CHECK ADULTERATION

n the current era, there is a scarcity of essential commodities, making it difficult for consumers to find the items they need in the market. Even when these items are available, businesses take advantage of the scarcity to increase prices and earn more profit. How the desire for higher profits has led to the adulteration of goods, which involves mixing substandard or harmful substances with products, deceiving consumers. The focuses on the particularly dangerous issue of adulterated medicines where fake medications like "Sarodon" and "Codopyrin" were found in the market. These counterfeit drugs can be ineffective or, worse, harmful to consumers' health. Such adulterated medicines can lead to various health risks, including stomach upset, kidney stones, heart disease, and even life-threatening situations. The need for public awareness and government intervention to combat this issue is necessary. Govt should set life imprisonment for those involved in adulteration and the death penalty for any corrupt officials who aid or abet this crime.

Importance of Accession Day

OMKAR DATTATRAY he 26th, October 1947 is the accession day and it is the day on which Maharaja of Jammu and Kashmir Hari Singh signed the instrument of accession and joined the secular and democratic India .We are celebrating the accession day on October 26,2023 and are celebrating it with fanfare. The UT and its people are celebrating 76th accession day this year .Thus this day has a special importance in the post independent history of not only Jammu and Kashmir but of the India as well. So this day should be celebrated with gaiety and fervor. But it is very disturbing that 26th October is not celebrated in the manner it deserves to be celebrated .However the LG administration had rightly issued order to all government offices and educational institutions to celebrate the accession day in a befitting manner .The 26th October has now been declared a public holiday by the government and therefore this day needs to be celebrated to commemorate the accession of J&K with the Indian union. In fact accession day in India's Jammu and Kashmir commemorates the day when the area joined the Dominion of India. The 26th October is important in the sense that Maharaja Hari Singh signed off the instrument of accession on this day in which Jammu and Kashmir joined the dominion of India. This was part of the series of events in 1947 by which rule the British Raj was converted into two independent Dominions of India and Pakistan, latter having territories separated by whole of the northern India. As a Hindu ruler of a state with both Hindu and Muslim population, the Maharaja's decision was crucial. The festivities of the day include holding rallies, lighting firecrackers, singing India's national anthem and raising the flag of India. Thus accession day carries great importance as it was on this day in 1947 that the then Maharaja of Jammu and Kashmir signed the Instrument of Accession to become part and parcel of the greatest and largest democracy of the world. This day marks the anniversary of Maharaja's signing the Instrument of Accession with the government of India. The signing of this document cemented Jammu and Kashmir as member of the Dominion of India. The people of India as well as of J&K especially children need to be taught about the historical developments which led to the signing of the Instrument of Accession and the importance of this day in independent India. The festivities of the day include holding rallies bursting of fire crackers, singing of India's national anthem and raising of national flag and in some areas the festivities are as big as those of the Hindu festival of Diwali. Accession day is a public holiday in the union territory of Jammu and Kashmir. The accession day became an official public holiday for first time in Jammu and Kashmir in 2020. While this day is celebrated and commemorated for acceding of Jammu and Kashmir with India and is celebrated by all nationalistic people but the separatists observe it as a black day. The Accession Day of Jammu and Kashmir with the $\,$ union of India is celebrated every year on 26th October across the UT. Special functions are observed to mark the day. The day became an official public holiday in J&K for the first time in 2020 after the abrogation of article 370 and 35Aon August 5th 2019. The Instrument of Accession is a legal document executed by Maharaja Hari Singh, ruler of the princely state of Jammu and Kashmir on October 26, 1947. By executing this document under the provisions of Indian Independence Act, of 1947, Maharaja Hari Singh agreed to accede to Dominion of India. It is pertinent to mention that Maharaja Hari Singh, sought the help of the Indian armed forces after an invasion from the army and tribesmen of Pakistan. The Indian government extended its help on condition of accession of the state to the dominion of India .Accession day is the new holiday that residents of Jammu and Kashmir will celebrate .Earlier the Jammu and Kashmir administration replaced former CM Shiekh Abdullah's anniversary and Martyrs day from its list of public holidays for 2020 and included Accession Day which will be celebrated every year on 26,October. The government should not have cancelled the holiday of the anniversary of Baba -e-Koum -Sher -e -Kashmir Shiekh Mohammad Abdullah because he was the towering political personality and his role is commendable for the upliftment of the people of Jammu and Kashmir . Though it is so good to have cancelled the holiday on account of the so called martyrs day of 13th July but the government should not have tinkered with the holiday of the anniversary of Shiekh Abdullah .It is a bad politics and politics of vengeance. The accession day is observed on 26,October every year .This day marks anniversary of Maharaja Hari Sing signing the Instrument of Accession with government of India. The people in Jammu and Kashmir whose national sentiments favor India celebrate the day by lighting fireworks singing the Indian national anthem and hoisting the national flag .Those in Jammu and Kashmir who have more separatist aspirations observe the day as a black day mourning kashmiri 's independence .The princely state of Jammu and Kashmir was torn apart when British India was partitioned to form modern nations of India and Pakistan .When Pakistani forces launched a guerrilla attack on Kashmir in 1947. Hari Singh the reigning monarch of Kashmir at the time ,turned to Mountbatten and India. He was asked to sign the Instrument of Accession -a document declaring the princely state as part of the Dominion of India. After the first Indo-Pak was drew to an end the United Nations was called for mediation .The UN's suggestion to hold a referendum to discern the aspirations of Kashmiri people was refused by India. Jammu and Kashmir thus became a part of India. The state was accorded special status by article 370 of the Indian constitution . The article though was repealed in 2019 and the state of Jammu and Kashmir bifurcated into two union territories of Jammu and Kashmir and Ladakh .As already stated accession day was made a public holiday. Accession day highlights the modern history of Jammu and Kashmir .It shows how Jammu and Kashmir became a part of India. .Through accession, we learn about the political aspirations of the people and how these impact the functioning of a state Accession is an opportunity to under stand special statehood .Jammu and Kashmir has a long history and it is in the fitness of things to use the accession day to educate the people especially the future generation about the importance of this historically significant day. The children who are the future leaders and rulers should be made aware about the importance of the accession day and so it becomes our responsibility to make children aware about the significance of this day for the country .In brief the accession cements and creates the relationship of Jammu and Kashmir with India and it is through signing of the

