

Antibiotic prescription rate high in private sector

India is considered to be one of the top users of antibiotics, says report

BINDU SHAJAN PERAPPADAN
NEW DELHI

The private sector clocked high levels of antibiotic prescription rates (412 per 1,000 persons per year), according to a new study by researchers at the Public Health Foundation of India (PHFI). The highest rate was seen among children aged 0-4 years (636 per 1,000 persons) and the lowest in the age group 10-19 years (280 per 1,000 persons).

The study is the first ever estimate of outpatient antibiotic prescription rates and patterns in the private sector and has been published this month in *PLOS One* titled – “Outpatient antibiotic pre-

scription rate and pattern in the private sector in India”.

12-month period

The authors used the 12-month period (May 2013-April 2014) medical audit data set and concluded that the prescription rates for certain classes are on a higher side in India as compared to the developed nations.

The study said the percentage of prescriptions for wide-spectrum antibiotics like cephalosporins and quinolones (38.2% and 16.3%) was significantly higher than the U.S. (14.0% and 12.7%) and Greece (32.9% and 0.5%).

Unusually high prescrip-

In large doses

A look at the outpatient antibiotic prescription rate in the private sector in India

519 mn prescriptions dispensed between May 2013 and April 2014. (412 prescriptions per 1,000 persons per year)

55% prescriptions given for diseases of the respiratory system

10% for diseases of the genitourinary system

9% for symptoms, signs and abnormal clinical findings



■ Antibiotic prescription rate highest in the age group 0-4 years

■ Most used antibiotics: beta-lactam, cephalosporins (38.2% of all prescriptions); beta-lactam, penicillins (22.8%) and quinolones (16.3%)

tion rates of beta-lactams-penicillins and cephalosporins in uncomplicated upper respiratory infections in children is in stark contrast to the prescription rates and

pattern reported in Europe. India is considered to be one of the top users of antibiotics and there is a growing problem of antimicrobial resistance.

The study noted that the per capita antibiotic consumption in the retail sector has increased by around 22% in five years from 2012 to 2016.

Clinical guidelines

Though clinical guidelines on judicious antibiotic use explicitly mentions that they should not be prescribed for common cold, non-specific upper respiratory tract infection (URI), acute cough illness and acute bronchitis, the study shows a high rate of prescriptions for respiratory infections in primary care.

The study highlighted that of the 519 million antibiotic prescriptions, the majority were dispensed for the diseases of the respiratory system (55%), followed by geni-

tourinary system (10%) and symptoms, signs and abnormal clinical findings (9%); generally these infections are viral in origin and self-limiting in nature.

Dr. Shaktivel Selvaraj, director - Health Financing and Economics, PHFI and one of the authors of the study said: “Irrational prescription and use of antibiotics has its origins in production and selling tactics of pharma companies. There is a need to target antimicrobial stewardship programmes to specific constituencies and stakeholders to raise awareness on antibiotics and prevent its misuse.”

The misuse of antibiotics and easy access fuels antimicrobial resistance (AMR) which is a growing concern worldwide and in India.

WEATHER WATCH

RAINFALL, TEMPERATURE & AIR QUALITY IN SELECT METROS YESTERDAY



TEMPERATURE DATA: IMD, POLLUTION DATA: CPCB, MAP: INSAT/IMD (TAKEN AT 18.00 HRS)

Forecast for Sunday: Thunderstorm accompanied with lightning very likely at isolated places over Rayalaseema, coastal and south interior Karnataka, Kerala, Mahe, coastal Andhra Pradesh, Yanam, Tamil Nadu, Puducherry, Karaikal and Lakshadweep.

CITY	RAIN	MAX	MIN	CITY	RAIN	MAX	MIN
Agartala	29.3	16.3	Kozhikode	.....	11.8	33.0
Ahmedabad	30.1	19.0	Kurnool	.....	33.0	21.2
Aizawl	23.8	11.9	Lucknow	.....	26.8	13.6
Allahabad	29.3	15.6	Madurai	.....	16.9	28.6
Bengaluru	1.6	27.0	Mangaluru	.....	35.9	24.0
Bhopal	28.9	16.0	Mumbai	.....	33.6	23.0
Bhubaneswar	19.5	19.5	Mysuru	.....	24.4	19.1
Chandigarh	22.8	10.6	New Delhi	.....	22.8	12.0
Chennai	20.2	30.6	Patna	.....	28.6	15.4
Coimbatore	1.2	28.7	Port Blair	.....	31.3	26.9
Dehradun	26.1	10.0	Puducherry	.....	8.2	25.6
Gangtok	16.4	8.5	Pune	.....	30.6	19.2
Goa	33.4	24.4	Raipur	.....	30.4	18.4
Guwahati	30.5	16.3	Ranchi	.....	26.2	14.4
Hubballi	29.0	20.0	Shillong	.....	20.5	7.6
Hyderabad	30.2	20.6	Shimla	.....	16.7	4.9
Imphal	23.0	9.5	Srinagar	.....	10.6	2.7
Jaipur	22.9	15.5	Thiruvananthapuram	.....	21.9	29.2
Kochi	30.6	25.8	Tiruchi	.....	37.8	26.4
Kohima	24.2	9.0	Vijayawada	.....	31.8	23.2
Kolkata	30.4	19.5	Visakhapatnam	.....	31.0	23.8

