

PINK CONNECTION

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“I wanted to inspire people, God made it happen through my personal life”

29-year-old
cancer survivor
Dharini Arvind

Gadwal

The wondrous weave
of Telangana

Dr Rustom Soonawala

The legendary gynaecologist

BEHIND The Scenes

As children, we were often asked by our teachers what we wanted to be when we grew up. I suspect, it was done in an effort to make our lives meaningful. Of course, not knowing anything better, we gave all kinds of answers ranging from wanting to become a leader of the country to improve the conditions of the poor to some girls confessing with a slice of vanity they wanted to be models! Some wanted to be teachers and pilots but when I think back, I remember an overwhelming number wanting to become doctors to ease the suffering of the sick and the ailing.

I have also travelled to small towns where today children say they want to become IT professionals instead of the all-time favourites – policemen or teachers. But here too, there are young boys and girls whose parents can barely afford to send them to high school, who will say they want to go to the city and study medicine. And, return to their village to treat the sick.

It is often said cynically, I may add, that people choose the medical profession because of the huge potential to make money. To that my argument has always been – there are easier ways of making money than slogging for over a decade before becoming a junior fellow at a hospital, and work extremely hard for another decade before you establish yourself as a doctor of some repute. By this time, you are easily in your early 40s and the spouse is fretting over the first car you had promised her during the courtship!

Just like the children in small towns, I too feel there is nothing nobler than bringing relief to the suffering. And, because they are treating the sick, it does not mean they must not charge their patients. I realise the profession itself is under the scanner for many unethical practices today but this is probably due to the heavy investments gone into setting up large hospitals and expensive equipment.

But, at the core of the matter, doctors are the good men and women, who bring relief when you have that awful toothache or a knee pain. God bless them!

Incidentally, what did I say I'd like to be when I grew up? It was a writer, just like a Jane Austen!

Ratna Rao Shekar



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'I am a fighter, not a victim'

At 24 years, a newly-married **Dharini Arvind**, was diagnosed with breast cancer. For the last five years, this young woman fought this disease, not even taking a day off from her demanding job. Her courage and chutzpah have helped her deal with the entire experience as much as her determination to not let the disease overpower her. **Minal Khona** talks to this young cancer survivor

Photographs: **Lakshmi Prabhala**

I was not expecting someone who looked so young, when I meet Dharini Arvind at a coffee shop. At 29, she looks younger and when she talks about her battle with breast cancer, her positive attitude and confidence shines through loud and clear.

Dharini, who has an MBA in hospital management, works as an operations manager at KIMS hospital in the cancer unit. Providential, you might say, because she was all of 24 years, and married for only a year when she did a routine check of her breasts and found a prominent lump in her lymph nodes. Her job at the hospital had given her that extra edge of awareness. She did the usual ultrasound checks and the radiologist was unhappy with the outcome.

Recalling the sequence of events that played out in just one fateful day, she narrates, "The radiologist Shrikala, told me she was not happy with the mammogram and told me to get a core biopsy done. Sure enough, the results showed an abnormality and the hospital MD, Dr Bhaskar Rao told me to meet Dr Raghuram. My husband Arvind joined me and so did my mother-in-law. I was only 24 and yes, I was crying at the thought I might have breast cancer. More than anything else, I was worried how it would affect my family life – I had only been married for a year and my primary concern was how it would make life harder for my husband and in-laws."

Dharini met Dr Raghuram and he explained everything to her. "We hoped it would be benign but the tumour turned out to be malignant and everyone was shocked. My parents live in Kolkata and I called my dad and told him about it. He flew down to meet me. It took him two days to break the news to my mother because he needed time to compose himself and come to terms with it. His father had died of leukaemia so he blamed himself. My mother was naturally upset and tearful when she got to know."

While there were concerns about the side effects and the long term consequences like possible infertility, and despite the doctors' reassurance that she would live a normal life,

Dharini was clear about a few things. Her mother-in-law wanted her to freeze her eggs so that if there was a problem later, she would have an option of having a child. "I didn't want any scientific intervention in what is a natural process. I was not in favour of freezing my eggs and if I couldn't have kids of my own, I would consider adoption. My husband supported my decision, and my mother-in-law came around too."

