



## DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Monday 20190204

**Diet/ Nutrition (Hindustan: 20190204)**

[http://epaper.livehindustan.com/imageview\\_82903\\_63793586\\_4\\_1\\_04-02-2019\\_i\\_1.pagezoomsinwindows.php](http://epaper.livehindustan.com/imageview_82903_63793586_4_1_04-02-2019_i_1.pagezoomsinwindows.php)

# कम सब्जी-फल खाने से 'छुपी मुखमरी' का खतर

नई दिल्ली | मदन जैड़ा

अगर आप फल-सब्जी कम खाते हैं तो सावधान हो जाइए। क्योंकि ऐसे करने से आप 'छुपी मुखमरी' का शिकार हो रहे हैं। यह खुलासा हैदराबाद के वैज्ञानिकों की रिपोर्ट में हुआ है। दरअसल, फल-सब्जियां विटामिन एवं माइक्रो न्यूट्रिएंट के बेहतरीन स्रोत होती हैं। इन तत्वों की कमी दिल, मधुमेह और अन्य गैर संक्रामक रोगों को बढ़ावा देती है।

इंडियन जर्नल फॉर मेडिकल रिसर्च (आईजेएमआर) में प्रकाशित नेशनल इंस्टीट्यूट ऑफ न्यूट्रिशियन हैदराबाद के वैज्ञानिकों कमला कृष्णास्वामी और राजगोपाल



गायत्री की रिपोर्ट के मुताबिक, यदि रोज 400 ग्राम सब्जियां एवं फल खाया जाए तो मधुमेह का खतरा 24 फीसदी, धमनियों में रक्त जमने का खतरा 11 तथा दिल का दौर पड़ने का खतरा नौ फीसदी तक कम हो सकता है। लेकिन देश में सब्जियो

### सब्जियों से क्या फायदा

आयरन-12 फीसदी, विटामिन सी-80 फीसदी, फोलिक एसिड-23 फीसदी, जिंक-8 फीसदी

### फल क्यों जरूरी

आयरन-6 फीसदी, विटामिन सी-20 फीसदी, फोलिक एसिड-12 फीसदी, आयरन, जिंक, पोटेशियम

एवं फलों के पर्याप्त उत्पादन के बावजूद लोगों को इनकी उपलब्धता जरूरत से करीब 60 फीसदी कम है। रिपोर्ट के अनुसार, विश्व के शीर्ष वैज्ञानिक संस्थानों के अध्ययनों में फल एवं सब्जियों की उपयोगिता को चिह्नित किए जाने के बाद विश्व

**60** फीसदी भारतीय पर्याप्त मात्रा में फल सब्जी नहीं खाते, जबकि देश में इनका पर्याप्त उत्पादन होता है

**इन बीमारियों से बचाव :** धमनियों से जुड़ी बीमारियां, दिल का दौरा, कैंसर, मधुमेह, मोतियाबिंद, मांसपेशियों से जुड़ी समस्या आदि।

स्वास्थ्य संगठन ( डब्ल्यूएचओ ) : भोजन में फल सब्जियों की रोजाना मात्रा 400 ग्राम तय की है। लेकिन भारत समेत निम्न और मध्य आय वाले 52 देशों के लोगों को तय सीमा से 75 फीसदी कम फल सब्जियां मिल पाती है।

# इन योद्धाओं ने हौसले के बल पर कैंसर को दी मात



**कैंसर दिवस पर विशेष**

कैंसर का नाम सुनते ही लोग जिंदगी से हताश हो जाते हैं। दुनिया भर में 2018 में कैंसर से मरने वालों की संख्या करीब एक करोड़ पहुंच गई, वहीं करीब दो करोड़ नए मामले सामने आए। इस आंकड़े से अलग हमारे बीच कुछ ऐसे लोग भी हैं, जिन्होंने हौसलों को बुलंद कर कैंसर जैसी बीमारी को कड़ी शिकस्त दी और आज जिंदादिली से जिंदगी जी रहे हैं -

## चिंता: 2025 तक 60 लाख लोगों की इस बीमारी से मौत की आशंका

मन के हारे हार है, मन के जीते जीत... इस साल विश्व कैंसर दिवस की थीम 'आई एम एंड आई विल' कुछ यही संदेश देती है। एक अनुमान के मुताबिक, 2025 तक इस बीमारी से मरने वालों की संख्या 60 लाख तक होने की आशंका है। दुनिया भर में यह दिन इसलिए मनाया जाता है ताकि लोगों को जागरूक किया जा सके और उन्हें जानलेवा बीमारी से लड़ने की हिम्मत दी जा सके।

### जानलेवा बीमारी ने ऐसे पसारे पांव

- भारत में मृत्यु का दूसरा सबसे बड़ा कारण है कैंसर
- 25 लाख कैंसर रोगी भारत में
- 11,57,294 प्रत्येक साल नए मामले दर्ज होते हैं
- 2,500 लोगों की मौत हर दिन तंबाकू संबंधित बीमारियों से होती है
- 3,17,928 महिलाओं और पुरुषों की तंबाकू से मौत
- भारत में प्रत्येक 8 मिनट में एक महिला की कैंसर से मौत होती है
- स्तन कैंसर से पीड़ित महिलाओं में औसतन 50 फीसदी जीवित नहीं बचती
- दुनियाभर के कुल मुख कैंसर रोगियों में एक तिहाई भारत में
- भारत में घातक रोग के कुल पीड़ितों में एक तिहाई को मुख का कैंसर
- 4,13,519 पुरुषों की मौत कैंसर से हुई
- 3,71,302 महिलाओं की मौत कैंसर से हुई (आंकड़े एनआईसीपीआर की 2018 की रिपोर्ट पर आधारित)



**विश्व में कैंसर**

1.81 करोड़ कैंसर के नए मामले सामने आए विश्व में

96 लाख से अधिक लोगों की कैंसर से मौत हो गई

(आंकड़े आईआरसी की 2018 की रिपोर्ट पर आधारित)

### भारत में 2018 के आंकड़े

1,62,468 स्तन कैंसर के नए मामले दर्ज हुए

87,090 महिलाओं की मौत स्तन कैंसर से हुई

1,19,992 मुख कैंसर के नए मामले आए

72,616 लोगों की मुख कैंसर से मौत हुई

60,078 महिलाओं गर्भाशय के कैंसर से मौत हो गई

● भारतीय महिलाओं में स्तन कैंसर सबसे ज्यादा होता है

**यह है शुरुआती लक्षण**

- आंत या मूत्राशय की आदतों में परिवर्तन
- घाव का जल्दी न भरना
- शरीर के किसी भी हिस्से से खरबसाव होना
- अचानक से वजन घटना या फिर भूख न लगना
- आहार निगलने में दिक्कत होना
- तिल या मससे में कोई परिवर्तन
- लगातार खांसी या आवाज में भारीपन
- शरीर में कहीं भी गांठ हो और वह बढ़ रही हो (दर्द न हो तो भी दिखाएं क्योंकि कैंसर में दर्द बहुत बाद की स्टेज में होता है)

### उत्तर प्रदेश



## ऋतु का जज्बा ही बन गया संजीवनी

**रामपुर।** हौसलों के दम पर गर्भाशय कैंसर को शिकस्त देने वाली ऋतु अपनी जंग की दास्तां पूरे आत्मविश्वास से सुनाती हैं। आवास विकास निवासी 50 वर्षीय ऋतु का यही जज्बा एक कैंसर रोगी के लिए संजीवनी बनता है।

ऋतु बताती हैं कि फरवरी 2018 में लंबे समय तक बुखार रहने के बाद जब पता चला कि उन्हें दूसरी स्टेज का गर्भाशय कैंसर है तो उन्हें एक पल को लगा कि सब तबाह हो गया। लेकिन जब अपने पति और परिवार को साथ खड़ा देखा तो लगा कि इस जंग में जीत जरूर हासिल करेंगी। ऋतु तुरंत दिल्ली पहुंचीं



