

## Reforming Medical Education

Reforming medical education is crucial to meet the evolving healthcare needs of society, enhance patient outcomes, and empower future healthcare professionals with the skills and knowledge necessary for modern healthcare delivery. Here's a comprehensive look at key areas where reform is needed:

Medical education must evolve to reflect advancements in medical science, technology, and patient care.

Emphasizing early clinical exposure alongside foundational sciences to bridge theory and practice. Collaborative education with other healthcare disciplines to foster teamwork and holistic patient care. Training on digital tools, telehealth platforms, and electronic health records to prepare students for modern healthcare practices. Understanding diverse patient populations and their cultural contexts to deliver equitable and sensitive care. Comprehensive training on medical ethics, patient confidentiality, and professional conduct.

Problem-based learning, case-based discussions, and simulation exercises to apply knowledge in clinical scenarios.

Virtual reality simulations, augmented reality for anatomy teaching, and online learning platforms for flexible education delivery.

Hands-on training in procedural skills, bedside manner, and communication with patients and families.

Encouraging lifelong learning through CME (Continuing Medical Education) programs and updates on current practices. Investing in faculty is essential for delivering quality education: Faculty development programs focused on effective teaching strategies and assessment methods.

Encouraging faculty to engage in research to advance medical knowledge and practice. Providing opportunities for senior faculty to mentor junior faculty and students. Implementing robust assessment methods ensures competency and proficiency: Assessing skills, attitudes, and knowledge aligned with competency frameworks. Objective Structured Clinical Examinations (OSCEs): Standardized exams to evaluate clinical skills and decision-making abilities. Feedback Mechanisms: Continuous feedback from peers, patients, and faculty to improve learning outcomes. Ensuring adequate funding for infrastructure, technology, and faculty development. Streamlining accreditation processes and standards to promote quality and innovation.

Collaboration with healthcare providers, community organizations, and policymakers to address local healthcare needs.

Reforming medical education requires a collaborative effort from educators, healthcare providers, policymakers, and stakeholders. By modernizing the curriculum, adopting innovative teaching methods, supporting faculty development, enhancing assessment strategies, and addressing systemic challenges, medical education can better prepare future physicians and healthcare professionals to meet the complex demands of healthcare delivery in the 21st century. These reforms are essential not only to improve medical education but also to enhance patient care, promote public health, and advance the overall well-being of society.

## BOMB MAKER SENTENCED TO 5200 YEARS

■ K.V. SEETHARAMAIAH

A bomb maker has been sentenced to 5200 years in jail or 67 consecutive life terms by the Israeli military court in 2004. Abdullah Barghouti, known as Hama's 'engineer' is No.1 on Hamas prisoner swap list. He was responsible for series of attacks in public places killing over 60 Israelis and 5 Americans in early 2000s. He has been considered as one of the most notorious prisoners in Israel. He is at the top of the militant outfit's list for a prisoner swap. Hamas in a meeting in Qatar Monday maintained that any peace deal must include a serious exchange deal between hostages in Gaza and Palestinians held in Israeli jails. Complete Israel withdrawal from Gaza is another demand of Hamas. The US-backed resolution endorsing three-phase ceasefire plan has been passed by the UN. Barghouti says that he was deeply moved after his uncle and cousin were killed in the resistance movement against Israeli occupation. He is said to have travelled to Palestinian prisoners in 1999 and joined Hamas as an 'engineer'. Barghouti has claimed that he is a university graduate, well-travelled and a music lover who made his first suicide bomb with his guitar - a 'prized possession'. This was revealed by him in an interview to CBS News in 2006. He started to make bombs to avenge the killing of two Hamas leaders - Mahmoud Abu Hanoud and Ayman Halawa in a helicopter crash in July 2001. That was said to be the beginning of his revengeful action with a series of attacks and he started training Palestinian youths in making explosive devices, using hand grenades and so on. His target of attack was Israeli forces in Jerusalem. Between 2001 to 2003 he had allegedly sent bombs and is said to have killed several Americans and more Israelis than anyone else including children and pregnant women. This attracted international attention. During his trial in the Israeli military court, he is said to have confessed to killing 66 people and injuring over 500. In the absence of a death penalty in Israel, the court had ordered one life sentence per killing and another for wounding 500 people. The sentence awarded to Barghouti is said to be the longest ever. He is unrepentant. He is said to have told the CBS News that he was ready to make bombs should he get a chance to escape after his arrest in March 2003 by Israeli forces. It requires no pundit to say that no one can live for another 5200 years either from the first date of birth or from the date of sentencing. Israeli military court viewed that his sentence for 5200 years is in proportion to the crime perpetrated by him. 5200 years sentence is not the longest sentence. The longest sentence is 1,41,078 years jail sentence awarded to a Thai tycoon Chamoy Thipiyaso who deceived thousands with Ponzi scheme. The world's longest serving prisoner is Udanta Sai, brother of freedom fighter Veer Surendra Sai for 47 years in India, according to the claims made by the historians. James Alex Fields Jr. is reported to have received jail sentence for 10,000 years for killing his estranged wife Diane Kyzer, his mother-in-law Eunice Barringer and College student Rick Pyron. Charles Scott Robinson received sentence for longest number of years in the US jail with a sentence of 30,000 years on multiple counts of child sexual abuse. Shortest jail sentence is one minute. Soldier Joseph Munch was sentenced for being disorderly while drunk off duty in Seattle in August 1905 who was brought before a municipal court judge on the charge. It is said that punishment to be meted out to the convict should not be disproportionate to the quantum of crime committed. The Supreme Court of India has defined life imprisonment as "confinement for the balance of the convict's natural life". This definition from Supreme Court has come in the case of Bhagirath and Ors.vs.Delhi Administration.