After meeting Dr Raghuram who reassured Dharini that she would be fine, matters moved ahead. Dharini recalls, "We came to know about my diagnosis on November 30, 2010. By December 13, I had my surgery. Dr Raghuram explained everything and told me that I would have to sacrifice one year of my life. He warned me that I might not get my periods because of the chemotherapy. I met his wife Dr Vyjayanti, who is an infertility expert. Luckily, my periods never stopped. In June this year, it will be five years since I completed my chemo sessions and I will be able to start planning a family."

Looking forward with hope seems to be in Dharini's DNA. Whether it was dealing with the surgery, the chemotherapy or the radiation sessions, her attitude remained upbeat. She says, "Though I was understandably shocked that I had breast cancer, I did believe that what was happening to me was for a reason and that there was a lesson God wanted me to learn. Some good would come out of it though I did not know what it would be. I don't believe in conducting pujas for a particular outcome."

Not one to look for pity or sympathy either, Dharini was open about her breast cancer. "I am a fighter, not a victim. I didn't want anyone's pity so though I told my close friends and family about it, I did what was needed. The medical oncologist told me about the side effects of chemotherapy and rather than lose my hair, I shaved off the hair on my head and wore a wig," she says.

Her husband was extremely supportive through it all, she says, even pressing her legs when they hurt after treatment. He reassured her



Dharini Arvind continued to lead a normal life even after she was diagnosed with breast cancer

about her looks when she was bald and the one visible scar on her breast is of no consequence to him. Her father flew down for every alternate session of chemotherapy though her mother could not bear to see her daughter in this condition.

She was so determined to live a normal life. So, Dharini worked part-time from the second week after every chemo session and full-time the following two weeks. She only rested completely during the first week after chemotherapy because the nausea and weakness was at its peak at that time. "I didn't change my diet, I just ensured I ate healthy food and I avoided eating out. In fact, I would go for my radiation therapy sessions after putting in 12 hours at work. I dressed well when I went to work even though I was unwell, as I am a dress freak," she reminisces.

Today, Dharini is still under medication and has been taking the drug Tomaxifin for the last five years. She is eager to start a family, something she can plan for after June. In her characteristic upbeat manner she says, "I love children and want to have some of my own. When I see other people my age with kids, I sometimes feel bad that they will have their second or third child, when I will have my first but it is not a big thing. And, even if for some reason

I can't have them or if I fail to conceive, I will consider adoption."

Illness and setbacks change people irreversibly. For most it is a lifestyle shift while for others it is a move towards a more spiritual existence cherishing every moment of being alive. How did the experience of overcoming breast cancer change Dharini?

"In fact, I would go for my radiation therapy sessions after putting in 12 hours at work. I dressed well when I went to work even though I was unwell, as I am a dress freak," she reminisces

She replies candidly, "I am more confident and independent today. I am not easily shaken by a crisis and while I value what my husband did for me, I think what he did for me was his duty. I am more grateful for all that I have today, including the people in my life. Recently, I spoke at the Pinkathon event held in Hyderabad and I could feel how much more confidence I had gained. In fact, I even ran as part of the same event after practising every

morning at 4.30 am. My husband also joined me and we trained with a trainer named Babita. I felt such a sense of accomplishment when I could run one or two kms at a stretch."

Incidentally, something that Dharini had wished for inadvertently came true for her through her illness. She says, "Every time, during job interviews and appraisals, when I was asked where I wished to be five years from now; or what my long term professional goal was – I would always say, I want people to look up to me. I wanted to be a role model and inspire others. Though, I wanted to do it through my work, God made it happen through my personal life. Today, when I interact with patients who are going through routine surgeries, I tell them not to be scared. I give them my example and say I have survived cancer so they should not worry about a bypass surgery or an angioplasty."

Dharini also tells women she meets at work to inspect every little change their bodies go through and not neglect their health.

With age on her side and a never-say-die attitude towards everything life throws at her, Dharini is a role model – not just for beating a life-threatening disease, but also for having the courage to face setbacks head on and emerge with flying colours. ■

Though I was understandably shocked that I had breast cancer, I did believe that what was happening to me was for a reason and that there was a lesson God wanted me to learn. Some good would come out of it though I did not know what it would be

Fertility issues during breast cancer

A few young women who have not conceived are diagnosed with breast cancer. What is their future of having children?

