" or a "widow-maker" is unfair.

According to another pilot who has flown 6316 sorties with the MiG-21, there isn't anything wrong with the aircraft. In the words of a 70-year-old pilot, who retired from the IAF in 1996, "The MiG-21 is a very demanding aircraft."

According to a third senior pilot, who has clocked 4,003 hours of flying in the much maligned aircraft, it is time to set the record straight. In his words, "Don't blame the machine. Blame the elements that the pilot has to deal with."

MiG-21, the single-engine fighter was not going to fade away anytime soon. The IAF had plans to operate over 100 upgraded MiG-21 "Bisons" at least till 2017.

India inducted upwards of 1,200 MiGs, two-thirds of them being MiG-21s, over the decades.

The MiGs constituted over 75% of its total combat fleet. Although IAF began with MiG-21s, but went on to progressively induct MiG-23s, MiG-25s, MiG-27s and in the 1980s, air defence MiG-29s. Though French and British fighters also joined the force later, the MiG saga still continues.

Today, MiG-21s make up a few squadrons of the IAF. Even now, MiG-21 is a cost-effective option.

An upgraded MiG-21 Bison costs just about Rs 40 crore. But unfortunately, its achievements have been overshadowed by negative publicity Commercial pilots, former MiG pilots and families of pilots like Flight Lt Abhijit Gadgil who have died in MiG-21 crashes have been pressing the government for years to scrap the aircraft.

According to Defense Minister A.K. Antony, IAF will begin phasing out its dreaded MiG-21 fighter jets in 2014.

## BEAUTY TIPS

## Muggy day makeover

Looking fresh and cool in the humid monsoon season needs some special care. **Sharmila Chand** talks to beauty experts to find out what works in this muggy season

Monsoon is here, and in time or ahead this year meteorologists say. It is, however, a tricky time for the skin due to high humidity in the air. Often the skin looks dull; more so if the skin is oily. This is due to sweat and oil secretions which get deposited in the skin which also attracts dirt and pollutants from the atmosphere easily. Irritating conditions like rash, spots and pimples are common during the monsoons, a nightmare indeed for those who care.

So how does one combat the situation?

Experts say, follow simple home-based treatments regularly to replenish the skin glow, and keep the skin healthy.

A combination of deep pore cleansing, toning, moisturising and exfoliating is an ideal ritual to practice.



"Deep pore cleansing is very essential," says Shahnaz Husain, well known beauty expert. "It is needed to keep the pores of the skin free of clogged oil and dirt."

She suggests simple home based recipes for all types of skin. Facial scrubs should be used twice a week. "Apply it on the face and rub gently on the skin, using a circular motion. Then, rinse off with plenty of plain water," she advises.

For oily skin, Husain suggests rice flour mixed with a little rose water while for normal to dry skin, ground almonds can be mixed with milk or yogurt.

For extremely dry and sensitive skin, one should avoid scrubs, she says. Washing the face several times a day with plain water is enough. Aromatherapist Blossom Kochhar advises not to use harsh soaps, and 'over-wash', during monsoons. Instead a gentle cleanser to clean the face in the morning and at night is advisable followed by toning with alcohol-free skin freshener. A moisturiser which is lotion based should wrap up the routine.

Kochhar also suggests a simple oatmeal and tomato juice pack to shrink large pores and slough off dead skin instead. Her magic formula: "To a tablespoon of tomato juice, mix enough oatmeal to make a thin paste. Add one drop of essential oil of pepper int. Apply to a dampened skin, avoiding the eye and mouth areas. Leave on for 10

minutes, then wipe off with damp cotton or a sponge and rinse with cool water."

**Toning helps**

Husain says one must use a tonic too. A flower based skin tonic or freshener is a boon in humid weather. "Rose water can be mixed with witch hazel to make a refreshing skin tonic. For oily skin, mix them in equal quantities. For dry skin, mix one part witch hazel with three parts rose water. Keep the mixture in a bottle in the fridge. Wipe the face with it, using cotton wool pads. It not only refreshes the skin, but also helps to tighten the pores and prevent spots and pimples."

Kochhar on the other hand goes by a paste of one beaten egg white mixed with one tablespoon yogurt and multani mitti (Fuller's Earth) which should be applied on the face till it dries and then rinsed off with clear water.

"Use this toning mask at least twice a week," she advises.