(Rainfall data in mm; temperature in Celsius)

CITIES	SO ₂	NO ₂	CO	PM2.5	PM10	CODE	Yesterday
Ahmedabad	85	36	.....	80	.....84	
Bengaluru	04	42	68	.....	67	.....86
Chennai	11	10	09	.....	33	.....53
Delhi	16	32	51	.....	284	.....176
Hyderabad	03	65	40	.....	148	.....122
Kolkata	17	96	44	.....	279	.....217
Lucknow	10	39	84	.....	231	.....
Mumbai	18	79	37	.....	231	.....171
Pune	80	17	51	.....	177	.....126
Visakhapatnam	11	38	36	.....	128	.....104

Air Quality Code: ■ Poor ■ Moderate ■ Good (Readings indicate average AQI)
SO₂: Sulphur Dioxide. Short-term exposure can harm the respiratory system, making breathing difficult. It can affect visibility by reacting with other air particles to form haze and stain culturally important objects such as statues and monuments.

NO₂: Nitrogen Dioxide. Aggravates respiratory illness, causes haze to form by reacting with other air particles, causes acid rain, pollutes coastal waters.
CO: Carbon monoxide. High concentration in air reduces oxygen supply to critical organs like the heart and brain. At very high levels, it can cause dizziness, confusion, unconsciousness and even death.

PM2.5 & PM10: Particulate matter pollution can cause irritation of the eyes, nose and throat, coughing, chest tightness and shortness of breath, reduced lung function, irregular heartbeat, asthma attacks, heart attacks and premature death in people with heart or lung disease

‘Report on forests soon’

Exercise to ascertain increase or decrease in cover: Minister

JACOB KOSHY
NEW DELHI

The Environment Ministry is likely to release an update on the state of forests in India in December, Environment Minister Prakash Javadekar said on Saturday.

The India State of Forest Report (ISFR) is a biennial exercise to estimate the forest cover, the density of forest vegetation, tree cover across States, and the progress of plantation outside regions officially designated ‘forest.’

Mapping, surveys

The exercise involves both satellite mapping and surveys to map increase or decrease in forest cover. Mr. Javadekar was addressing a meeting of Forest officials and Ministers on the utilisation of the Compensatory Af-



Natural reserve: A view of the Belghar forest hills in Kandhamal district of Odisha. ■ BISWARANJAN ROUT

orestation Funds. The law prescribes how the funds collected by the Centre from industrial projects for razing forests can be used by States. Forest Ministers from Himachal Pradesh, Telangana, Meghalaya, Mizoram, Nagaland and Tripura were present.

“There are nearly 12 crore trees planted over the last five years and we will be giving yearly updates on how

they are progressing. Details on how States are progressing with improving forest cover will be available in the report next month,” Mr. Javadekar said.

Director-General (Forests), Siddhanta Das, told *The Hindu* that all the data on the ISFR was ready.

The latest ISFR, or the report of 2017, was released in February 2018, after a delay of nearly three months.

None should be stigmatised for a crime committed as a juvenile: SC

Law requires all past records be erased to afford them a fresh start in life, the court said

KRISHNADAS RAJAGOPAL
NEW DELHI

A person should not be stigmatised for a crime committed as a juvenile, the Supreme Court has held.

The law requires all past records of a juvenile’s crime to be erased to afford him a

fresh start in life.

The objective of the Juvenile Justice Act is to reintegrate a person who committed a crime while under 18 rather than punishing him perpetually.

A Bench of Justices U.U. Lalit and Vineet Saran made

the observations in a short judgment on November 29 while upholding the appointment of a man as a SI in the Central Industrial Security Force (CISF).