इलाज शुरू हुआ। इस दौरान पति दीप जोशी ऋतु की हिम्मत बने। एक साल के इलाज के बाद ऋतु जोशी ने कैंसर को मात दे दी। अब वह कहती हैं कि मेरे पति की दीप जोशी की बात सच साबित हुई। जिंदगी जिंदा दिली का नाम है, मुर्दा दिल क्या खाक जिया करते हैं।

## जिंदगी तो खुदा देता है...

**आगरा।** आगरा के दौरेता स्थित शिव पुरम में रहने वाले नूर मोहम्मद कहते हैं कि जिंदगी खुदा देता है... जमीन पर रहने वालों का भी सहयोग होता है। नूर को 2008 में गाल ब्लैडर पर सूजन आ गई। जांच में पता चला कि कैंसर है। नूर ने कभी बीड़ी, सिगरेट को कभी हाथ नहीं लगाया था। नूर कहते हैं कि यह खुदा की मेहर थी कि पहली स्टेज में बीमारी का पता चला और एस्पेन में साल चले इलाज में 25 रेडियोथेरेपी और 6 सेट कीमोथेरेपी के बाद कैंसर को मात दे दी।

### दिल्ली



## स्तन कैंसर को मात दे नीलम कविताओं से कर रहीं प्रेरित

**नई दिल्ली।** दिल्ली की रहने वाली नीलम भाटिया को 2010 में स्तन कैंसर हुआ। नीलम ने अपनी इच्छाशक्ति और अपने परिवार के सहयोग से मौत को मात दी। नीलम भाटिया ने बताया कि 2010 में एक दिन पालतू कुत्ते के छूने से अचानक छाती में दर्द होने लगा। नीलम अस्पताल गईं तो उन्हें स्तन कैंसर का पता चला। कैंसर दूसरी स्टेज का था और बालाजी एक्शन अस्पताल में डॉक्टरों ने दो दिन बाद उनकी सर्जरी की। सर्जरी के बाद

भारत में कैंसर के इलाज के लिए इम्प्युनोथेरेपी, प्रोटोन बीम थेरेपी के आने से इलाज में राहत मिलेगी। जीवनशैली में सुधार से 60% तक मामले कम हो सकते हैं। - प्रोफेसर अतुल शर्मा, मॉडिसन ओन्कोलॉजी, एम्स

एक साल तक कीमोथेरेपी चली और जिंदगी की यह जंग जीत ली। अब नीलम कविताएं लिखती हैं। (व.सं)

### झारखंड



## सुधीर की हिम्मत ने मौत को पछाड़ा

**रांची।** रांची के लालपुर में रहने वाले सुधीर कुमार (बदला हुआ नाम) को परिवार वालों ने 2014 में स्ट्रेचर पर लादकर रिम्स लाया था। उनके एलएस स्पाइन में कैंसर था।

50 वर्षीय सुधीर घर के अकेले कमाने वाले हैं। रिड की हड्डी में कम्मर के पास जब कैंसर का पता चला तो परिवार में खलबली मच गई। बेटा तब 10 वर्षों में पढ़ता था। पत्नी घरों में काम करके परिवार चलाती थी। रिम्स आए, डॉ. अनूप कुमार के भरोसे और सुधीर के हौसले ने परिवार को उजड़ने से बचा लिया, सुधीर अब पूरी तरह स्वस्थ हैं।

## कैंसर के तीन बड़े कारण- तंबाकू, प्रदूषण और खराब जीवनशैली (Hindustan:20190204)

[https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page\\_6-7507-1491-4.html](https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page_6-7507-1491-4.html)

तमाम उपायों के बाद भी कैंसर के रोगी बढ़ रहे हैं। इसे आप किस रूप में देखते हैं?

- लोगों की जीवनशैली बदल चुकी है। खानपान में जंक फूड का इस्तेमाल बढ़ गया है, जिसमें रसायनों का इस्तेमाल होता है। यह कैंसर का कारण बन रहा है। इसके अलावा पहले के मुकाबले औसत उम्र भी बढ़ी है। बढ़ती उम्र में कैंसर की आशंका अधिक रहती है। जांच सुविधाएं बेहतर होने से ऐसे रोगियों की पहचान भी अधिक हो रही है। 50 वर्ष की उम्र के बाद सभी को जांच कराना चाहिए, जिससे बीमारी जल्द पकड़ में आ जाए।

दिल्ली-एनसीआर में प्रदूषण अधिक है, क्या यह भी कैंसर का कारण बन रहा है?

-निश्चित रूप से प्रदूषण कैंसर का कारण बन रहा है। बहुत लोग कम उम्र में कैंसर से पीड़ित हो रहे हैं। इसका कारण प्रदूषण हो सकता है। दिक्कत यह है कि हवा व पानी दोनों प्रदूषित हैं। गॉल ब्लैडर का कैंसर भी 20 साल की उम्र में होने लगा है, जो पहले अक्सर 40 साल के बाद होता था।

शरीर के किस अंग का कैंसर अधिक जानलेवा है, और किसका बेहतर इलाज संभव है?

-देश में तंबाकू खाने व धूमपान की समस्या अधिक है। इसलिए, मुंह, गले व फेफड़े के कैंसर से अधिक लोग पीड़ित होते हैं। यदि नियमित जांच हो तो शुरुआत में ही इनका बेहतर इलाज हो सकता है। मॉलीक्यूलर जांच से फेफड़े के कैंसर के इलाज में क्रांति आ गई है। पहले एडवांस स्टेज के कैंसर मरीज नौ महीने भी नहीं बच पाते थे, अब कई वर्षों तक ठीक रहते हैं। मुंह के कैंसर के इलाज में सर्जरी, कीमो व रेडियोथेरेपी तीनों होते हैं। पुरुषों में प्रोस्टेट कैंसर बढ़ रहा है। पहले इस बीमारी का पता भी नहीं चल पाता था। अब ब्लड में पीएसए (प्रोस्टेट स्पेसिफिक एंटीजेन) की जांच से शुरुआती चरण में इसका पता चल पा रहा है। 35 फीसद मरीज शुरुआती चरण में सामने आने लगे हैं। इसके अलावा अल्ट्रासाउंड से किडनी के कैंसर की पहचान भी शुरुआती चरण में होने लगी है। महानगरों में महिलाओं में स्तन कैंसर अधिक है, जबकि ग्रामीण क्षेत्र की महिलाओं को सर्वाइकल अधिक होता है। उन्हें मुंह का कैंसर ज्यादा नहीं होता, क्योंकि वे तंबाकू ज्यादा नहीं खाती हैं।

कैंसर के इलाज की व्यवस्था में विदेश की तुलना में दिल्ली-एनसीआर कहां ठहरता है?