Doctors S Vyjayanthi, Head of Department and Consultant, Infertility and Reproductive Medicine, KIMS Fertility Centre, Krishna Institute of Medical Sciences (KIMS) and breast cancer surgeon, **Dr P Raghuram** lay out some broad guidelines

In India, about 87 per cent of the population is under the age of 50. Hence, far more breast cancers in India are being diagnosed in the 20s, 30s and the 40s, as compared to the West, where most breast cancers are diagnosed in people above 50 years.

Fertility issues when dealing with cancer are not addressed adequately in India. It is important for people to know that the cancer specialist team must involve a fertility specialist when dealing with a young woman with breast cancer much before commencing treatment.



Dr P Raghuram

Sandhya (name changed), a 32-year-old woman married for a couple of years has been diagnosed with breast cancer. She asks:

Will breast cancer treatment affect my fertility in the future?

While surgery alone does not have an impact on fertility, chemotherapy does affect fertility to a significant extent as it can hasten the age of menopause. Studies have shown that women who resume their periods after a chemotherapy course may be less fertile. The impact of chemotherapy on the ovaries depends on the age of the patient receiving chemotherapy and the kind of chemotherapy drugs used. Some chemotherapy drugs can cause more damage than others. Hence, it is important for the patient, who has been newly diagnosed with breast cancer, and her spouse to discuss fertility issues with the specialist team. Early referral to a fertility specialist is paramount especially for young women before they embark on breast cancer related treatment.

Can a patient take a contraceptive pill after being diagnosed with breast cancer?

The contraceptive pill is not advised for any woman after she is diagnosed with breast cancer. There is a possibility the hormones in the contraceptive pill will activate the remaining breast cancer cells. Non-hormonal methods of contraception, such as condoms or a diaphragm are better options. Generally, a woman could still get pregnant unless she has not had a period for at least a year (over 40 years) or two years (less than 40 years) after completing the treatment. However, it is important to remember that this does vary for each individual.

Are there options available for fertility preservation before undergoing breast cancer treatment?

Freezing of oocyte/egg (oocyte cryopreservation) or embryo (embryo cryopreservation) or ovarian tissue cryopreservation are the different options available, though none of them are perfect.

For the married breast cancer patients with a partner, embryo cryopreservation is the best option. The treatment involves going through the IVF (In Vitro Fertilisation - test tube baby



Dr S Vyjayanthi

This procedure could be scheduled after breast cancer surgery during convalescence and before commencing chemotherapy.

Fertilized embryos can be frozen and stored for nearly 10 years before being implanted in the womb. This procedure gives couples the opportunity to have their own biological child in the event of the lady developing premature menopause after chemotherapy.

Oocyte (egg) cryopreservation can be offered to unmarried women, although the chances of success when the frozen eggs are thawed to make embryos are less, compared to embryo cryopreservation.

Freezing ovarian tissue is an option although it is still at a research stage. Moreover, few pregnancies have been reported worldwide using this technique.

How does one know after completing breast cancer treatment whether the ovaries are working or not?

Firstly, to know about ovarian function it is important to assess whether the periods have started again. Blood tests such as Follicle Stimulating Hormone (FSH) may be done. One may have to wait three to six months after chemotherapy before blood levels can be tested. The results will indicate whether one has entered menopause. An ultrasound scan of the ovaries may also be helpful.