The authorities had cancelled his appointment after it was revealed in an official

form that a criminal case had once been registered against him for teasing a girl while he was a juvenile.

However, he was acquitted after the girl’s parents had ‘pardoned’ him and refrained from testifying in court.

The Rajasthan government had ordered the government to appoint him, but the Centre chose to appeal to the apex court, last year.

The judgment, authored by Justice Saran, upheld the High Court decision.

Two Naxals killed in encounter in Maharashtra

GADCHIROLI

Police raided a training camp of Naxals in Maharashtra’s Gadchiroli district on Saturday and killed two rebels in an encounter, officials said. The encounter took place in Bhamragad, ahead of the ‘Peoples Liberation Guerrilla Army Week’ which the Naxals observe from December 2 to 8.

SOUTHERN RAILWAY

INDICATIVE ADVERTISEMENT

No.CPB/P/198/Act/TP/Vol.XXI dated: 29.11.2019

It is proposed to engage Act Apprentices for the year 2020 at Southern Railway. The establishments and the vacancies are furnished hereunder :

Sl.No.	Establishment	Vacancies
1.	Carriage Works, Perambur	1208
2.	Central Workshop, GOC	723
3.	Signal & Telecom Workshop, Podhanur	1654

The candidates should have the qualification of Matriculation/ITI. The candidates should be in the age group 15-24. The candidates should apply online through <https://www.sr.indianrailways.gov.in/> -> News & Updates -> Careers.

The candidates are eligible for stipend as prescribed under the Apprentices Act. The selection is on the basis of merit list prepared based on the marks secured in the Xth Std and ITI in respect of all the candidates who apply against the notification.

The candidates have to Pay Rs.100/- as processing fee through online mode (except SC/ST/PWD/Women candidates) the access to the server gets closed on 31.12.2019 at 17.00 hrs.

Workshop Personnel Officer, Carriage & Wagon Works, Perambur, Chennai - 600 023.

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Ms. Taranjeet Kaur
biracbig.dbt@nic.in | sped01.birac@nic.in

SMART CITY THIRUVANANTHAPURAM LIMITED
CIN U75302KL2017SGC05027
E-TENDER NOTICE
e-Tenders are invited for the projects- Construction of Open Air Theatre and Park at Putharikandam Maidanam and Supply and Installation of Interactive Information Kiosk in Thiruvananthapuram Smart City area.

Name of Project	E-Tender ID	Probable amount of Contract (PAC) (Exclusive of GST)
1) Construction of "Open Air Theatre and park at Putharikandam Maidanam"	2019_SCTLT_325909	Rs. 8,11,79,769/-
2) Supply and Installation of Interactive Information Kiosk.	2019_SCTLT_325916_1	Rs. 43,25,000/-

• Bid Submission Last Date: 21.12.2019, SATURDAY, 5:30 PM
Date and Time of Opening Price Bid: To Be Intimated Separately to Technically Qualified Bidders by Email. All the RFP documents and details are available on the e-Procurement Website. Bids are only accepted online on the Website <https://etenders.kerala.gov.in>
(Sd/-) CHIEF EXECUTIVE OFFICER, SMART CITY THIRUVANANTHAPURAM Ltd.

Biotechnology Industry Research Assistance Council (BIRAC)
(A Govt. of India Enterprise)

Invites Applications for

Social Innovators (SPARSH Fellows)
for
Social Innovation Immersion

SPARSH is the social innovation program of BIRAC and SIIP (Social Innovation Immersion Program) is one of its components under which a pool of “Social Innovators/SPARSH Fellows” is being created to identify and address the social problems through biotechnological interventions.

The program is being implemented through 14 SPARSH Centres who would provide all the requisite support to the Social Innovators in following thematic areas:

- Maternal and Child Health
- Ageing and Health
- Food and Nutrition
- Waste to Value
- Combating environmental pollution
- Agri-Tech

Features:

- Rs 50,000 pm fellowship
- Rs 5 Lakhs mini kick-start grant
- Clinical/ Rural Immersion
- Access to BIRAC network
- Mentoring by experts
- Opportunities for future funding

Eligibility:

Indian undergraduate (B.Tech, BE, MBBS) or postgraduate (MSc, MS, M.Tech, MPhil, MD) & PhD below 35 years from fields of Life Sciences, Agriculture, Engineering, Medicine & Human Biology.

For submitting application and queries please log in to BIRAC website www.birac.nic.in
Contact : GM & Head Investment, E-mail : investment.birac@gov.in or Sr. Manager, E-mail : sgandhi.birac@nic.in

Last date : 15th January, 2020