



CROSSROADS

The official newsletter of The Premed Scene

The Hope Corner:
"Coping and
Continuing
the Fight"

WHAT'S IN THIS ISSUE

**FINANCIAL STRESS &
INCREASED MORTALITY
RATES**

**NOVEL SIGNALING
PATHWAY FOR THE
PREVENTION OF LUNG
CANCER RELAPSE**

**THE INVISIBLE
PANDEMIC: CHRONIC
KIDNEY DISEASE**

THE ANT-CANCER DIET

A Word From our Newsletter Director

By Ryen Belle Harran

Dear Crossroads Newsletter readers,

Can you believe that we're only 90 days into the year 2022? Yet, so much has happened just within the last few days...increasing political tensions due to the war in Europe, fluctuating stock values across the globe, Will Smith's now-infamous slap at the 2022 Oscars...

But despite both the ridiculous and the disappointing world news of late, scientific discovery has continued to flourish internationally.

Accordingly, our content writers have gathered up some pretty interesting research articles that have been published throughout the month of March.

Aprile Bertomo, for instance, spotted a novel research article, suggesting a link between financial stress and higher mortality rates. Oriana Tolentino has brought research from Columbia University, showcasing a newfound signaling pathway that could potentially prevent lung cancer relapse. Ashlyn Southerland discovered a Swedish research study on chronic kidney disease, an often overlooked, but very relevant disease in modern medical history. Ilana...

Last but not least, for this month's Hope Corner Article, we have a special topic written by Oriana Tolentino. I won't give any of it away here, so go ahead and scroll to the next page to find out what it is all about!

Happy reading!
Yours truly,

Ryen Belle Harran
Ryen Belle Harran



COPING AND CONTINUING THE FIGHT

Oriana Tolentino

An illness can definitely alter or even wreak havoc on almost all aspects of life. The diagnosis could cause an individual to experience emotions like fear, anxiety, sadness, and anger. Deteriorating health and frequent trips to the hospital may lead to losing hope and meaning. Therefore, here are a few reminders and affirmations when battling such medical struggles!



Allow yourself to let out your feelings about your condition and difficulties.

It is normal to feel overwhelmed; therefore, you must allow yourself time to process the new information. Ignoring and/or bottling up your feelings may cause you to collapse under immense stress and worry. Also, do not dictate what you should feel based on other people's experiences because each person's circumstances are unique.

Remember that you are not alone.

You do not have to deal with everything by yourself. Reach out to your support system filled with people whom you trust and even those who may be experiencing similar situations as you! Strengthen your bond with them during these tough times.



Do not forget that you are strong and brave!

The illness should not define who you are and who you will become. Celebrate even the smallest achievements! Ensure that you would still do the things that you enjoy. Discover new passions that would give a renewed meaning and purpose to your life.





THE ANT-CANCER DIET

Ilana Saidov

Every year there is an unfortunate increase in the number of cancer patients. These individuals, now faced with a difficult journey ahead of endless treatments of chemotherapy or radiation, will have to change their entire way of living.

What if I can tell you that there are preventative measures you can take every day to decrease your likelihood of having cancer in the future. It can be surprising to learn that a staggering 30-40% of all cancers can be prevented by simply controlling our diet, as the food we eat has a tremendous impact on our future health

You may wonder - what should we eat to prevent this illness? I present to you - the "Anti-Cancer Diet". This diet includes an adequate, yet not successive amount of calories, ten servings of vegetables (rich in folic acid found in dark green vegetables), and four servings of fruits. Additionally, this diet is low in fat, red meat, refined sugar, and refined flour but high in fiber. It also includes specific details about essential vitamins such as vitamin D, B12, C, and E which can be obtained from fruits and vegetables, as well as from adequate sunshine. By taking control of our diet and allowing ourselves to focus on consuming foods rich in vitamins, we can decrease our chances of future health complications. Will you take on the "Anti-Cancer Diet?"

Source:

Donaldson, Michael S. "Nutrition and cancer: a review of the evidence for an anti-cancer diet." Nutrition journal 3.1 (2004): 1-21.