A person awarded with life term will undergo minimum of 14 years in prison or a maximum of entire life in prison in India. Death penalty has not been abolished in India. It is awarded in the rarest of the rare cases.

## Embracing Differences: Raising Awareness and Support on World Vitiligo Day

■ DR PAYAL CHAUHAN & DR RIA SHARMA

Vitiligo is a disorder marked by the disappearance of skin pigment, which leads to the formation of white spots that can appear anywhere on the body. The Global Vitiligo Foundation (GVF) reports that vitiligo affects around 70 million people in the world. In India, the condition's prevalence varies from 0.25% to 4% , with regions like Gujarat and Rajasthan experiencing rates as high as 8.8%. Given the significant number of individuals affected, it is essential to inform the public about the causes, symptoms, prevention and treatment options for vitiligo.

"Everyone has differences, and vitiligo is just another difference, like freckles, big hair, or tiny ears," says 29-year-old Canadian model Winnie Harlow. Harlow, the first model with vitiligo to walk the runway at the 2018 Victoria's Secret Fashion Show, has worked with brands like Sprite and Swarovski and was named one of BBC's 100 Women in 2018. Her life story is one of overcoming adversity, and it serves as an inspiration to many. Growing up with vitiligo, Harlow endured bullying and abuse. She often recalls that it was people's negative opinions, rather than her appearance, that most damaged her self-esteem.

The legendary performer Michael Jackson also had vitiligo. Renowned for his music, dance, and groundbreaking videos, Jackson found himself at the centre of controversy as his skin lightened over time. Accusations of skin bleaching were rampant until a 1993 interview with Oprah Winfrey, where he revealed his vitiligo diagnosis, which began at around 24 years of age and progressed over a decade, affecting his entire body.

In addition to them, others who have vitiligo include Rasheed Abdul Wallace, a retired professional NBA basketball player; Gautam Singhania, an Indian textile tycoon; and Chandrababu Naidu, the Chief Minister of Andhra Pradesh, India.

If vitiligo did not hinder the achievements of these remarkable individuals, it underscores the importance of spreading awareness about this condition. By educating others about this simple change in skin colour, we can ensure that no one feels that having vitiligo will pre-

vent them from achieving their dreams.

Hence each year on June 25th, World Vitiligo Day is observed to enhance efforts in vitiligo healthcare and education and to raise awareness. This day honours the lives of individuals living with vitiligo, highlighting their challenges and triumphs. The first World Vitiligo Day was organized in 2011 by the VR Foundation (USA) and VITSAP (Nigeria). The date, June 25th, was chosen by Yan Valle, CEO of The Vitiligo Research Foundation, to honour Michael Jackson's legacy.

