



Summer 2024

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Enjoy Your Summer



Message from the President

Diane Lemon



Welcome to summer 😊

Most of us are very happy to now navigate sidewalks and streets unfettered with ice and snow. We have been fortunate to enjoy excellent speakers over the last few months. The appearance of budding leaves, crocuses, tulips and daffodils gives us incentive to prepare our gardens and lawns.

With the passing of our member, Evelyn Bank, we are left with a void in our small group. Condolences go to her husband, Al.

I recently had the privilege of listening to a very inspiring talk by a woman who lives with Cerebral Palsy and limited sight. She discussed various forms of Ableism which is discrimination against disabled people. Individual ableism occurs when someone intentionally discriminates against someone with a disability. Cultural ableism is noted when certain groups are discriminated against based on religion, ethnicity, gender or social advocacy. System ableism results in situations such as lack of access to buildings, parks and other venues. Internalized ableism is the culmination of the previous described three types. When one takes these on it can be detrimental to living a happy life with a disability. Her message was to encourage interdependence and never be afraid to ask for help. True accessibility requires breaking down barriers to belonging.

It may be enhanced by fostering reciprocity. Expectations are an example of connections. We should never feel shame in asking anyone for help. To collaborate with others in achieving acceptance and accessibility is rewarding. Inclusion should be achieved when we proceed with a positive attitude.

At the Meetings

November 2023 – Nicky's Café - Odds and Ends: David Cotcher said he has acid reflux so he asked if anyone knows of where he can buy a Queen-sized bed that the head and foot of the bed is adjustable individually. Most people said that to get a fully adjustable bed for two people you have to get a king-sized bed but that is too large for their bedroom.

Diane Lemon said that studies have shown that Gastro-Esophageal Reflex Disease (GERD), otherwise known as Acid Reflux, is more prevalent in those with Post-Polio syndrome than in the general population. Proton Pump Inhibitor drugs such as Omeprazole stop the stomach acid from going up to the esophagus and thus prevent Barrett's Esophagus which can turn cancerous.

Other New Business: Diane Lemon completed a survey by Polio Australia requesting information from Polio support groups around the world.

Christmas party: We all enjoyed a turkey dinner with all the trimmings and were able to socialise with fellow members after the meal.

January 2024 – By Zoom - New Business: Diane Lemon reported about various group meetings that she attended.

At a March of Dimes meeting, they said that

research is being done on comparing symptoms of Long COVID19 to Post-Polio Syndrome. Diane volunteered because she has had both Polio and COVID19.

Polio Australia sent a survey out to Polio support groups all over the world, but they only got responses from two in Canada and six in the USA.

The Post-Polio Advisory Group wants to make a ten-minute video to educate doctors and physiotherapists about PPS.

Diane Lemon will write universities that train doctors to inquire about how much Post-Polio Syndrome training that they do.

Open Forum: Our guest speaker was Rylie Threinen, from Sask Polytechnic who did a presentation on dental hygiene. An outline of her presentation is included later on in this issue.

February 2024 – By Zoom - Open Forum: Our guest speaker, Susan L. Schoenbeck, MSN, RN, a nurse educator, gave a presentation about being kind to others, titled “Our Heart is Known by the Path We Walk”. A summary of her presentation is included later on in this issue.

Odds and Ends: Ivan Jorgensen attended the Post-Polio Syndrome Self Advocacy Group meeting on February 22, 2024, by Zoom. They discussed how many people with PPS have been taught not to question anyone of authority, so they don't ask questions or challenge doctors, physiotherapists, etc. Having someone to advocate for you if you are not able to clearly speak for yourself is important.

March 2024 – At Green Falls Landing and by Zoom
New Business: Election of executive.

The following people are the Executive Officers/Directors of Polio Regina Inc. for 2024-2025:

President – Diane Lemon

Vice-President – Carole Tiefenbach

Secretary – Ivan Jorgensen

Treasurer – David Cotcher

Phone Co-ordinator – Elaine Cotcher

Web Master – David Cotcher

PostBox Editor – Ivan Jorgensen

Directors at Large – Ken Holliday, Wilf Tiefenbach

Odds and Ends: There was an article in the March 15th Leader Post entitled “Province establishes Accessibility Advisory Committee”. There were more than 180 applicants for the committee including our

Ken Holliday but only 15 were chosen. Ken was not chosen.

Other New Business: Diane Lemon read definitions of advocacy that were printed in February edition of the Post-Polio Manitoba newsletter. The article is reprinted later on in this issue.

The City of Regina has asked Ken Holliday if he would sit on a committee about paratransit. Ken said yes.

The Regina Paratransit asked Clarence Biberdorf to attend a meeting on March 27th about taxi services for disabled. He said he will attend.

Open Forum: Our guest speaker Toni Tinio, a nurse practitioner, gave a presentation entitled “Nurse Practitioner’s Role in Primary Health Care”. A summary of his presentation is included later on in this issue.