-दिल्ली ही नहीं, देश में कई जगहों पर अब कैंसर के इलाज की बेहतर सुविधाएं मौजूद हैं। राष्ट्रीय राजधानी में तो इसकी अत्याधुनिक सुविधाएं मुहैया हैं। यहां रेडियोथेरेपी की अच्छी मशीनें हैं। इतना ही नहीं, यहां पर नई दवाओं का क्लिनिकल ट्रायल भी होता है। इसलिए, मरीजों को बाहर जाने की जरूरत नहीं है। विदेश में पहले सर्जरी करते हैं। उसके बाद कीमो व रेडियोथेरेपी देते हैं। यहां भी हम इसी तरह इलाज करते हैं। विदेश से भी यहां मरीज इलाज के लिए पहुंचते हैं। यहां रोबोटिक सर्जरी की भी अच्छी सुविधा है। मरीजों को किरफायती दर पर विश्वस्तरीय सुविधा उपलब्ध कराने की कोशिश होती है। यहां कई ऐसी रोबोटिक सर्जरी ऐसी होती हैं, जो अमेरिका में भी नहीं होतीं।

### **Killer In Our Midst (Hindustan Times:20190204)**

<http://paper.hindustantimes.com/epaper/viewer.aspx>

According to World Health Organization (WHO) estimates, 9.6 million cancer deaths were reported globally in 2018. The numbers are going up due to several reasons that include changing lifestyles and improved diagnostics. We take a look at the trends on World Cancer Day:

#### CANCER IN INDIA

One in eight men and one in nine women in India will develop some form of cancer in their lifetime, show projections from the National Cancer Registry data that was last released in 2016

#### GLOBAL SCENARIO

Cancer is the second leading cause of death; about one in 6 deaths are attributed to cancer

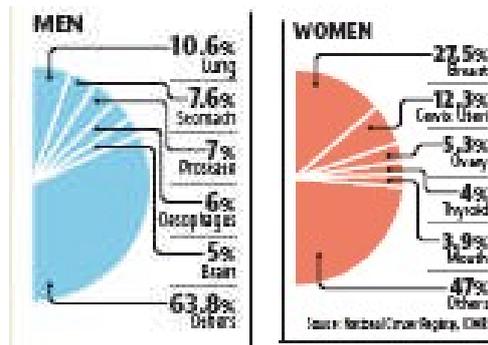
#### WORLD CANCER DAY

70% deaths occur in low and middle-income countries

22% of cancer deaths happen due to the use of tobacco products

Around one-third of the deaths happen due to five leading behavioural and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, and alcohol use

Infections such as hepatitis and human papilloma virus (HPV) are responsible for up to 25% of cancer cases in low and middle-income countries



**It's time to win the war against Cancer (Hindustan Times:20190204)**

<http://paper.hindustantimes.com/epaper/viewer.aspx>

February 4 is observed globally as the World Cancer Day. By becoming aware and taking measures towards its prevention, early detection and treatment, one can make a difference to the fight against cancer.

It is estimated that one in five men and one in six women will develop cancer over their lifetime. Also cancer is the second leading cause of deaths worldwide. According to GLOBOCAN 2018 data, common cancers affecting Indian men are cancers of mouth, lung and stomach, while in women, they are cancer of breast and cervix. Majority of these cancers are related to our lifestyle including tobacco, alcohol, faulty diet, obesity, infections, etc. One third of common cancers are preventable by lifestyle modifications.

Year 2019 marks the launch of the three-year 'I Am and I Will' campaign. It implies that whoever you are, you have the power to reduce the impact of cancer for yourself and for people around you. Do not be fearful. Be hopeful, be aware and win the war against cancer! The author, Dr Jyoti Wadhwa has written the article to create public awareness on the occasion of World Cancer Day. Dr Jyoti Wadhwa

## **Call for early detection of cancer (The Hindu:20190204)**

<https://www.thehindu.com/news/cities/chennai/call-for-early-detection-of-cancer/article26169756.ece>

Experts stress on steps to improve patient survival on eve of World Cancer Day

On the eve of World Cancer Day, global cancer experts have called for measures for early detection to improve patient survival.

A majority of cancers can be managed/cured if detected early, say experts. In 2018, of the more than 18 million new cancer cases diagnosed worldwide, nearly five million cases of breast, cervical, colorectal, and oral cancers could have been treated more effectively had they been detected earlier.

In India, a study among rural women with cervical cancer found the five-year survival rate to be 9% when cancer was diagnosed at stage 4. The five-year survival rate soared to 78% when the cancer was diagnosed at stage 1.

Early diagnosis also reduces the cost of treatment by two to four times compared to when the cancer is diagnosed at an advanced stage. In the U.S., the five-year survival rate for women diagnosed with cervical cancer at the advanced stage is just 15%, compared to 93% when the cancer has not spread.

Experiences shared

On Sunday, the Union for International Cancer Control (UICC), along with Cancer Institute, Adyar, conducted an event in which cancer survivors shared their experiences at a rally held on Elliott's Beach, Besant Nagar.

Participants included healthcare providers, cancer survivors and non-governmental organisations. Actor Gautami Tadimalla, founder of Life Again Foundation and a cancer survivor, and V. Shanta, chairman of Cancer Institute, participated.

## स्तन कैंसर

**कम उम्र में ही स्तन कैंसर से पीड़ित हो रही महिलाएं (Dainik Jagran:20190204)**

[https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page\\_6-7506-1491-4.html](https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page_6-7506-1491-4.html)

राज्य ब्यूरो, नई दिल्ली: सरकार व स्वास्थ्य मंत्रालय के जागरूकता अभियान के बावजूद स्तन कैंसर को लेकर महिलाओं में जागरूकता की कमी देखने को मिल रही है। स्तन कैंसर से पीड़ित ज्यादातर महिलाएं इसके गंभीर स्थिति में पहुंचने पर ही अस्पताल पहुंच रही हैं। यह बात एम्स द्वारा किए गए अध्ययन में सामने आई हैं। खास बात यह है कि 48 वर्ष से कम उम्र की महिलाओं में यह रोग तेजी से बढ़ रहा है। स्थिति यह है कि स्तन कैंसर से पीड़ित हर 10 महिला में एक युवती है। इसलिए एम्स के डॉक्टरों ने देश में कैंसर स्क्रीनिंग कार्यक्रम को बेहतर बनाए जाने की वकालत की है।

एम्स का यह अध्ययन इंडियन कैंसर जर्नल में प्रकाशित हुआ है। एम्स के डॉक्टरों ने जनवरी 2014 से दिसंबर 2016 के बीच इलाज के लिए पहुंची 550 महिलाओं पर यह अध्ययन किया। इसमें पाया गया कि सिर्फ चार फीसद महिलाएं ही पहले स्टेज में इलाज के लिए पहुंचीं। इसके अलावा 33 फीसद महिलाएं दूसरे स्टेज और 44.9 फीसद महिलाएं तीसरे व 18 फीसद महिलाएं चौथे स्टेज में इलाज के लिए पहुंचीं। इस तरह करीब 63 फीसद महिलाएं एडवांस स्टेज में इलाज के लिए पहुंचीं। स्तन कैंसर से पीड़ित ज्यादातर महिलाओं की उम्र 48 साल से कम थी। वहीं 10 फीसद महिला मरीजों की उम्र 35 साल से भी कम थी। देर से इलाज के लिए पहुंचने पर ट्यूमर का आकार बड़ा (पांच सेंटीमीटर) होता है। एडवांस स्टेज में इलाज के लिए पहुंचने पर कैंसर हड्डी, फेफड़े व लिवर तक फैल चुका होता है।

## गॉल ब्लैडर कैंसर

### गॉल ब्लैडर कैंसर के कारण जानने में जुटा एम्स (Dainik Jagran:20190204)

[https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page\\_6-7503-1491-4.html](https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page_6-7503-1491-4.html)

राज्य ब्यूरो, नई दिल्ली: उत्तर भारत में गॉल ब्लैडर (पित्ताशय) कैंसर के मामले तेजी से बढ़ रहे हैं। खासतौर पर दिल्ली एनसीआर में जिस तेजी से यह बीमारी बढ़ रही है, उससे डॉक्टर भी चिंतित हैं। इसलिए गॉल ब्लैडर कैंसर के बढ़ते मामलों के कारणों का पता लगाने के लिए एम्स और अमेरिका के एमडी एंडरसन कैंसर सेंटर के विशेषज्ञ शोध में जुट गए हैं।