**Problem skins**

When the skin erupts with rash, pimples or acne, the face should be washed with a medicated soap or cleanser twice a day, says Husain and then applied with rose skin tonic. "Avoid harsh astringent lotions, or mix it with rose water and keep in a tightly closed bottle in the fridge. Add a little rose water to sandalwood paste and apply on the eruptions," she suggests. Oily products, like heavy nourishing creams, should not be used when the weather is humid. If the skin is dry, a light, liquid moisturiser may serve the purpose during the mon-

soons. A 'monsoon face mask' Husain concocts can be prepared at home with ingredients available easily at home. Here's how: "Mix 3 teaspoons oatmeal with egg white and one teaspoon each of honey and curd. If egg white is to be avoided, add rose water or orange juice. Apply it on the face and wash it off after half an hour. Use it twice a week. Dry and powdered lemon and orange peels can also be added to face packs."

An exfoliating scrub for oily skin can be made at home too as Kochhar shares. "Mix together multani mitti Chana Ka atta (gram Flour) and sandalwood powder in equal quantities. Store in an air tight container. Use a teaspoon of this scrub mixed to a paste with water." This rids the skin of flakes and dirt and should be used twice a week.

Food for skin During the monsoon, the body loses fluids through sweat. So one should drink more fluids to keep the system flushed. Plenty of water, nimbu paani (fresh lemon juice) and fresh fruit juices are recommended. Instead of heavy starchy meals, salads, fruits, sprouts and yoghurt should figure in the daily diet. One can also substitute the hot cup of tea with iced tea, lemon juice and a dash of honey.

Above all, keeping up a cheery mood in the hot, humid weather can add to the fresh look. (TWF)

## HEALTHLINES

## Hole in the Heart

DR ARVIND KOHLI

Heart is one of the most important organs of our cardiovascular and circulatory system and if there is even a minute problem in its structure of functioning it indeed is a grave thing. Heart attacks, blockages are a common thing. But a heart murmur of having a hole in the heart is certainly very serious and which cannot be prevented as it is a natural defect in almost all the cases. Many young infants are born with such type of problems. But due to clinical advancements, now such problems can be fixed and new lease of life is given to the patient.

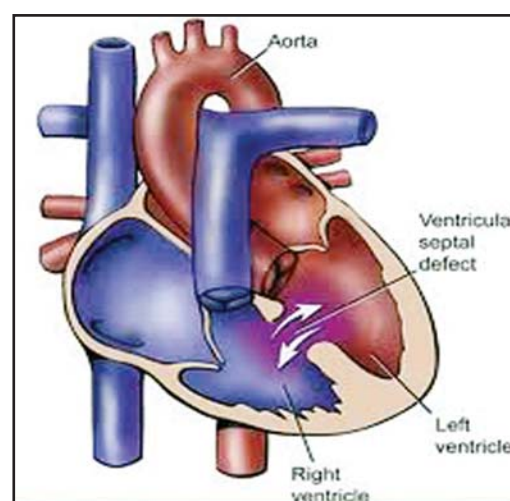
**What is a hole in heart?**

It is a very simple type of congenital heart defect. Hole in the heart is a problem related to the structure of the heart and is present right from the birth. Due to this defect in the heart, the normal blood flow is changed. The heart comprises of two sides which are separated by septum-an inner wall. With every beat of the heart, its right side gets oxygen deficient blood from the body and directs it through pumping towards the lungs. Similarly, the heart's left side gets oxygen rich blood via lungs and then pumps into the body from where it is reached to various cells units of different organs. The key role here is of the septum which divides the two sides and stops the blood from two sides mixing with each other. But sometimes babies are born with a small hole in the lower or upper part of the septum. When the hole is present in the upper two chambers (atria) of the septum it is known as atrial septal defect or ASD. When the hole is in the septum in between the lower two chambers of the heart (ventricles), the defect is termed as ventricular septal defect (VSD).

**What Causes Holes in the Heart?** Mothers of children who are born with atrial septal defects (ASDs), ventricular septal defects (VSDs), or other heart defects may think they did something wrong during their pregnancies. However, most of the time, doctors don't know why congenital heart defects occur. Heredity may play a role in some heart defects. For example, a parent who has a congenital heart defect is slightly more likely than other people to have a child who has the problem. Very rarely, more than one child in a family is born with a heart defect. Children who have genetic disorders, such as Down syndrome, often have congenital heart defects. Half of all babies who have Down syndrome have congenital heart defects. Smoking during pregnancy also has been linked to several congenital heart defects, including septal defects. Scientists continue to search for the causes of congenital heart defects.