April 2024 – At Green Falls Landing and by Zoom

Old Business: The City of Regina had asked Ken Holliday if he would sit on a committee about paratransit. Ken said he hasn't heard from them and there have been no meetings yet.

The Regina Paratransit asked Clarence Biberdorf to attend a meeting on March 27th about taxi services for disabled. He said the city wants to use more taxis rather than paratransit because it is cheaper. Some of our members said that their experience with taxis has been scary. Their wheelchairs or scooters were not properly secured, the drivers drove aggressively, and the drivers did not know how to handle them properly. The drivers require more training. Some drivers ask for payment even after the trip had already been paid for.

Odds and Ends: Polio Manitoba has asked Carole Tiefenbach to be president and Wilf Tiefenbach to be secretary.

Ivan Jorgensen mentioned an article in the Leader Post about COVID19 booster vaccinations being available for persons over 65, residents of long-term care facilities and retirement residences if they have not had a vaccination in the last six months. Vaccinations for XBB.1.5 are available at any clinics operated by the SHA or at participating pharmacies. Diane Lemon's grandson is designing an autonomous wheelchair.

Open Forum: We had a discussion among members about how they have been doing this winter.

Evelyn Mae Bank

Evelyn was a long-time member of Polio Regina and a frequent contributor to our meetings. She endured a health system that doesn't fully understand the adverse and deteriorating effects of Post-Polio Syndrome which caused her a great deal of pain and suffering. We admire her strength and courage, and we miss her. The following is Evelyn Bank's obituary.



December 20th, 2023

Evelyn BANK

1947 - 2023

It is with great sadness that we announce the passing of Evelyn Bank (nee Ursulescu) at the age of 76, on December 20, 2023. Evelyn leaves behind her beloved husband Al, daughters Desiree Kirby, Daniela (Kevin)

Zerr, Candace (Reynaldo) Cardoso, brother Robert (Wanda) Ursulescu, grandchildren Jason, Justin, Brandon, Jessica, Kaitlyn, James, Elizabeth, and great granddaughter Briar Rose, as well as numerous nieces and nephews. She is predeceased by her parents Lazar and Valeria Ursulescu and brother William (Bill).

She was born and grew up in Regina and from an early age had a love for art and animals. At the age of twelve she contracted polio and endured a year-long hospitalization away from her family, but despite the concerns of some that she may never walk again, she recovered and went on in high school to play basketball and worked as a playground supervisor.

Her career in the floral industry lasted over 40 years, beginning when she started working in a flower shop in Grade 12. She used her considerable artistic talents and "ahead of her time" sense of ascetics creating flower arrangements to bridal bouquets and even Christmas trees that were truly works of art. She worked many years at the Hudson Bay as the head of Decorative Accessories & Floral Department, for a while had her own business, Serendipity, before returning to The Bay, then Green Elegance, then onto Castle Furniture, and finally ended her career with

her business Lavender Lane Flower Shoppe, which she closed upon retirement.

Her love and appreciation for art and design manifest in many forms. She was a passionate artist, with particular interest in pastels. She was very creative in her drawings and paintings and over the years participated in various shows where her pieces would often sell quickly. Her talents as a florist extended into interior design, she helped many people decorate their homes with her unique sense of beauty, sophistication, and comfort; she brought beauty to people's homes. One of her favorite times of year, was the holiday season. It was a time when her talents would shine and she would spend the weeks leading up to Christmas decorating the homes of her many clients, having decorated probably thousands of trees in her career. Evelyn's participation in the Festival of Trees was a highlight of each Christmas season, especially in the early years. Her trees would often be amongst the ones that had the highest bids.

Semi-retiring, Evelyn and Al built their dream home in Buena Vista. Her vision for their house was breathtaking inside and out. It was while living at the lake that she finally had the time to join an art guild, and devote herself to her art.

The last 14 years Evelyn had to draw on her strength, as her health took a turn due to the effects of Post-Polio. She faced each new challenge with such determination, even though she was living with incredible pain and mobility issues. In the last month she was faced with even more health complications, still, right till the end Evelyn fought for every breath, not wanting to give up. Her love for her husband and family more evident than ever.

A funeral Mass was held at St. Cecilia Parish, 5020 7th Avenue, Regina, Saskatchewan on Wednesday, January 3rd at 1:00pm. In lieu of flowers, donations can be made to Polio Regina.



The following is a summary of the presentation made by Rylie Therinen at our January Polio Regina meeting. Rylie is a third-year dental hygiene student at Sask Polytechnic.

Achieving Oral Health with Post-Polio

Why Is Oral Health Important?