One common question is: when and how does one develop vitiligo? The answer is that according to the reported data, vitiligo can appear as early as birth or as late as 81 years of age. The likelihood of developing this condition increases with a positive family history along with autoimmunity in which our body's immunity destroys the pigment-producing cells called melanocytes resulting in white patches. Conditions like pernicious anemia, Graves' disease, Addison's disease, thyroid disorders, hyperparathyroidism and diabetes mellitus are associated with vitiligo. It is crucial to discuss these possibilities with your doctor to rule out any related autoimmune disorders. Another theory suggests that an imbalance between oxidants and antioxidants may lead to the destruction of melanocytes. Additionally triggering events such as stress, severe sunburn or skin trauma such as contact with a chemical can lead to the development of white patches.

At the beginning of the disease, one may notice white coloured spots that may appear anywhere on the body or mucous membrane ( including oral and genital ) and gradually increase in size and number. During active vitiligo, the patches might feel itchy. However, these spots and patches generally do not cause any discomfort.

Vitiligo can lead to the loss of colour in a person's hair; as hair contains melanin. When vitiligo affects the skin, the hair in the affected area can become white. Additionally, vitiligo can cause hair to turn prematurely grey, impacting areas such as the scalp, eyelashes, eyebrows, or beard. These symptoms should prompt a consultation with a dermatologist.

Remember not all white patches are vitiligo !

Patients should understand the importance of consulting a qualified dermatologist rather than self-diagnosing any condition. Various skin disorders can cause lightening of pigmentation, and it is best to rely on a professional to make an accurate diagnosis.

**Early diagnosis and treatment is the key !**

Most of the time people reach out to the doctor after trying all non-scientific (desi) treatment options causing the worsening of the disease which makes it difficult for the doctor to treat as the disease has already spread to the entire body.

Vitiligo always starts with a localised patch and therefore we need to visit the doctor as soon as possible to control it at the earliest stage with the application of topical creams/ointments.

Once it starts spreading actively to different sites of the body, administration of oral drugs becomes imperative. Other measures like phototherapy and surgical options can be suggested depending on your treating dermatologist. In addition to these, oral antioxidants and supplements like ginkgo biloba, vitamin D, B12, E, folic acid, zinc, L - phenylalanine, and polypodium leucotomas can be given. Although further research is required to verify their effectiveness, some evidence suggests that these supplements may be beneficial.

Hence it is always better to treat this condition early so we as doctors can teach the patients how to control its spread.

**Sun exposure and Vitiligo !!**

Skin that has lost its pigment is more prone to sunburn. Severe sunburn can exacerbate the existing vitiligo or can act as a potential risk factor for initiating it.

Hence according to the American Academy of Dermatologists, "proper application of sunscreen is extremely crucial. Apply sunscreen which provides broad-spectrum protection, is water resistant and has SPF 30 or higher at least 15-20 minutes going out in sunlight. For regular clothing, choose clothes that are heavier and darker; like denim, as light-coloured fabrics offers much less protection from UV radiation".

**Busting Vitiligo Myths**

Several myths float around about vitiligo - ranging from the nature of the disease to its treatment.

## Commercialization and Diversification of Agriculture in J&K

■ DR. BANARSI LAL

India is one of the largest food producer countries in the world. Presently India is having first rank in milk production, second in fruits and vegetables production and third in grain production in the world. The climate of India varies from temperate to tropical. India has made remarkable progress in development of agriculture in the last few decades with a significant increase in production and productivity of different crops. Total area of India is 3,287,263 square kilometers and India has snow covered mountains, oceans, deserts, fertile plains and areas with the highest rainfall in the world. All this help to grow various types of foods plants and have different types of animals. The total food grains production in 2022-23 was 329 million tonnes. Pulses production was 27.5 million tonnes; rice production was 135.52 million tonnes while wheat production was 110 million tonnes. Hilly areas are located across the nation with a larger area located in the Himalayan region which is classified into three categories comprising Western Himalayas, Central Himalayas and North-East Himalayas. The major hilly areas are located in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, North Eastern Hill region and Nilgiri hills in Tamilnadu.Union Territory Jammu and Kashmir is also comprised of hilly areas. The Himalayan ranges are about 2500 km long and covers an area approximately 2, 36,000 sq.km. In the Himalayas four factors namely latitude, longitude, altitude and aspect play a significant role in determining the range of agro-climate and add to the multiplicity of habitats. This provides appropriate ecological niche not only for plants and animals but also for different ethnic groups of human beings to prosper their natural habitats.