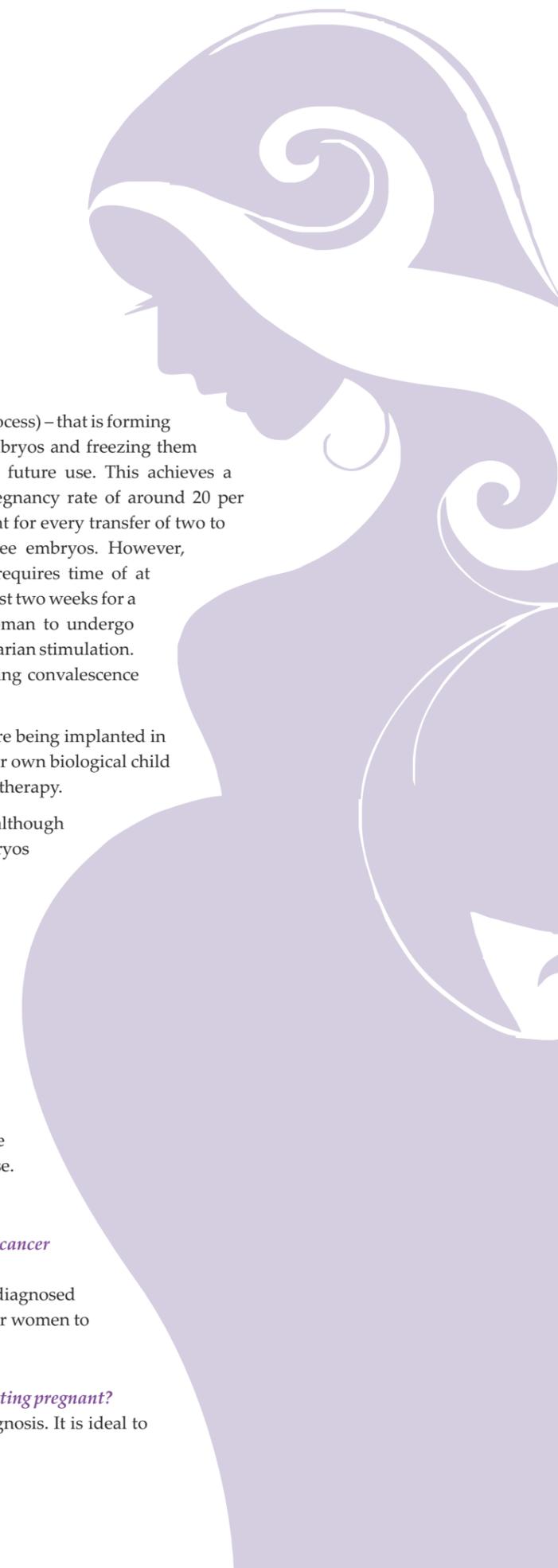
How safe is a pregnancy after a patient has undergone breast cancer treatment?

A number of studies, evaluating the safety of pregnancy after being diagnosed with breast cancer, have shown reassuring results. It is indeed safe for women to get pregnant after completing breast cancer treatment.

How long should one wait after a treatment of breast cancer before getting pregnant?

The risk of recurrence is highest during the first two years after diagnosis. It is ideal to wait at least two to three years. ■

process) – that is forming embryos and freezing them for future use. This achieves a pregnancy rate of around 20 per cent for every transfer of two to three embryos. However, it requires time of at least two weeks for a woman to undergo ovarian stimulation.



Dr Rustom Soonawala

A legacy and a legend

Medicine is in the DNA of the Soonawala family. Three generations of the family are qualified doctors with **Dr Rustom Soonawala** perhaps being the best known among them. A gynaecologist and obstetrician, he has brought the likes of Bollywood filmstars Karishma and Kareena Kapoor into the world and then delivered Karishma's children too. Today, in his mid-eighties, he continues to practise and clocks in hours at the clinic that would put a younger doctor to shame. **Minal Khona** chats about his life and times and the connection between cancer and infertility

Photographs: **Ayesha Broacha**

Dr Rustom Soonawala is the quintessential Parsi gentleman – soft-spoken, charming and graceful – with an enviable head full of hair with barely any grey in it. He works long hours at his clinic with a team of younger doctors. His sons, nephews, nieces, etc. are also doctors and their number totals up to strength of a cricket team – 11. Besides having a successful practice, he has created a legacy by designing a low-cost IUD for women; has penned several papers on sterilisation and assisted fertility and has been awarded the prestigious Padma Shri in 1991. He is also one of the few voices from the Parsi community who speak up about its dwindling numbers and disagrees with the pro-life lobbies vociferously.

In today's times, when two generations of a family go to the same gynaecologist to bring their children into the world, it does speak highly of the doctor's reputation. Besides the fact that he elicits such trust and loyalty, his skills and experience obviously mean a great deal. From the Birlas to the Ambanis, Ruias, Mallyas and the Kapoors... he has worked with a cross-section of society throughout his career.

Dr Soonawala has been practising as a gynaecologist since 1956. He is the

third son of Dr Phiroze Framjee Soonawala, a physician who used to practise at Masina Hospital in Bombay's central suburb of Byculla. Since he lived in a joint family and his father, uncle and cousins were doctors, dinner-time conversations were always about medicine, surgical procedures and X-ray reports. "That created an interest in me for medicine from the age of five. But, I was not as bright a student as my brother," he points out.