became a part and parcel of India and hence the importance of this day cannot be exaggerated. (The author is a columnist, social and KP activist).

Instrument of Accession by the Maharaja Hari Singh that J&K

THE DILEMMA OF DISORDERS OF SEXUAL DEVELOPMENT

(DSD, ambiguous genitalia, inter sex disorder)

■ DR LUCKY GUPTA

→ntersex Awareness Day takes place on October 26 each year and this article is an effort to raise awareness about this condition, which is the need of an hour.

The term "intersex" describes a range of medical disorders in which an individual's physical sex characteristics do not fit typical male or female classifications. It has been seen that parents experience extreme stress when their child is born with ambiguous genitaliaand they feel intense guilt and at that time they need emotional support and a clear explanation of the problem. Surprisingly, some patients go undiagnosed till puberty. Ambiguous genitalia can occasionally be linked to life-threatening conditions like salt wasting seen in congenital adrenal hyperplasia that requires emergency treatment.

One in every 4500 newborns is estimated to have DSD. The clinical evaluation is in accordance with the knowledge of the five main types of intersex disorders; the commonest are male pseudohermaphrodite, female pseudohermaphrodite, and true hermaphrodite. In the current scenario, it is evident that with the awareness, clinical knowledge, more sophisticated investigations and highly skilled diagnostic procedures, the diagnosis of the DSDs can be made with ease and with the multidisciplinary approach that involves the medical, surgical and psychosocial features of the condition, the condition can be dealt accordingly.



History, Clinical Evaluation and Investigations

The important questions are: Did the mother use any drugs that might have an impact on the development of the fetal genitalia while she was pregnant? Does the family have a history of consanguineous marriages, ambiguous genitalia, death in the perinatal

period or death of a sibling? Upon a thorough physical examination, the child may exhibit dysmorphic facial features. The other clinical features include genital symmetry, meatel location, hyperpigmentation, size of phallus, bifid or hemiscrotum, gonads, presence or absence of uterus and systemic illness.

The investigations include Chromosomal analysis, radiological investigation in the form of Urethrogram, Ultrasound, MRI and bone age estimation. Hormonal estimation in the form of serum 17- OH progesterone, electrolytes, beta HCG stimulation test, etc. are important.

Sex assignment and Surgical management

Management of intersex problems is a challenging job. Early detection requires community awareness and adequate infrastructure for diagnosis and management. Many parents didn't know that there was any problem with the child. Some knew that there was a problem but were not sure if it could be corrected and if so where. The other factors that prevented them from seeking help

1. They were ashamed to mention the condition

2. Fear that 'hijras' may take the child away

3. Sometimes parents give up treatment after exhausting all the money they had for diagnosis, but the diagnosis is not made.