J&K is endowed with ample natural resources including soil, water, climatic condition, diversity, topography, rich natural flora etc. which are conducive for the cultivation of a wide range of crops.High mountains and small hills, snow peaks, rivers and rivulets, glaciers, valleys and lakes, large forest areas and terraced fields and bugyals are the integral features of hilly areas of Jammu and

Kashmir.Union Territory of Jammu and Kashmir lies in the North West of the country.About 19.95% of the total geographical area of J&K is covered under forests. Jammu and Kashmir is a mountainous territory in which about 30 per cent of the area is under cultivation. Jammu and Kashmir is located between 32.17 and 37.06 North latitude and 73.2 and 80.36 East longitude in the Himalayan region. The agro-diversity of J&K varies from sub-tropical in Jammu region and temperate in Kashmir region. The average annual rainfall of these two regions is 1069mm and 660m respectively. The average temperatures of these two regions are 24.5, and 13.3 Centigrade respectively.J&K 58 per cent area under agriculture is rainfed and remaining 42 per cent is irrigated. Maize is first rank crop in J&K occupying one-third of the total cropped area, paddy at number second in 28.58 per cent area of gross cropped area and wheat at number three which covers around 26 per cent of the total cropped area. There is need to increase the income and employment in agriculture and allied sectors for the farmers in J&K. There is possibility to increase the production and productivity of the crops and to enable the farmers to increase their income and employment by adopting the modern technologies in agriculture and establishing the infrastructure for the farm production. There is need to promote the scientific agriculture and move towards high value crops like vegetables, aromatic and medicinal plants, saffron, mushroom, beekeeping, silkworms, pulses etc. It is a matter of grave concern that the interest of younger generation in J&K is dwindling towards agriculture.

The livestock rearing activity provides subsidiary occupation to a large population living in hilly areas of J&K. Livestock play a pivotal role in agriculture development and helpful in maintaining the soil fertility. Agriculture and allied sectors contribute about 38% to J&K gross domestic product of which 11% is contributed by the livestock. The major occupation of the rural people is agriculture and livestock rearing and thus is the major source of income and employment. Dairy sector not only generates income and employment among the

farmers but also supplements the varied nutritional requirements of the individual. Livestock rearing is an integral part of rural J&K. Milk production in Jammu and Kashmir is steadily increasing.One of the major bottlenecks in low production in dairy sector is Jammu and Kashmir's diversified climate e.g. temperate climate in Kashmir region and humid sub-tropical climate in Jammu region. Small size of land holding is another hurdle for limited milk production in J&K as J&K does not produce much fodder production because of lack of modern technologies in small farms. In Jammu and Kashmir the number of animals per 1000 human beings are 882 while at national this number is only 457 as per livestock census2007.

Soil is the basic natural resource for the plants growth. The hilly areas have great diversity and along with climatic conditions. Water in the hilly areas is available through precipitation in the form of rains, hails, snow and natural streams. Most of the rains are received in monsoon. Five major crop production systems exist in J&K.(1)Cereal based production system(Maize, paddy and maize),(2)Agri-horti based production system,(3)Vegetables, floriculture or mushroom based production system,(4)Livestock based production system and(5)Agri-horti-silvi-pastoral based production system. Maize, paddy, wheat, pulses and oilseeds are the major crops and their productivity in the state is low. Agri-horti production system in J&K has a wealth of horticultural crops. Horticultural sector contributes immensely to strengthen the financial condition of Jammu and Kashmir: This is a core sector of Jammu and Kashmir agriculture and about 4.5 lakh families are engaged in it. Around 20 per cent area of J&K is under horticultural crops. Horticultural sector contributes about10000 crores to the annual income of J&K of Jammu and Kashmir. Among the horticultural crops in J&K apple occupies the predominant position constituting around 45 per cent of the total area under fruit crops. There is need to give thrust on the horticultural crops in hilly areas of J&K. The fruit crops grown in J&K are

**Myth:-** "Many people believe that if you have fish and curd/milk together, it causes vitiligo. There is also a common belief that people with vitiligo should avoid sour food.

**Fact:-** There is no scientific proof to support either of these dietary connections to vitiligo."

**Myth:-** "You can cure vitiligo and return the natural colour of the skin by rubbing a variety of oils or taking certain supplements.