The options in the 50s were to become a physician, surgeon, gynaecologist or dental surgeon. If you were unable to get into these streams, then the last choice was to become a veterinary doctor. Dr Soonawala chose gynaecology and worked at the Wadia Maternity Hospital where he got practical experience in handling deliveries. He would handle thousand deliveries a month as it was a referral centre for all complicated cases from all of Greater Bombay.

To further his career prospects, Dr Soonawala decided to go to the UK for his FRCS degree and he spent four years studying for it. With talent and education under his belt, Dr Soonawala then returned to Bombay to set up practice. Marriage and children happened along with the FRCS degree and the return to India.

It was difficult balancing a family and establishing a practice, as he worked long hours.

"I did not come from an affluent background but we were given the best of education," says Dr Soonawala. "I had taken a loan to buy my clinic and my income would be zero if I was not present." He spent as much time as he could with his wife Piloo and his four children, taking short holidays together within India, whenever he could. His first month-long holiday to the USA with his family was when his oldest daughter was 20!

Today, while both his sons are doctors, his two daughters steadfastly have stayed away from careers in medicine. He attributes this to his own demanding lifestyle and long working hours. Luckily, he had an understanding and supportive family who never complained about it. One of his daughters, Jenai, is married to Dr Burjor Banaji, a leading ophthalmic surgeon, who has pioneered the Lasik technique in India and abroad.

Dr Soonawala's career has followed a varied path. He would travel to several countries to participate in seminars on issues like family planning, planned parenthood, maternal mortality, abortion, voluntary sterilisation and other such issues.



Dr Rustom Soonawala enjoying a rare moment of relaxation at his home in Mumbai

A woman who gets pregnant because she is raped – why would she want to keep that baby? Outsiders who have forceful views don't know what goes on in a woman's mind when she makes a decision to have an abortion. We only have the right to respect her decision and help her

As a representative of the Family Planning Association of India, he would organise and lead teams to train medical and paramedical personnel in India and South Asia and other developing countries. He also conducted male and female sterilisation camps across the country. It was at these camps that he developed a method of executing the sterilisation process through the vagina instead of the abdomen. He modified the technique and trained doctors in the camps.

Internationally too, he has also been involved in training doctors to perform vasectomy and female sterilisation, and for Tubal Reconstructive Surgery following sterilisation. He has been instrumental in establishing a low-cost medical centre outside Jaipur in 2000, called the Mahatma Gandhi University of Medical Sciences and Technology, Jaipur. This institute has a free hospital, a medical college of 150 seats and a postgraduate college of 50 seats,

as well as nursing and dental colleges. Today, the institute has university status, and Dr Soonawala is the Chancellor.

He is also one of seven to be awarded the Von Grafenberg Medal for original work in the Intra Uterine Contraception field by the University of Kiel, West Germany. His practice grew along with his honorary work. Over the years, Dr Soonawala has worked as Senior Consultant at Jaslok Hospital and Research Centre and Saifee Hospital. He is Head of Department at Breach Candy Hospital and Research Centre, Masina Hospital and BD Petit Parsee General Hospital, and Chairman and Head of Department, Max Healthcare Hospital, Delhi. He says there are heavy discounts given to teachers, priests of all communities and the underprivileged. "Sometimes, they cannot afford to pay even that so we treat them for free," he says.

One of his major achievements is the improved design of the Intra Uterine



Dr Soonawala sheds some light on the incidence of cancer in women, its causes, myths and prevention:

- The incidence of cancer in women is estimated to be one in 250 – 300 women and the most common are breast, cervical and uterine cancers; the worst being ovarian as it is detected late and spreads rapidly.
- Some strains of the Human Papilloma Virus [HPV] are known to lead to cancer and some forms of cancer are genetic in nature – like the BRACA genes that are responsible for breast cancer.
- There can be several reasons why cells turn cancerous – poor local hygiene, multiple pregnancies and multiple sex partners. Women who have never given birth to a child or in medical terms – nulliparous women – are more prone to breast and ovarian cancer.
- There is no connection between a hysterectomy and cancer.
- Prolonged use of HRT has reduced the risk of ovarian cancer but increased the risk of breast and uterine cancer.
- Hyperstimulation drugs used in IVF to produce more eggs are prone to lead to ovarian cancer.
- Cancer can be prevented by regular self-examination and routine blood and imaging modalities.