दक्षिण भारत में यह बीमारी नहीं होती: एम्स कैंसर सेंटर के प्रमुख डॉ. जीके रथ ने बताया कि उत्तर भारत में इस रोग के मामले अधिक होते हैं। दुनिया में सबसे अधिक चिली में एक लाख की आबादी में 30 लोग इस बीमारी से पीड़ित होते हैं। इसके बाद दिल्ली एनसीआर में यह बीमारी अधिक देखी जा रही है। यहां एक लाख की आबादी में 11 लोग इस बीमारी से पीड़ित हो रहे हैं। पिछले डेढ़-दो दशक में इसके मामले तेजी से बढ़े हैं। इसका स्पष्ट कारण मालूम नहीं है। वैसे अनुमान है कि यहां के पानी में ऐसे भारी धातु मौजूद हैं जिसके कारण यह बीमारी होने की आशंका है। इसके अलावा खानपान में जंक फूड व मोटापा भी इसका कारण हो सकता है पर अभी इसका प्रमाण नहीं है।

## दवा बैंक

### गरीबों की जान बचा रहा थर्ड जेंडर का दवा बैंक (Dainik Jagran:20190204)

[https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page\\_25-8028-1484-4.html](https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page_25-8028-1484-4.html)

थर्ड जेंडर की कहानियां आपने बहुत सुनी होंगी, लेकिन यह कहानी कुछ ज्यादा दिलचस्प होने के साथ प्रेरक भी है। जमशेदपुर शहर में इस समुदाय ने गरीबों की जान बचाने के लिए अनूठी पहल की है।

इन्होंने यहां दवा बैंक की शुरुआत की है। इस शानदार पहल को देश भर से लोगों का समर्थन मिल रहा है। ऐसे में रांची, बिहार, पश्चिम बंगाल, लखनऊ और चंडीगढ़ में भी दवा बैंक की बुनियाद रखी जा चुकी है। जल्द ही मुंबई, दिल्ली, गोवा और पुणे में दवा बैंक खोलने की योजना है। यही नहीं नेशनल एड्स कंट्रोल सोसायटी की दिल्ली टीम ने भी दिल्ली में दवा बैंक खोलने का आग्रह इस समुदाय से किया है।

यह दवा बैंक हर माह कई जरूरतमंदों की जान बचा रहा है। छोटी बीमारियों के अलावा किडनी, कैंसर, हार्ट सहित अन्य रोगियों को फ्री दवाएं दी जा रही हैं। इस बैंक की खासियत है कि मरीजों को सीधे दवाइयां नहीं दी जातीं। पहले दवाइयों की एक्सपायरी डेट देखी जाती है। इसके बाद डॉक्टरों की सलाह पर ही उन्हें मरीज को दिया जाता है। हाल ही में जमशेदपुर शहर के साकची निवासी एक व्यक्ति ने इस बैंक को लगभग 50 हजार रुपये की कैंसर की दवाएं सौंपी थीं। यह दवा बैंक फेसबुक व वॉट्सएप सहित अन्य सोशल मीडिया पर भी सक्रिय है। जमशेदपुर के इस बैंक को बेबो किन्नर, सोनिया किन्नर, अमरजीत, आनंद और करण संचालित कर रहे हैं।

दो साल में 1500 मरीजों को बांटी दवा: जमशेदपुर में दवा बैंक की शुरुआत 14 फरवरी 2017 को साकची से हुई। इसके बाद लोगों का समर्थन मिलता गया। अब शहर के हर क्षेत्र में यह मौजूद है। अलग-अलग क्षेत्रों में कुल 25 बॉक्स लगाए गए हैं। यहां आकर लोग दवाइयां दान करते हैं। कई लोग सदस्यों को फोन कर घर बुलाकर दवाएं सौंप देते हैं। दावा है कि इस अभियान के तहत सिर्फ शहर में अबतक 1,507 जरूरतमंदों को दवाएं मुहैया कराई गई हैं।

कैसे काम करता है दवा बैंक: थर्ड जेंडर के इस अभियान का नाम है- दवा दान जीवन दान। अगर आपके घर में कोई मरीज ठीक हो गया है और दवाएं बच गई हैं, तो आप अपने क्षेत्र लगे बॉक्स में जाकर दवाएं दान कर सकते हैं। या फोन कर सदस्यों को घर बुला सकते हैं। इसके लिए 9709639822 पर कॉल कर सकते हैं।

## बॉडी मास इंडेक्स

**कम बीएमआइ से बिगड़ सकती है खानपान की आदत (Dainik Jagran:20190204)**

[https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page\\_25-8345-1484-4.html](https://epaper.jagran.com/epaper/article-04-Feb-2019-edition-delhi-city-page_25-8345-1484-4.html)

बचपन के दिनों में बॉडी मास इंडेक्स (बीएमआइ) लगातार कम बने रहने से आगे चलकर मुश्किल का सामना करना पड़ सकता है। ताजा शोध के मुताबिक, ऐसे बच्चों में किशोरावस्था में एनोरेक्सिया नवरेसा की समस्या पैदा होने की आशंका रहती है। ऐसे लोग अपने वजन और खानपान को लेकर शंका से भरे रहते हैं। ऐसे किशोर हमेशा कम खाने और वजन को नियंत्रित रखने की चिंता में डूबे रहते हैं। इसी तरह बचपन में ज्यादा बीएमआइ वाले बच्चे किशोरावस्था में बिंज ईटिंग का शिकार हो जाते हैं।  
अमेरिकन अकेडमी ऑफ चाइल्ड एंड

व्यायाम आपके शरीर को ऊपर से ही नहीं, अंदर से भी मजबूत बनाता है। एक शोध के मुताबिक व्यायाम आपके अंदरूनी अंगों को प्रभावित करने वाली वसा को कम करता है। इससे दिल की बीमारियों और डायबिटीज का खतरा कम होता है। शोधकर्ताओं ने बताया कि वह वसा जो शरीर के बाहर दिखाई देती है, ज्यादा खतरनाक नहीं होती। आपकी आंतों में जमा होने वाली वसा इससे ज्यादा घातक होती है। अमेरिका की यूनिवर्सिटी ऑफ टेक्सास साउथवेस्टर्न के असिस्टेंट प्रोफेसर इयान जे. नीलैंड ने बताया कि यह वसा पूरे शरीर की व्यवस्था पर असर डालती है। अध्ययन में शामिल लोगों पर दवा और व्यायाम दोनों का असर परखा गया। आंतों में जमी वसा को खत्म करने में व्यायाम को दवा से भी ज्यादा कारगर पाया गया। - प्रेट्र

## Swine flu

### Swine flu death toll rises to 14 in state (The Tribune:20190204)

<https://www.tribuneindia.com/news/himachal/swine-flu-death-toll-rises-to-14-in-state/723695.html>

Over 100 test positive for H1NI virus so far

Mandi: Health Minister Vipin Singh Parmar on Sunday said people needed to take precautionary measures to check the spread of swine flu and there was no need to panic. The minister said a few deaths had been reported, which had triggered panic. The health authorities have been directed to educate people in villages about the symptoms of swine flu. In case of cold, fever and bodyache, one should immediately visit hospital.

The death toll due to swine flu has increased to 14, while nearly 100 persons have been tested positive for the H1NI virus in the state so far.

With the death of four patients on Saturday, two each in Hamirpur and Mandi, the death toll soared to 14. So far, five patients have died due to swine flu in Kangra, three in Mandi, two each in Hamirpur and Una and one each in Shimla and Bilaspur.

Out of the 14 patients admitted to Indira Gandhi Medical College (IGMC) and Hospital here on Sunday, five tested positive for swine flu, said Dr Janak Raj, Medical Superintendent, IGMC.