FINANCIAL STRESS AND INCREASED MORTALITY RATES

Aprile Bertomo

A new study has found that in adult individuals that have recently been healing from an acute myocardial infarction, great financial challenges have been associated with higher risk of mortality. It had been noted that a confounding factor that could affect the strength of such an identified association is the extend of the severity of the disease experienced by the individual. Yet, regardless, such findings can aid physicians and other health professionals analyzing such patients in engaging in more holistic analyses of disease development and the relationships between illness and other socioeconomic factors in patients.

It had been noted that past studies had identified associations between financial difficulties and the utilization of prescription drugs and other illnesses. Consequently, it was explained that a potential step that could be taken to be aware of such correlations in patients could be better screening of patients and their personal lifestyles. To go further, both local and national systems of government could work to develop policies that allow for an emphasis on identification of financial difficulties among older individuals who are or had recently been treated for myocardial infarction.

Works Cited:

Lyles, Ashley. "Financial Strain Tied to Increased Mortality after Mi." Medscape, Medscape, 28 Mar. 2022, <https://www.medscape.com/viewarticle/970967?reg=1>.

Falvey, Jason R., et al. "Association of Financial Strain With Mortality Among Older US Adults Recovering From an Acute Myocardial Infarction." JAMA Internal Medicine (2022).

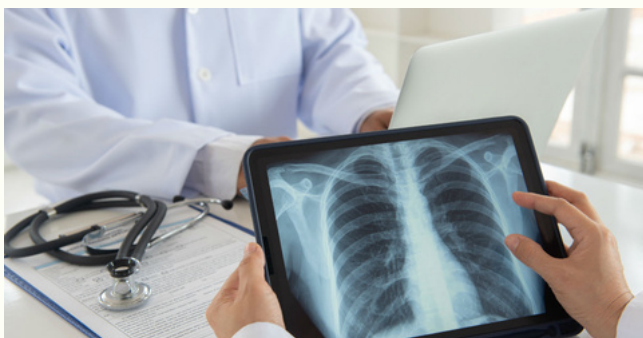
APA



NOVEL SIGNALING PATHWAY FOR THE PREVENTION OF LUNG CANCER RELAPSE

Oriana Tolentino

Lung cancer is the leading cause of cancer death in the United States due to metastatic tumor growth caused by mutations in the epidermal growth factor receptor (EGFR). Therefore, earlier this month, researchers at Columbia University have potentially created a new combination therapy by discovering the signaling pathway S100A9-ALDH1A1-RA in EGFR-mutant lung cancer. This pathway causes cancer relapses and progressions even after the Osimertinib treatment. This is because metastatic cancer cells are not eliminated by the said targeted therapy and these have adaptations to linger and flourish in the brain.



With that, the researchers produced mouse models and employed proteomic and transcriptomic profiling to gain more insights into metastatic development. They discovered that there was the expression of higher levels of protein S100A9 in mice that had relapsing cancer after the Osimertinib therapy. Additionally, the retinoic acid pathway antagonist AGN194310 has a major role in eradicating remaining cancer cells in the brain which decreases the occurrence of brain metastasis.



THE INVISIBLE PANDEMIC: CHRONIC KIDNEY DISEASE

Ashlyn Southerland

Chronic kidney disease (CKD), distinguished through a gradual loss of renal function, continues to rise as a global cause of death. Particularly, in areas of long life expectancy, it is estimated that CKD will be the fifth largest cause of death by 2040 and the second largest cause of death by 2100. Despite this knowledge, CKD is still rarely discussed or highlighted. For instance, even though researchers have found that CKD has a significant correlation with COVID-19 mortality, media, articles, and resulting literature fail to list CKD as a major health concern, and instead continue to list diabetes and hypertension.

Swedish researchers composed a large cohort of positive CKD-criteria participants (57,880) to evaluate health care providers' awareness of CKD and assess their ability to correctly diagnose participant "patients". From this study, CKD diagnosis was found to be shockingly small. In comparison, 82% of the CKD-criteria participants were diagnosed with hypertension, but only 23% of the same cohort were diagnosed with CKD. In addition, through qualitative interviewing and review measures, the low awareness of CKD appears to perpetuate systematic biases within electronic health records (which aid in the disease's "invisibility" to healthcare authorities) and overprescription of nephrotoxic medications.

CONNECT WITH US