Dr Rustom Soonawala (r) shares a joke with his son Dr Feroze Soonawala

Contraceptive Device (IUD). Known as the Soonawala IUD, he created it as early as 1963. He says, “The way the IUD used to be inserted at the hospitals after 40 days of having a baby was not very healthy or hygienic. It used to bother me. Once, at a dinner my friend Chandrakant Garware asked me what was bothering me because I was a little preoccupied. I told him about this loop which could cause problems. Since he was dealing in plastic, he said I could come by and make something of my own which would work better. I made one but I was too busy to have it patented.” The USP of the IUD designed by Dr Soonawala was that it required no touching and no gloves. It was ideal for a country like India because it was a simple, low-cost device and a non-medical person trained in its usage could plant it.

Dr Soonawala is never too busy to speak up on issues he feels strongly about. He is vocal about what irritates him most. “I can’t stand the hypocrisy of these pro-life lobbies,” he says. “The ones who think they can decide whether a woman should or should

not have a baby. Each case is individual and the right to decide rests with the woman. I would promote termination of pregnancy in the first trimester, rather than allow a pregnancy to go ahead when the baby born has got no future due to poverty and scarcity of food.”

He adds, “A woman who gets pregnant because she is raped – why would she want to keep that baby? Outsiders who have forceful views don’t know what goes on in a woman’s mind when she makes a decision to have an abortion. We only have the right to respect her decision and help her.”

In these days of specialised medicine and the field of gynaecology also making several advances, what is his view about IVF, fertility treatments and surrogacy? He is all for it, he says: “The urge to procreate, the desire to have a child, is one of the strongest urges nature has given us. When people can’t have children due to various reasons, if science can step in and help, why not. Even with surrogacy, as long as there is mutual

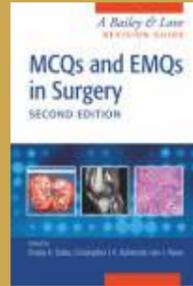
consent on all sides, it is alright. Think of the joy it brings to the family wanting that baby. But, at the same time, the situation should not be exploited financially as it is happening now.”

He also emphasises the need for the Parsi community to have more children. “We are a dwindling community and the younger generation must do what it can to save it,” he says. Dr Soonawala was the gynaecologist when his own children were born and was in charge when his daughters were in labour too. I ask him if the fact that he was the patient’s father came in the way. He replies, “When I am in the theatre, I do not think this is my child. I cannot get emotional – if I do, then if there is a complication, my judgement is affected. I retained my professional attitude at all times.”

No wonder then that Dr Soonawala, after half a century of practising medicine is as much in demand today as he was back then. Doctors like him are only born and they come along once in a few generations. ■

UBF Diary

A Guiding Light



Dr Raghuram has contributed a chapter on breast diseases in the second edition of *MCQs and EMQs in Surgery: A Bailey & Love Revision Guide* published this February. The book is widely considered the reference "bible" world-wide for doctors and surgical trainees preparing for under-graduate and post-graduate surgical exams. Pertinently, the publishers have chosen to print the histology slide relating to the breast chapter on the book's cover!

One More Milestone...

Dr Raghuram crossed one more milestone when he was listed on wikipedia in February 2015. Here is the link:
http://en.wikipedia.org/wiki/Raghu_Ram_Pillarisetti



Walking the Ramp for a Cause

Dr Raghuram was the guest of honour at a fashion show organised by the Rotary Club of Hyderabad Deccan on March 1. The programme was aimed at raising funds to improve amenities in their adopted village. He released a souvenir, and walked the ramp along with the little children!



A Promise to take Breast Cancer Screening India-wide

In an effort to take the UBF's population based breast cancer screening programme being implemented in Telangana and Andhra Pradesh across the country, Dr Raghuram met BP Sharma, Union Health Secretary, Government of India at his Nirman Bhavan Office in Delhi on April 8, and presented a synopsis of the programme. Impressed with this innovative initiative, the health secretary has promised to examine the prospect of implementing the screening programme in other states across India

Empowering Women to Fly High



Dr Raghuram addressed nearly 600 women at the Hindustan Aeronautics Limited (HAL) on breast cancer and the importance of screening for early detection

Gynaecologists and Breast Health



Dr Raghuram recently addressed a gathering on different aspects of breast health at the Indian Menopause Society Meeting, Hyderabad in April

Padma Shri for Dr Raghuram



Dr P Raghuram was conferred one of the highest civilian awards of the country, the Padma Shri by the President of India, Pranab Mukherjee at the Rashtrapati Bhavan on March 30, 2015, making him the youngest surgeon ever in the history of Telangana and AP and one of the youngest doctors in the country to receive the honour.