He said the patients were shifted to the isolation ward and were stable. So far, as many as 100 patients have tested positive for the virus out of the total 308 patients admitted to the IGMC and Dr Rajendra Prasad Medical College, Tanda, reveal health reports.

According to the health report, Kangra has reported 32 positive cases, Shimla (33), Mandi (8) and Chamba (5) Hamirpur (4), Solan (3), Bilaspur (11), Una (2) etc.

## **Hardlook: Crisis H1N1, outbreak of Swine Flu (The Indian Express:20190204)**

<https://indianexpress.com/article/cities/delhi/hardlook-crisis-h1n1-outbreak-of-swine-flu-5567363/>

A sharp spike in swine flu cases has caught Delhi's hospitals by surprise, with isolation wards running full and doctors advising abundant caution. Astha Saxena looks at how the healthcare setup is dealing with the crisis.

At Sir Ganga Ram Hospital, Saturday. In January, the hospital recorded 107 swine flu cases in its OPD, and 95 in its IPD. Six deaths were also reported; (below) patients are admitted to dedicated isolation wards. (Express photo by Praveen Khanna)

In 2018, 205 swine flu cases were reported in Delhi, along with two confirmed deaths. January 2018 saw just 11 cases — a fraction of the 643 in the first 31 days of this year. Of the 13 deaths reported last month, nine were residents of the capital.

Health experts The Indian Express spoke to suggested that this year's outbreak wasn't along expected lines. According to them, the influenza is known to rear its head every third year. With relatively few cases reported last year, this year was expected to show a similar trend.

Except, it did not.

“We were not expecting that cases will reach this number. Generally, any influenza changes its trend every two years. But now, any patient coming to us with even the slightest case of cough and cold is being asked to undergo the test for swine flu,” said Dr S P Byotra, senior consultant, internal medicine, Sir Ganga Ram Hospital. In January, the hospital recorded 107 swine flu cases in its out-patient department (OPD) and 95 in its in-patient department (IPD). Six deaths were reported from the hospital.

A harsher, longer winter this time around could be one explanation for the surge in the number of cases. Data provided by the India Meteorological Department showed that January mornings this year were the coldest since 2013. The average minimum temperature, recorded early in the morning, in January was 6.6 degrees Celsius. It was 7 degrees Celsius in January 2018, and 8.7 degrees Celsius in January 2017.

According to doctors, cases generally spike during extreme weather conditions — a dip in mercury during winters and extreme humidity during the rainy season often leads to a rise in numbers. “We are surprised to see the sudden surge in cases in the last two weeks. Awareness among patients could be a reason for the higher number. But till we find out a definite reason, all this is guess work,” said Dr

S Chatterjee, senior consultant, department of internal medicine, Indraprastha Apollo Hospital.

According to doctors, like seasonal flu, swine flu can lead to more serious complications, including pneumonia and respiratory failure. It can also make conditions such as diabetes or asthma worse. (Express Photo)

Hard to tell apart

Initially recorded in Mexico in 2009, swine flu was declared a pandemic by the World Health Organisation in 2010. The most common strain, H1N1, first reported in 2009, has since turned into a seasonal flu, said doctors. Symptoms include fever, cough, nasal secretion, fatigue, headache, body ache and sore throat. There are three categories of the virus — A, B and C. While the first two are considered stable, category C is dangerous and requires immediate ventilator support. “Every year, we have been seeing similar cases, due to which the virus has become seasonal. This virus is called an endemic. If the influenza takes on another form of virus, it becomes an epidemic. At present, it is transmitting from one human to another,” said Dr Jugal Kishore from the department of community medicine, Safdarjung Hospital. The hospital has seen 22 confirmed cases of H1N1 influenza, and three deaths this year.

Standard treatment for H1N1 is the Oseltamivir drug, which is to be taken only on prescription. Frequent washing of hands and avoiding crowded places are among precautions suggested by doctors to avoid catching swine flu which, because of its symptoms, is easily mistaken for the relatively harmless cough and cold.

Sitting in the H1N1 ward of Sir Ganga Ram Hospital, Bhavna Kharbanda, whose father-in-law is being treated for the disease, testifies to this: “He kept shivering for three days. There was no fever or any other symptom of swine flu. We thought it might be a case of pneumonia, but then we got the test results. The symptoms are such that it is difficult to tell whether it is swine flu.”

Caught off guard

The sudden surge in cases has also thrown the spotlight on the under-preparedness of authorities. As the number of cases spiked, the Union Ministry of Health and Family Welfare recently circulated guidelines on case diagnosis, management, vaccination, isolation criteria, risk categorisation and preventive measures to all hospitals and health facilities. Health advisories, in English and Hindi, on seasonal swine flu were also issued for the general public.

But many hospitals and patients are still complaining of a shortage of the swine flu vaccine in the market. More alarmingly, a majority of doctors and health workers in government hospitals are yet to be vaccinated against the disease. Usually, the vaccination process for health workers begins in October, but that hasn't happened this time around.

“We all are trying to get the vaccine at our level. Those who are in close contact with patients are advised to get it done themselves. The government usually starts the process by early October, so that the vaccination can have the intended effect,” said Dr Sunil Kumar, medical director of Guru Tegh Bahadur (GTB) Hospital.

As per guidelines of the Union Ministry of Health, it takes about two-three weeks for development of immunity after the vaccine is administered. For healthcare workers in an environment that exposes them to the virus, a vaccine should be administered at least a month prior to commencement of the flu season.

Families of those who succumbed to swine flu are still finding it hard to reconcile with how a disease they knew little about claimed the lives of their loved ones. (Express Photo)

Not just vaccines, shortage of N95 masks and gloves is also being felt in the markets. At hospitals, to ensure that the infection doesn't spread to other patients, those diagnosed with swine flu are admitted to isolation wards. Every hospital has set aside 5-10 beds from the existing number for such patients. The facility is generally created away from the emergency and general wards.

At Lok Nayak, one of the biggest Delhi government hospitals, doctors working closely with swine flu patients have not been vaccinated. "This was not included in the health programme of the Government of India," said Dr Kishore Singh, medical director of the hospital. Dr Karan Madaan, associate professor, department of pulmonology, AIIMS, said that this year, "hospitals are using a quadrivalent vaccine for primary target groups, including healthcare personnel, patients with co-existing chronic diseases and immuno-compromised patients. This vaccine contains two strains each of influenza A and B. Till last year, we were administering the trivalent form of the vaccine".

As compared to the trivalent vaccine, which has two strains of influenza A and one of B, the quadrivalent one is considered superior. It is also more expensive. While the trivalent vaccine costs around Rs 1,000-Rs 1,200, the quadrivalent one is around Rs 1,500.

"Vaccination is one of the important parts of the programme. But in the past years, we have noticed that not all health workers are readily opting for preventive measures. There have been attitudinal issues in many cases," said Dr Jugal Kishore.

#### A sudden tragedy

Families of those who succumbed to swine flu are still finding it hard to reconcile with how a disease they knew little about claimed the lives of their loved ones.

For 25-year-old Ravi Kumar's family, it started with a fever. Kumar was admitted to RML Hospital on January 7, and died on January 15. For the last six months, he had been suffering from frequent bouts of high fever, sore throat and indigestion.

But his condition deteriorated in January, and the fever touched 105 degrees. "We immediately took him to a nearby hospital, where he was admitted for 15 days. We couldn't see any improvement in his condition, so we went to RML," said Hari Singh, his father. According to the hospital administration, Kumar suffered multiple health issues apart from swine flu, including tuberculosis. "He had been availing treatment for the last six months, but doctors never mentioned anything about these diseases... We are still not able to understand what happened," his father said.

According to doctors, like seasonal flu, swine flu can lead to more serious complications, including pneumonia and respiratory failure. It can also make conditions such as diabetes or asthma worse.