Good communication should perhaps be given a higher priority than it is at present. In our society, sex assignment is still considered an important step as compared to the Western world and based on the clinical evaluation and investigations as mentioned above, this decision is highly important. The parents and other concerned persons should have a private, in-depth discussion of the matter at hand about both the advantages and drawbacks of each type of sex assignment in terms of surgical options, development of malignancy, fertility, phallic recon-

struction, vaginoplasty, psychological development, need for hormonal supplementation if any.

The author has a special interest in managing these children because these children are either mismanaged or misdiagnosed as when they reach puberty, they'll exhibit unfavourable secondary sexual traits, infertility, or marital issues, infertility, or marital disorders where there is a lot of conflict in their minds. Girls with congenital adrenal hyperplasia have been observed to anticipate being fertile and, thus, the role of raising preferably will be female and depending upon the preferences for surgery, can also undergo surgical treatment in a young age.

The evidence-based data available today is still insufficient to determine a person's gender. The question of whether surgery should be performed early in childhood or postponed until the patient is capable of giving consent on their own has long been discussed. In the author's view, it is crucial to take into account the psychological evaluation of patients in conjunction with their parents on denial, anxiety, guilt, worthlessness or acceptance along with their proper counseling should be the first step and respectful care is critical for the management of infants, children, adolescents, and their families to ensure respect, a positive and meaningful quality of life.

(The writer is Assistant Professor, Department of Pediatric Surgery, AIIMS, Vijaypur, Jammu).

Air pollution and your health

■ MOHAMMAD HANIEF

ir pollution is a familiar environmental health hazard. We know what we're looking at when brown haze settles over a city, exhaust billows across a busy highway, or a plume rises from a smokestack. Some air pollution is not seen, but its pungent smell alerts

It is a major threat to global health and prosperity. Air pollution, in all forms, is responsible for more than 6.5 million deaths each year globally, a number that has increased over the past two

Air pollution is a mix of hazardous substances from both human-made and natural sources

Vehicle emissions, fuel oils and natural gas to heat homes, by-products of manufacturing and power generation, particularly coal-fueled power plants, and fumes from chemical production are the primary sources of human-made air pol-

Nature releases hazardous substances into the air, such as smoke from wildfires, which are often caused by people; ash and gases from volcanic eruptions: and gases, like methane, which are emitted from decomposing organic matter in

Traffic-Related Air Pollution (TRAP), a mixture of gasses and particles, has most of the elements of human-made air pollution: ground-level ozone, various forms of carbon, nitrogen oxides, sulfur oxides, volatile organic compounds, polycyclic aromatic hydrocarbons, and fine particulate matter.

Ozone, an atmospheric gas, is often called smog when at ground level. It is created when pollutants emitted by cars, power plants, industrial boilers, refineries, and other sources chemically react in the presence of sunlight.

Noxious gases, which include carbon dioxide, carbon monoxide, nitrogen oxides (NOx), and sulfur oxides (SOx), are components of motor vehicle emissions and byproducts of industrial

Air pollution and climate change affect each other through complex interactions in the atmosphere. Air pollution is intricately linked with climate change because both problems come largely from the same sources, such as emissions from burning fossil fuels. Both are threats to people's health and the environment worldwide. Read more: Health Impacts of Air Quality.

When the National Ambient Air Quality Standards were established in 1970, air pollution was regarded primarily as a threat to respiratory health. In 1993, NIEHS researchers published the landmark Six Cities Study, which established an association between fine particulate matter and mortality.

Air pollution exposure is associated



with oxidative stress and inflammation in human cells, which may lay a foundation for chronic diseases and cancer. In 2013, the International Agency for Research on Cancer of the World Health Organization (WHO) classified air pollution as a human carcinogen.

Research on air pollution and health effects continually advances. Public health concern now includes cancer, cardiovascular disease, respiratory diseases, diabetes mellitus, obesity, and reproductive, neurological, and immune system disorders.

Air pollution and birth outcomes are linked as global public health concerns. Researchers analyzed indoor and outdoor air pollution data from all inhabited continents along with key pregnancy outcomes. Their findings indicate efforts to reduce PM2.5 exposure could lead to significant reductions in the number of low-birth weight and pre-term birth infants worldwide. Air pollution reduction would be especially beneficial for children born in low- and middle-income countries.

Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulfur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases and are important sources of morbidity and mortality.

WHO data show that almost all of the global population (99%) breathe air that exceeds WHO guideline limits and contains high levels of pollutants, with lowand middle-income countries suffering from the highest exposures.