A Visishta Ugadi Puraskar Awardee (State Award, Government of undivided Andhra Pradesh, 2010), Dr P Raghuram has been conferred the Padma Shri for his vision and his substantial body of work in improving breast healthcare in the country, and also for his unstinting contribution in promoting the highest standards of surgical education in India, through his association with the Royal College of Surgeons of Edinburgh and the Royal College of Surgeons of England.

The Gadwals

A Timeless Appeal

A quaint town in the Mahboobnagar district of Telangana is known for the Gadwal weaves, one of the finest handloom techniques anywhere in the country.

These saris were patronised by the Bhupal Rajas who ruled over this town once. The Gadwal weavers were dispatched to Benares, to learn from the weavers there about their unique weaving techniques. And, when they returned their work was so stunning, that the rajahs gifted the Gadwals to the Nizams of Hyderabad.

The handloom industry is in the doldrums but the beautiful Gadwal saris continue to be popular sustaining large communities of weavers

Text and Photos: **Lakshmi Prabhala**

Most of the Gadwal weavers live in and around the Raghavendra colony situated in the outskirts of the town. Two jacquard looms occupies most of the living room space inside the home of one of the weavers, Ramakrishna, a resident of the colony. Strikingly, a set of punched cards are tied up in a sequence hanging over the loom.

“This set of cards is instrumental in creating the intricate brocade designs found on the borders of the Gadwal saris”, explains Ramakrishna, showing us his creations. He unfolds the pink *pallu* of a green silk Gadwal sari decorated with a floral design flanked by the ornate motifs of two peacocks. “The designs on the fabrics are rarely created by us since they are made to order,” reveals Ramakrishna, when we compliment him on the beauty of the designs.

In the past, the Gadwal weavers were patronised by the royal families that ruled the town. They took great pride in creating exquisite saris by choosing the colours, design and patterns that became characteristic of these fabulous handlooms. Unfortunately, today the hands of the weavers are tied and their craft has been reduced to mechanical work.

Ramakrishna offers to take us to visit his brother-in-law Venkatesh, also called Jacquard Venkatesh because of his expertise with the jacquard loom. Venkatesh shows us his recent work - a set of plain sico (which is a mix of silk and cotton) stoles coloured in maroon and bordered with zari. Clearly, these stoles also seem to have been ordered by the master weavers who boast a strong nexus with many retail units and business houses.

“We would certainly love to create saris and fabrics with our own designs but the cost of the silk yarn is too high. If they are not sold, it will be a dead investment for us. We cannot afford to take such a risk,” he says.

These weavers, who have either pursued a family calling or have taken this profession by choice, are forced to work with the master weavers on a contractual basis. The master weavers

provide them the raw materials, designs and financial assistance but sell the final product at a price five times higher than the weaver’s wages.

The weavers set up looms in their homes with most activities in the household revolving around the weaving. The family members also pitch in. A sari requires nearly 4-8 days (depending on the design complexity) of continuous effort by two weavers and then both are paid a total sum of Rs.1,500. It is indeed difficult to run a household of six members with a meagre Rs. 8,000 a month, which is what they earn. It is unfortunate the weavers end up with a raw deal despite the popularity and demand for Gadwal saris.

The Gadwal sari is unique for its design and fabric. An aesthetic blend of cotton and silk; the entire body is woven in cotton while the borders and the *pallu* (the end-piece or the falling edge of the sari) come heavily brocaded in silk and zari



The Gadwal sari is unique for its design and fabric. An aesthetic blend of cotton and silk; the entire body is woven in cotton while the borders and the *pallu* (the end-piece or the falling edge of the sari) come heavily brocaded in silk and zari. The sari body colour is usually in a neutral or earthy tone like white, off-white, grey, beige or a lighter hue, while the border and *pallu* are in contrasting rich vibrant colours. These three are woven together using the interlocked weft technique. The sari borders and *pallu* are beautifully adorned with cultural motifs from south India, often influenced by figures and decorative patterns seen in temples surrounding Gadwal.