Pregnant women, infants, elderly and people on long-term medication or those suffering from immuno-deficiency are at high risk, and should opt for the influenza vaccine. In the case of 72-year-old Dilwar Singh, who died on January 24, the first signs were viral fever and chest congestion. But when the fever continued for a week, his family sensed something was wrong.

“After a few days, he coughed up blood and had trouble breathing. We thought it was due to chest congestion and had no idea it could be swine flu. There were not many cases in Delhi last year. By the time we took him to the hospital, his lungs, kidney and heart had been affected. We couldn’t do anything,” said Manjeet Singh, his son.

The entire family was asked to take Oseltamivir for five days as a precautionary measure. In the midst of the crisis, the Delhi government’s health department, in a meeting last week, requested all hospitals to locally purchase medicines and vaccines for staff and health workers. A dedicated helpline number has been activated so people can seek assistance on the disease.

“We call it seasonal influenza, as per WHO guidelines, and only those who develop symptoms under category C are considered to be confirmed swine flu cases. Patients with co-morbid conditions like low immunity, those on immunosuppressants, or people suffering from blood cancer, renal transplant, diabetes or heart disease are at high risk of getting infected. Till last year, we had 25 hospitals with dedicated isolation wards for swine flu patients. This year, the number has increased,” said Dr Nutan Mundeja, Director General of Health Services, Delhi government.

#### The Guidelines

Healthcare workers in hospitals such as doctors, nurses and paramedics with a likelihood of exposure to influenza virus should be vaccinated. This includes:

All medical, paramedical personnel working in casualty/emergency department of identified hospitals treating influenza cases

All medical and paramedical personnel working in ICU and isolation wards managing influenza patients

All personnel identified to work in screening centres set up for categorisation of patients during seasonal influenza outbreak

Laboratory personnel testing suspected influenza samples

## **Elder abuse**

### **Capital among top 8 cities with maximum elder abuse: survey (The Hindu:20190204)**

<https://www.thehindu.com/news/cities/Delhi/capital-among-top-8-cities-with-maximum-elder-abuse-survey/article26169949.ece>

Neglect from family members is a major concern, says NGO

The Capital ranks among the top eight Indian cities with high percentages of elder abuse, a survey by an NGO revealed.

The neglect faced by the elderly from their children, relatives or close ones, is a major concern regarding the safety of senior citizens, the HelpAge India survey stated.

Chief Executive Officer Helpage India Mathew Cherian said social engagement is very necessary for the security of senior citizens living alone in the city.

“We are in touch with many Residents Welfare Associations [RWAs] and have requested them to keep a check on senior citizens living here. There should be a team of residents to ensure regular visits to the house where the elderly stay,” said Mr. Cherian.

The HelpAge India, which has a helpline, also coordinates with the police to ensure the safety of senior citizens.

#### Recent cases

In January, the police arrested a masseuse and apprehended her juvenile son for allegedly murdering an elderly couple in south Delhi’s Mount Kailash apartments.

On January 18, the juvenile had murdered the couple — Virender Khaneja and Sarala Khaneja. Their bodies were detected after eight days in a semi-decomposed state. The case came to fore when the victims’ son, settled in abroad, could not contact them and requested a relative to visit their house.

The killer managed to sneak into the high-security flat located on the ninth floor and also flee with the robbed items after the crime.

“I met Sarala a month ago for a short time. In high societies, neighbours do not interfere in each other’s lives. In 2017, I had gone to pay my condolences when their younger son died due to illness,” said a next-door neighbour.

Meanwhile, police said the domestic helps in the building are verified.

‘Collective responsibility’

“It is the collective responsibility of society to take care of senior citizens living alone in their neighbourhood,” said an officer.

In November 2018, the police arrested a 51-year-old driver in connection with the murder of a senior citizen in south-east Delhi’s Sarita Vihar.

In September 2018, two women, including a senior citizen, were brutally murdered by a plumber and his three associates in outer district’s Mianwali, the police said, adding that the accused have been arrested.

## **Leprosy**

### **Battling more than just a disease: on leprosy (The Hindu:20190204)**

<https://www.thehindu.com/news/cities/Delhi/battling-more-than-just-a-disease/article26170044.ece>

The fight to end discrimination, stigma and prejudice against people afflicted with leprosy rages on in India, which reported the highest number of new cases in the world in 2017. Bindu Shajan Perappadan speaks to Vagavathali Narsappa, who was abandoned as a child due to his medical condition, about the changing dialogue around leprosy

“Leprosy does not kill, but the social discrimination, isolation and disability associated with the disease do not allow people to reach their potential, which is worse than death,” said Vagavathali Narsappa, who works with the Association of People Affected by Leprosy (APAL-India), a support group for leprosy patients.

The 55-year-old activist was abandoned by his parents at the age of nine when he was diagnosed with the disease. Left to fend for himself on the streets, the disease quickly spread to his fingers, which eventually had to be amputated.

“I met my wife at the leprosy hospital where we were both being treated. We have been blessed with two girls... we now work for APAL to support people afflicted with leprosy,” said Mr. Narsappa, who was recently in the Capital to participate in leprosy eradication-related programmes.

#### Timely treatment

One of the biggest challenges in the battle against leprosy is that one in every 10 new leprosy patients is a child, he said, adding: “Unlike other diseases, leprosy does not have a

vaccination or a preventive pill... the fact that leprosy can cause childhood disabilities makes awareness and timely treatment vital.”

Older patients are also vulnerable, with untreated ulcers often proving to be fatal. “The government and various organisations working in this area are doing their bit but the stigma attached to leprosy still remains... though people are more open to diagnosis and treatment now,” said Mr. Narsappa.

While welcoming the passing of a Bill excluding leprosy as grounds for divorce, the activist said that society’s mindset needs to change too.

“My dream and mission is to work towards zero disability, and for that to happen we need to create awareness, remove misconceptions about leprosy, have early detection and voluntary reporting. School curriculum should make children aware that early detection can prevent disability. People afflicted with leprosy should be made partners in policy making,” said Mr. Narsappa.

Last-mile efforts in leprosy eradication will need enabling environments where people afflicted by the disease feel comfortable in coming forward and seeking treatment, he said, adding that till this happens eradicating leprosy “will remain a distant dream for India”.

### World Leprosy Day

In India, World Leprosy Day is celebrated on January 30 to commemorate the death anniversary of Mahatma Gandhi. The date was chosen by French humanitarian Raoul Follereau as a tribute to the life of the Mahatma, who had compassion for people afflicted with leprosy.

This year’s theme was ‘ending discrimination, stigma, and prejudice’.

Several reports have revealed that a majority of leprosy patients have experienced some form of social stigma and discrimination and nearly 50% end up suffering from mental health issues such as depression or anxiety.

### Know the disease

Leprosy is a chronic infectious disease caused by *Mycobacterium leprae*

Leprosy is a major cause of physical disabilities. Timely detection and treatment of cases, before nerve damage sets in, is the most effective way of preventing disabilities due to the disease

The year 2000 marked the elimination of leprosy as a public health problem at the global level - a significant milestone in history. Elimination means the prevalence of less than one case per 10,000 population, globally. The elimination target was also achieved by most of the endemic countries at the national level by the end of 2005

Approximately 96% of leprosy cases are limited to 15 countries, which report more than 1,000 new cases annually

In the early 1980s, the World Health Organization introduced multidrug therapy (MDT), which revolutionised treatment of leprosy

MDT offers multiple benefits: The infected person ceases to be infective after a single dose; it is a complete treatment; and it reduces the risk of disabilities and consequent stigma

**‘Correct clinical diagnosis of leprosy at an early stage of infection is vital’ (The Hindu:20190204)**

<https://www.thehindu.com/news/cities/Delhi/correct-clinical-diagnosis-of-leprosy-at-an-early-stage-of-infection-is-vital/article26170060.ece>

Delay in seeking treatment can lead to permanent physical disability, disfigurement, and permanent nerve damage, warns D.M. Mahajan

D.M. Mahajan, senior consultant (dermatology) at Indraprastha Apollo Hospitals, Delhi, speaks to Bindu Shajan Perappadan about leprosy and its cure

What is leprosy?