**Signs and Symptoms** **Atrial Septal Defect:** Many babies who are born with atrial septal defects (ASDs) have no signs or symptoms. However, as they grow, these children may be small for their age. When signs and symptoms do occur, a heart murmur is the most common. Often, a heart murmur is the only sign of an ASD. However, a child presents with features of Fatigue (tiredness) Tiring easily during physical activity Shortness of breath Growth stunting

**Ventricular Septal Defect:**



Babies born with ventricular septal defects (VSDs) usually have heart murmurs. Murmurs may be the first and only sign of a VSD. Heart murmurs often are present right after birth in many infants. However, the murmurs may not be heard until the babies are 6 to 8 weeks old. Most newborns who have small VSDs don't have heart-related symptoms. However, babies who have medium or large VSDs can develop heart failure. Signs and symptoms of heart failure usually occur during the baby's first two months of life. The signs and symptoms of heart failure due to VSD are similar to those listed above for ASD, but they occur in infancy. A major sign of heart failure in infancy is poor feeding and growth. VSD signs and symptoms are rare after infancy. This is because the defects either decrease in size, close on their own or they're repaired.

**Diagnosing Hole in Heart** If your child is discovered to have a heart murmur, in addition to doing a physical exam, the cardiologist take your child's medical history. If an ASD, VSD is suspected, one or more of these tests shall be diagnostic

\*Chest X-ray and electrocardiogram (EKG)

\*An echocardiogram (echo), which uses sound waves to produce a picture of the heart and to visualize blood flow through the heart chambers. This is often the primary tool used to diagnose a VSD.

\*Cardiac catheterization, which provides information about the heart structures as well as blood pressure and blood oxygen levels within the heart chambers. This test is usually performed for VSD only when additional information is needed that other tests can't provide.

**What is the treatment for ASD and VSD?**

**Treating an Atrial Septal Defect**

If a child has an atrial septal defect (ASD), routine checkups are done to see whether it closes on its own. About half of all ASDs close on their own over time, and about 20 percent close within the first year of life. If an ASD requires treatment, catheter or surgical procedures are used to close the hole. Doctors often decide to close ASDs in children who still have medium-or large-sized holes by the time they're 2 to 5 years old.

**Surgery:** Open-heart surgery generally is done to repair secundum primum or sinus venosus

ASDs. Then, the cardiac surgeon makes an incision (cut) in the chest to reach the ASD. Procedure involves repairing the defect with a special patch that covers the hole. A heart-lung bypass machine is used during the surgery so the surgeon can open the heart. The machine takes over the heart's pumping action and moves blood away from the heart. The outlook for children who have ASD surgery is excellent. On average, children spend 3 to 4 days in the hospital before going home. Complications, such as bleeding and infection, are very rare.

**Catheter Procedure** A catheter (a thin, flexible tube) is inserted into a vein in the groin (upper thigh) and threaded the tube to the heart's septum. A device made up of two small disks or an umbrella-like device is attached to the catheter. When the catheter reaches the septum, the device is pushed out of the catheter. The device is placed so that it plugs the hole between the atria. It's secured in place and the catheter is withdrawn from the body. Within 6 months, normal tissue grows in and over the device.

The closure device does not need to be replaced as the child grows.

**Treating a Ventricular Septal Defect**

More than half of VSDs eventually close, usually by the time children are in preschool. Checkups may range from once a month to once every 1 or 2 years. If treatment for a VSD is required, options include extra nutrition and surgery to close the VSD. We can use catheter procedures to close some VSDs. We may use this approach if surgery isn't possible. More research is needed to find out the risks and benefits of using catheter procedures to treat VSDs.

**Surgery**

Most doctors recommend surgery to close large VSDs that are causing symptoms, affecting the aortic valve, or haven't closed by the time children are 1 and a half year old. Surgery may be needed earlier if:

\* A child doesn't gain weight \* Failure to thrive

Intractable congestive heart failure Medicines are needed to control the symptoms of heart failure

Rarely, medium-sized VSDs that are causing enlarged heart chambers are treated with surgery after infancy. However, most VSDs that require surgery are repaired after first year of life. Doctors use open-heart surgery and dacron patches to close VSDs

**Living With Holes in the Heart**

The outlook for children who have atrial septal defects (ASDs) or ventricular septal defects (VSDs) is excellent. Advances in treatment allow most children who have these heart defects to live normal, active lives with no decrease in lifespan.

Many children who have these defects need no special care or only occasional checkups with a cardiologist (a heart specialist) as they go through life.