Besides temple borders, motifs of peacocks, mangoes, elephants, flowers and yaali, the stylised lion are

commonly used on the *pallu* and borders. The silk for the borders and *pallu* is usually sourced from Bangalore, while the gold threads for the zari come from Surat. In recent times, a trend of using sico – a mix of cotton and silk – is preferred for its softness and lustre.

The story of the Gadwal sari acquiring fame starts at the beginning of the 20th century, when the then rulers of Gadwals, the Bhupal Rajas were ambitious and wanted Gadwal to be known for its unique and valuable fabric, just like the popular and sought-after Benares saris. Skilled weavers from Gadwal were sent to Benares to acquire the skill and art of weaving silk. They faced difficulties initially but because of their knowledge of Urdu and Persian, they befriended the Benares weavers and returned armed with the art of their unique weaving techniques.

Maharani Adilakshmi Devi of Gadwal, who was familiar with textiles herself, also made innovations to the designs and the fabrics, making the Gadwal sari what it is today. Showing the weavers Venkatagiri saris, she recommended that they create saris in similar patterns. While the brocading abilities of the weavers in Gadwal originate from Benares, the designs do not reveal any Benares influences. Instead, they are south Indian in their composition and aesthetics.

It was the Rani who suggested weavers introduce silk yarn in the warp, 100 counts cotton yarn for the weft and the zari in the *pallu* and the border. It is rumoured the zari or gold thread was imported from France. Due to the steep prices of the sari, the silk Gadwals were made for royalty, while commoners made do with cottons.

A key feature that identifies a Gadwal sari is the *kuttu* (joint) at the border. Every Gadwal sari, regardless of the body will always have a silk border. It is fascinating that a 5.5 yard Gadwal sari can be folded to the size of a little matchbox. Every year, on the first day of the Brahmotsavam at Tirupathi, Lord Venkateswara is decorated with Gadwal drapes specially designed for



The breathtaking Gadwal sari is painstakingly woven on the looms set up in the homes of the weavers like Venkatesh at Raghavendra colony, Telangana

the occasion. This tradition was started when Nala Somanadri ruled Gadwal, and the king's family as a tradition would send a sari for the goddess before the Navaratri festival.

As with any handloom, the beauty of the Gadwal sari is achieved after an enormous amount of hard work. Every thread in the sari is handwoven. The yarns are dipped in specific colours at high temperatures to ensure uniformity in the dyeing. The colours are applied as per the design or on orders from customers. After colouring, the silk yarn is dried in the shade. After drying, the yarns are rolled over small sticks and loaded on the loom for weaving. The weaving process involves the intertwining of two sets of yarns – the warp and weft at right angles. The warp threads are held firmly with the help of a loom and move up and down. The weft yarns are wound into spools called bobbins, which are placed in a shuttle and move to and fro during the weaving process.

The design required for the brocade is initially drawn in a computer and punched into a series of cards with the help of a machine. These cards are loaded on the jacquard loom in a specific sequence. The jacquard loom is a mechanical device which simplifies the process of weaving intricate designs in brocade. The loom is controlled by cards with punched holes – each row corresponds with one row of the design. Multiple rows of holes are punched on each card which is strung together in a specific order.

Every hole in the card corresponds to a hook (which can be situated either above or below) which raises or lowers a harness that carries the warp thread. And, hence the weft will either lie above or below the warp. This sequence of raised and lowered threads creates the pattern of the resulting brocade design. The setting up of a jacquard loom is time-consuming and involves concentrated effort hence the looms are usually threaded only once. Subsequent warps

are then tied to the end of an existing warp for another sari with the similar colours and design to be woven.

In addition to the low wages prevailing in the handloom industry, the weavers also face threat from the powerlooms. The saris made on these machines using low quality silk are sold at the same price as an original Gadwal sari. Customers, who are not aware of the hallmark of a true Gadwal sari (the joint at the border), unsuspectingly end up buying the duplicates at high prices.

The weavers thrived under royal patronage during the 1930s, when the Gadwal saris were most popular. Sadly, the recent trends are not encouraging, and a continuous effort is required to improve the conditions of the weavers who are in the mercenary grip of the master weavers. With support from the government, NGOs and designers, the Gadwal weavers should hopefully regain their past glory. ■