It is a chronic, progressive infection in which a person’s skin, eyes, respiratory tract and peripheral nerves are affected. It is caused by *Mycobacterium leprae*, and while the disease is not highly contagious, repeated contact with the infected person can lead to infections.

How does it spread?

The pathogen spreads through droplets released in the air when the infected person sneezes or coughs. These air-borne mucosal secretions, if inhaled by a healthy person, can lead to leprosy infection. The disease progresses slowly as its incubation period is five years. Symptoms may not appear for as long as 20 years. Skin lesions, granulomas (bumps on skin), numbness of appendages, muscle weakness are some of the common symptoms associated with leprosy.

Lepromin skin test is used to determine the contraction of the disease, as well as its type and stage. A correct clinical diagnosis at an early stage of infection is vital.

Can delay in treatment harm the patient?

Delay in seeking treatment for leprosy can have dire consequences for the patient.

It can lead to permanent physical disability, disfigurement, and permanent nerve damage, which can lead to inability to use arms, legs, hands and feet, loss of hair (even from brows and eyelashes), glaucoma (damage to optic nerve in eye), inflammation of iris, blindness, infertility due to erectile dysfunction, kidney failure, severe nasal congestion, and many other complications. It is of utmost importance that the disease is diagnosed and treated early to stop its progress before it leads to severe tissue damage.

Is leprosy curable?

Leprosy is curable. Multi-drug therapy developed by the World Health Organization in 1995 has proven to be highly effective in treating the infection. India provides free treatment for leprosy. However, many people do not come forward to seek treatment as they are afraid of the stigma and discrimination attached to the disease. While it is true that as a precaution, long-term physical contact with an infected person should be avoided, there is no need to completely isolate a leprosy patient. After the course of treatment, when a person is free from infection, he/she is no longer contagious. They can resume their role as a productive member of society.

## **Parkinson's disease**

### **Are we facing a Parkinson's pandemic? (Medical News Today:20190204)**

<https://www.medicalnewstoday.com/articles/324344.php>

According to one new study paper, evidence is emerging that Parkinson's disease is becoming a pandemic. The authors discuss their concerns and the challenges ahead.

Parkinson's is on the rise, but can we slow its march?

Parkinson's disease is a neurodegenerative condition.

Primarily affecting the motor regions of the central nervous system, symptoms tend to develop slowly.

Over time, even simple movements become difficult; and, as the disease progresses, dementia is common.

Historically, Parkinson's was rare. In 1855, for instance, just 22 people living in the United Kingdom died with Parkinson's disease.

Today, in the United States, the National Institutes of Health (NIH) estimate that about half a million people are living with the disease.

Recently, a group of experts from the field of movement disorders published an article in the *Journal of Parkinson's Disease*. Titled "The emerging evidence of the Parkinson's pandemic," the authors outline their growing concerns and what might be done.

A pandemic?

Globally, neurological disorders are the leading cause of disability. Of these, Parkinson's disease is the fastest-growing. In 1990–2015, the number of people living with Parkinson's doubled to more than 6.2 million. By 2040, experts predict that that number will reach 12 million.

The term "pandemic" is normally associated with diseases that can spread from person to person. Of course, this does not apply to Parkinson's. However, according to the study authors, the condition's spread does share some of the characteristics of a pandemic.

How coffee might protect against Parkinson's

A recent study investigates which compounds in coffee produce its neuroprotective effects.

For instance, it is a global concern that is present in every region of the planet. It is also becoming more prevalent in all regions that scientists have assessed. Additionally, pandemics tend to move geographically. In the case of Parkinson's disease, it seems to be moving from West to East as demographics slowly change.

Some researchers also believe that although people cannot "catch" noncommunicable conditions such as diabetes through contact with pathogens, they may still be pandemics. They explain that these conditions are still communicable via new types of vectors — namely, social, political, and economic trends.

In the case of diabetes, for instance, one author argues that we are transmitting risk factors across the world. Such factors include "ultraprocessed food and drink, alcohol, tobacco products, and wider social and environmental changes that limit physical activity."

Increasing risk

Because Parkinson's primarily affects people as they grow older, the steady increase in humanity's average age means an inevitable increase in the prevalence of Parkinson's. This slow lift in our average age is not the only factor playing into the hands of a potential epidemic.

Some studies show that, even when analysis accounts for increasing age, Parkinson's disease still seems to be becoming more prevalent.

This means that the average older adult today has an increased risk of developing Parkinson's disease.

The study authors outline some of the factors that appear to be increasing the risk of Parkinson's disease today.

### Tobacco's surprising influence

Globally, the number of people who smoke tobacco has dropped significantly over recent decades. People roundly and rightly consider this to be a huge benefit to public health.

However, smoking tobacco appears to reduce the risk of Parkinson's disease. Some studies have shown that smoking can reduce risk by more than 40 percent.

Reducing tobacco consumption may therefore be raising the overall prevalence of Parkinson's disease.

### The growth of industry

Also, industrialization might be playing a part in the steady rise in Parkinson's risk. As the authors write:

"Numerous byproducts of the Industrial Revolution, including specific pesticides, solvents, and heavy metals, have been linked to Parkinson disease."

For instance, China — a country that has witnessed rapid industrial growth — has had the swiftest increase in Parkinson's disease.

Scientists are still debating the role that pesticides play in Parkinson's. However, one in particular, paraquat, is strongly linked to the condition and is now banned in 32 countries.

Despite this, the study authors say that in the U.S., people are using it "in ever greater quantities." The U.K. is 1 of 32 countries to have banned paraquat usage. Regardless, they continue to manufacture it and sell it to countries including the U.S., Taiwan, and South Africa.

"Parkinson[s] disease is increasing and may be a creation of our times," write the authors. "As opposed to most diseases whose burden decreases with improving socioeconomic level, the burden of Parkinson[s] disease does the opposite."

Increasing rates of Parkinson's disease are concerning for obvious reasons, but what can we do?

### Can we turn the tide?

The study authors believe that the key to transforming this seemingly inevitable rise in Parkinson's disease is activism.

Conditions such as HIV and breast cancer have benefited widely from this approach. For example, many focus on raising awareness, amassing funds, improving treatments, and changing policy.

Stopping the production and use of certain chemicals that may increase the risk of Parkinson's is essential. As the authors write:

"We have the means to prevent potentially millions from ever experiencing the debilitating effects of Parkinson disease."

Also crucial, as ever, is financial backing. More research is needed to understand why the condition appears and how it progresses, and this type of scientific investigation is never cheap.

In particular, scientists need to develop better medications. Currently, the most effective therapy is levodopa, which is 50 years old and not without its issues, including both psychological and physical side effects.

While this recent analysis is worrying, the authors leave the reader with some positivity, concluding that "[t]he Parkinson pandemic is preventable, not inevitable."

## **Skin cancer**

### **How skin cancer becomes invasive (Medical News Today:20190204)**

<https://www.medicalnewstoday.com/articles/324350.php>

In a study on mouse models and human tissue, researchers have revealed how aggressive forms of skin cancer are able to co-opt the immune system to become invasive. Knowing this could lead to better, more effective treatments.

A study reveals the key factors that allow melanoma to become invasive.

New research, the findings of which now appear in the journal *Cell*, has found a mechanism that allows aggressive forms of skin cancer to become invasive and spread quickly.