Air quality is closely linked to the earth's climate and ecosystems globally. Many of the drivers of air pollution (i.e. combustion of fossil fuels) are also

sources of greenhouse gas emissions. Policies to reduce air pollution, therefore, offer a win-win strategy for both climate and health, lowering the burden of disease attributable to air pollution as well as contributing to the near- and long-term mitigation of climate change.

In a landmark collaboration with over 30 international experts, the World Health Organization (WHO) has developed the first Air Pollution and Health Training toolkit (APHT), specifically tailored for health workers to be unveiled at the end of 2023. The toolkit includes downloadable training modules accompanied by a manual using a trainthe-trainers approach to inform and empower health care professionals. In anticipation of the toolkit's launch, an instrumental step is being taken to equip health care professionals for the challenges ahead by launching the userfriendly OpenWHO online training program, to coincide with this year's International Day for Clean Air for blue skies. This strategic move reflects a commitment to addressing air pollution concerns and fostering healthier condi-

Air pollution is a significant global health challenge, with far-reaching consequences on both individual well-being and public health. WHO estimates that, globally, air pollution is responsible for about 7 million premature deaths per year from ischemic heart disease, stroke, chronic obstructive pulmonary disease and lung cancer, and acute respiratory infections such as pneumonia, mainly affecting children in low- and middleincome countries.

Air pollution also threatens the global economy as it imposes enormous health costs, representing 6.1% of the global gross domestic product (more than US\$ 8 trillion in 2019).

Hundreds of specific substances are

considered hazardous when present in trace amounts in the air. These pollutants are called air toxics. Many of them cause genetic mutations or cancer; some cause other types of health problems, such as adverse effects on brain tissue or fetal development. Although the total emissions and the number of sources of air toxics are small compared with those for criteria pollutants, these pollutants can pose an immediate health risk to exposed individuals and can cause other environmental problems.

Most air toxics are organic chemicals, comprising molecules that contain carbon, hydrogen, and other atoms. Many are volatile organic compounds (VOCs), organic compounds that readily evaporate. VOCs include pure hydrocarbons, partially oxidized hydrocarbons, and organic compounds containing chlorine, sulfur, or nitrogen. They are widely used as fuels (e.g., propane and gasoline), as paint thinners and solvents, and in the production of plastics. In addition to contributing to air toxicity and urban smog, some VOC emissions act as greenhouse gases and, in so doing, contribute to global warming. Some other air toxics are metals or compounds of metals-for example, mercury, arsenic, and cadmi-

In many countries, standards have been set to control industrial emissions of several air toxics. The first hazardous air pollutants regulated in the United States (outside the workplace environment) were arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides (radioactive isotopes), and vinyl chloride. In 1990 this short list was expanded to include 189 substances as part of the significant amendments to

the Clean Air Act of 1970. By the end of the 1990s, specific emission control standards were required in the United States for "major sources"those that release more than 10 tons per year of any of these materials or more than 25 tons per year of any combination of them.

Like people, animals, and plants, entire ecosystems can suffer effects from air pollution. Haze, like smog, is a visible type of air pollution that obscures shapes and colors. Hazy air pollution can even muffle sounds.

Anybody can take steps to reduce air pollution. Millions of people every day make simple changes in their lives to do

Taking public transportation instead of driving a car, or riding a bike instead of traveling in carbon dioxide-emitting vehicles are a couple of ways to reduce air pollution. Avoiding aerosol cans, recycling yard trimmings instead of burning them, and not smoking cigarettes are others.

> (The author can be mailed at m.hanief@gmail.com).

YOUR COLUMN **Civil Societies are the** Friends and Guide of People

Through the columns of your paper I like to sensitize the people about the role of civil societies towards development. When we speak of the government policies, with regard to their implementation and benefits to the common man in the society, there are always conflicting

statements being made by those on the platform of the political party in government and those on the other side of the table. Thus the facts remain a mystery and factual position subsides. In this way if works are executed substandard and not according to norms, its benefit goes to the kitty of the executing agency and the sufferer is the beneficiary. In this situation the role of civil societies comes into plays that are considered as watch dogs. But we find that we are 'critics' only and never take initiative and never come forward as a civil society group to act as 'Social Auditors' for those works which are meant for our benefits for an effective check

on the executive action and to hold such agencies accountable to the society. The civil society conveys the problems of people to the proper authority and by doing this the civil society ensures justice for common people The civil society is, in this sense, the friend and guide of people. The support of a civil society as a whole increases the tolerance and understanding of people towards the rules of the government and the democratic power also supports the civil society to play the role of advisory for better implementation of laws.

Mahadeep Singh Jamwal Udhampur.