**Fact:-** Unfortunately, there is currently no cure for vitiligo, nor is there a convenient, easy treatment that addresses the disease process. However, there are several therapies that people with vitiligo may try after consulting their dermatologist."

**Myth:-** "Vitiligo can spread from one person to another by mere contact.

**Fact:-** Vitiligo is neither contagious nor infectious, and there's no way to get it from someone else. So, there is no reason to avoid people who may have visible signs of the disorder."

**Myth:-** "Only dark-skinned people are affected by Vitiligo.

**Fact:-** The occurrence of vitiligo is not determined by skin colour. It affects individuals of all races, irrespective of their skin tone."

As we wrap up our journey of World Vitiligo Day, it is crucial to emphasize the invaluable resources our community has to offer. The dermatology department at AIIMS Jammu will be well-equipped with facilities and a dedicated team of doctors devoted to delivering exceptional care. From the latest diagnostic tools to advanced treatment options like phototherapy, our doctors are dedicated to providing patient-centred care tailored to each individual's unique needs.

As we conclude World Vitiligo Day, let us reaffirm our commitment to raising awareness, and supporting those affected by vitiligo. Together, we can build a more inclusive and compassionate world where everyone feels empowered to embrace their unique beauty.

(The writers Dr Payal Chauhan is Associate Professor and Dr Ria Sharma is Senior Resident, Department of Dermatology, AIIMS Jammu)

## YOUR COLUMN

### Defining today's journalism

Dear Editor,

Journalists play an important role in keeping the readers informed about day to day happenings. Whether the candidate wants to pursue the latest breaking news, political developments or the local sports team, he/she must first prove his/her trustworthiness. If the candidate is keen on becoming a newspaper journalist, it is important to know what will be expected when applying to a newsroom.

Today's journalism is a far cry from what it used to be earlier. In the past, you received majority of your news and information from your local newspaper published every morning.

If you didn't get it there, you watched the evening news on television after dinner and in a few national newspapers, and that was it.

Today, relying on only one source to receive all of your news and information seems unheard of.

Newspapers are still around today, but we have so much more to go along with them. We don't have to wait for an entire day for our news anymore.

Now we see the news as it's happening instead of getting recaps of it the next day. With the rise of the internet and the

24/7 news station, we have an abundance of news sources directly at our fingertips.

Journalism as a whole has changed in response. Instead of having time to fact check, journalists are urged to be the first to break the story.

This rush to first often leads to misinformation being published, causing confusing and sometimes outrage. What used to be a cardinal sin is now less of an issue because being the first to hit publish is such a priority.

Let's take a look at what journalism is today and some of the people changing it. Journalism is the act of gathering, assessing, creating and presenting news and information.

It is also the product of these activities. Journalism is the product of every newspaper you read, every news station you watch, and every news article you read on the internet.

Journalism is meant to place the public good above all else and uses specific methods to gather and assess information.

In other words, journalism is meant to benefit the people, and journalists should routinely check what they're reporting on to be sure the information is verified and accurate.

Another side effect of the internet and the amount of data at our fingertips is the rise of data journalism. Data journalism is the use of data and number crunching to uncover, better explain, or provide context to a news story.

Data can be the tool used to tell a story, the source upon which a story is based, or both at the same time. It often

involves the use of statistics, charts, and info graphics.

Data journalism has become important because in today's world, anyone with a smart phone and a social media account can be a journalist.

Multiple sources add information over social media, blogs, and videos as the news story is happening. Today's journalists also face a new set of challenges. They're no longer the run-away experts in the fields they write in. Today, their readers may be smarter, and better informed than they are.

One thing journalists don't have on their side anymore is time. They have to be first and have to be fast. They don't have time anymore to become deeply engrossed in their stories. They don't have time to learn and to ponder on their stories. They rely on quotes from other experts to shape their stories.

True investigative journalism is an art that is slowly fading. One of the main reasons is the money isn't there for it anymore.

Doing a real investigative piece takes a lot of time, which in turn takes a lot of money. The ad revenue they'd earn for the story would likely be a small fraction of what it cost to produce it.

Because of this, investigative journalism is being replaced by 5-10 blog posts a day that will never have as much substance as an actual investigative piece.

Jubal