The study, which nonprofit organization Cancer Research UK funded, was conducted by a team from King's College London and Queen Mary University of London (QMUL), both in the U.K.

In their experiment, they analyzed the makeup of skin cancer, or melanoma, cells, looking for the factors that work to their advantage.

They found that such cancer cells release certain molecules that interact with the immune system, sending out signals that favor the growth and spread of tumors.

In the future, the researchers hope that their new discovery will allow scientists to come up with better strategies for targeting aggressive melanoma and preventing a relapse.

#### A complex signaling mechanism

The research team looked both at melanoma tumor samples collected from human patients as well as mouse models of this form of cancer.

The investigation revealed that skin cancer's aggressiveness is largely due to the presence of the protein myosin II in large quantities within cancer cells.

#### Modified herpes virus effective against late-stage melanoma

In the future, treatments for skin cancer could include a "bespoke" herpes virus.

Myosin II contributes to cell motility, meaning that it helps cells move around; thus, high levels of this protein allow cancer cells to become more mobile and spread around the body quicker.

However, the researchers also found that myosin II stimulates the secretion of substances that send out signals to the immune system, "telling" it to bypass cancer cells.

More specifically, these substances "speak" to macrophages. These are specialized immune cells that normally consume and eliminate foreign bodies, malfunctioning cells, and cellular debris.

When these macrophages receive the signals from the melanoma cells — due to the action of myosin II — this "programs" them to avoid attacking cancer tumors, letting them grow and spread freely.

#### Targeting the chemical culprits

Another effect of the substances secreted thanks to myosin II is the puncturing of blood vessels so that cancer cells can pass into the bloodstream and travel to distant sites inside the body.

"This study," explains lead author Prof. Vicky Sanz-Moreno, of QMUL, "highlights how cancer cells interact with and influence their surrounding environment to grow and spread."

"Developing treatments that target the chemicals that alter the immune system," she adds, "could help to prevent the spread of the disease."

Further analyses showed the team that the most important chemical released through myosin II is interleukin 1A, a signaling protein that helped boost the invasiveness of cancer cells.

When the researchers decided to target myosin II and block its activity, cancer cells released less interleukin 1A — both in mouse models and human melanoma samples.

"By using therapeutic drugs that block either myosin II activity or the release of interleukin 1A, we can make the tumor less invasive and slow its growth, making it easier to treat."

Prof. Vicky Sanz-Moreno

On the lookout for 'treatment combinations'

The researchers explain that some drugs targeting myosin II activity already exist, but that people currently use them chiefly in the treatment of other conditions. These include glaucoma, an eye condition that tends to appear later in life and can lead to vision loss.

Prof. Sanz-Moreno and colleagues are now planning to test myosin II blockers in conjunction with current cancer treatments to see whether the two are compatible.

The option of using interleukin 1A inhibitors to reduce cancer cell invasiveness is also in sight; at present, there are clinical trials putting such drugs to the test for the treatment of colon cancer.

"We are excited to find out whether inhibitor drugs could be used in combination with other targeted therapies," says Prof. Sanz-Moreno.

"By identifying effective treatment combinations," she adds, "we hope that in the future myosin II and interleukin 1A inhibitors could be used to improve patient outcomes and reduce the risk of melanoma coming back."

Prof. Richard Marais, director of the Cancer Research UK Manchester Institute, did not contribute to the study but notes that the new findings could lead to better methods of stopping melanoma from returning following traditional cancer therapy.

"When melanoma is removed, there's always a chance that some cells could remain," explains Prof. Marais, adding, "What this study shows is that we may be able to develop treatments to stop those remaining cells from spreading after surgery, helping patients to survive for longer."

## **Cardiovascular Disease**

### **Cardiovascular deaths on the rise in the US (Medical News Today:20190204)**

<https://www.medicalnewstoday.com/articles/324351.php>

According to the American Heart Association (AHA), nearly half of all adults in the United States have cardiovascular disease. It caused more deaths in 2016 than previous years, despite rates of cardiovascular deaths having declined worldwide.

The amended hypertension guidelines explain the high prevalence of cardiovascular disease in the U.S., say the AHA.

Heart disease is the leading cause of mortality in the United States, followed closely by cancer and chronic respiratory diseases.

In fact, heart disease causes almost 1 in 4 deaths in the U.S.

Staying abreast of the latest statistics on the prevalence of this condition is key for prevention.

Physicians, governmental organizations, and patients alike can benefit from information on heart disease death rates and risk factors that stave off cardiovascular conditions.

In this context, the American Heart Association (AHA) have just published their 2019 updated Heart and Stroke statistics in the journal *Circulation*.

The report is a compilation of the latest statistics on the prevalence of cardiovascular disease both in the U.S. and across the globe. The AHA worked in collaboration with the National Institutes of Health (NIH) and other governmental organizations to put the report together.

According to the report, about 48 percent of all U.S. adults — or almost half of the adult population — are living with a form of cardiovascular disease.

Cardiovascular disease is an umbrella term for several conditions, including atherosclerosis, heart disease, heart failure, stroke, heart attack, arrhythmia, and heart valve problems.

#### **Hypertension and cardiovascular risk**

The updated AHA report found that in the U.S., cardiovascular deaths have increased significantly in recent years, despite the fact that across the globe, the number of cardiovascular deaths has declined.

Specifically, in the U.S., 840,678 cardiovascular deaths were registered in 2016, a number that has gone up from 836,546 deaths in 2015.

However, worldwide, 17.6 million people died from a cardiovascular condition in 2016, compared with 17.9 million in 2015.

### Heart attacks increasingly common in young women

New research finds that young women are more likely to be hospitalized due to a heart attack than men.

Importantly, the recently reported high prevalence of cardiovascular disease is mainly due to the fact that the definition of what constitutes high blood pressure has changed.

According to the AHA's updated 2017 hypertension guidelines, a reading of 130/80 millimeters of mercury (mm Hg) or above counts as high blood pressure, whereas previously this reading was 140/90 mm Hg.

Dr. Ivor J. Benjamin, the president of the AHA and the director of the Cardiovascular Center at the Medical College of Wisconsin in Milwaukee, comments on the importance of high blood pressure for cardiovascular risk.

"As one of the most common and dangerous risk factors for heart disease and stroke," he states, "this overwhelming presence of high blood pressure can't be dismissed from the equation in our fight against cardiovascular disease."

"Research has shown that eliminating high blood pressure could have a larger impact on [cardiovascular] deaths than the elimination of all other risk factors among women and all except smoking among men."

Dr. Ivor J. Benjamin

### Fewer people smoke and more are exercising

The recent report also notes some encouraging improvements in risk reduction. The proportion of teenagers who do not smoke, for example, has increased by almost 20 percent in 1999–2016.

Meanwhile, 94 percent of adolescents aged 12–19 did not smoke in 2015–2016, whereas only 76 percent did not smoke in 1999–2000.

Additionally, the number of teenagers aged 12–17 who smoked in the past month decreased by two-thirds between 2002 and 2016.

Approximately 80 percent of adults did not smoke in 2015–2016, and the number of male adults who smoke has dropped from 51 percent in 1965 to 16.7 percent in 2015. Also, 34 percent of females smoked in 1965, while only 13.6 percent smoked in 2015.

Finally, the report also mentions that the rate of physical inactivity has declined, as more and more U.S. individuals are engaging in various types of exercise.

Namely, over half of U.S. students engage in muscle-strengthening exercise on 3 days per week or more, and the number of physically inactive adults has dropped by over a third between 2005 and 2016.

However, the report authors warn that obesity and sleep deprivation remain significant risk factors for cardiovascular disease and other chronic conditions. The rates of obesity in the U.S. are still high, as are the number of adults who do not get enough sleep.