- Prevents cavities
- Prevents gum disease
- too much bacteria leads to diseases in the mouth
- Oral health and systemic health are closely linked
- Gum disease has been found to be associated with heart disease, diabetes, respiratory functions/pneumonia, and pregnancy complications
- Losing teeth too early can lead to bone resorption, so we want to keep our natural teeth as long as possible

What I can Do to Maintain Oral Health:

- Brush 2x every day for 2 minutes
- Floss 1-2x every day
- Use an electric toothbrush
- Avoid tobacco products
- healthy well-balanced diet
- regular dental hygiene cleanings and dentist checks
- replace toothbrush every 4-6 months
- use products with fluoride

-use a mouthrinse to remove remaining bacteria or debris

Tips on How to Brush Teeth

- Have the brush at a 45-degree angle towards the gums
- Use a soft-bristled toothbrush
- Brush 2x per day
- Brush the tongue!

Tips on How to Floss Teeth

- Make a “C-shape” around each side of the tooth
- Use waxed floss
- Floss 1-2x per day
- Don’t forget the back of the last molar

If You are Having Trouble Using a Toothbrush, Try:

- home-made grip handles to help grasp your toothbrush (Ex. wrap a towel around your toothbrush handle to increase handle width)
- storebought grips to help grasp your toothbrush
- electric toothbrush for better dexterity and less muscle strength
- tongue scraper

Why is a Balanced Diet Important for Oral Health?

- a balanced diet and good nutrition is needed to maintain oral health
- The healthier nutrients we eat, the healthier and stronger our teeth and alveolar bone will be (Ex. Calcium and Phosphorus are nutrients that help our teeth stay strong and help with tooth repair)
- Sugary foods can lead to cavities

Trouble Swallowing?

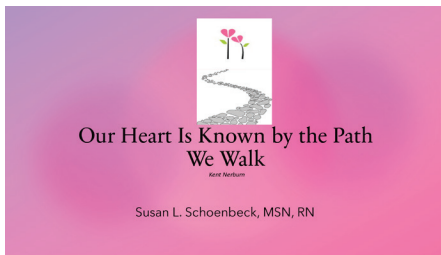
- Eating/drinking smoothies, pureed vegetables, and soups are a good option for easy foods to swallow while getting the proper nutrients for our teeth/body in

Is it important to Tell my Dentist/DH that I have Post-Polio?

- YES!!
- Always make sure to tell dental professionals that you have Post-Polio in the health history portion before the appointment
- May need to take precautions or make accommodations so that care can be altered to fit your needs (Ex. positioning of the chair for clients with weakened muscles or breathing difficulties)

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Susan L. Schoenbeck, MSN, RN is a nurse educator with a background in critical care nursing and education. She previously contributed an article titled "Post-Polio Syndrome Pain" in our Summer 2023 issue of the Postbox.

Our Heart is Known by the Path We Walk

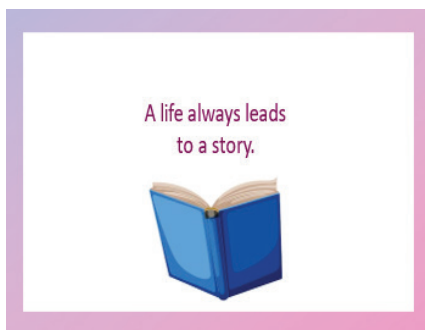
By Susan L. Schoenbeck, MSN, RN

Do you look back on your life and wonder how you will be remembered?

- One joy of life is discovering who we are.
- Another is to be happy with who we've become.
- Many people find it helpful to periodically review what they are doing with their lives to help them stay on the path they want to be on.

Benjamin Franklin, a founding father of America, was a successful writer, printer, and inventor. He is well known for writing down thirteen values he wanted to play out in his life. He felt that knowing his values would drive how he lived his life.

- Franklin's listed values were temperance, resolution, sincerity, order, cleanliness, humility, industry, moderation, chastity, silence, frugality, justice, and tranquility.
- He focused on practicing each value for one week, four times a year which amounted to the 52 weeks of a calendar year.
- Historians would say Franklin was successful at becoming who he wanted to be.



As a Clinical Nurse Specialist for Death and Spiritual Care at a large university hospital, I listened to people speak their last words. While caring for dying patients, I would sit and breathe in synchrony with the dying while holding their hands. I heard life stories...histories, hopes, and dreams. Many of those dying shared that they hoped they had succeeded in becoming someone their family members and others loved and valued.

Some families and loved ones shared with me joyful stories about the dying person. At other times, the patient could no longer speak and family members/loved ones shared no stories.

- Silence shrouded the bedside.
- I heard low mumblings and quibbling about what to list in about the deceased in an obituary.
- These folks were trying to guess how the dying person really would like to be remembered.

This all inspired my friends and I to start a project to find out how people wanted to be remembered. Over 600 people participated in the study. More than 75% wanted their loved ones to know the values for which they wanted to be remembered.

Top eight virtues people wanted to be remembered for:

- Being a good friend
- Being a good parent
- Care of family
- Creativity
- Empathy
- Faithfulness
- Fairness
- Generosity

Virtues also highly valued for which study participants wanted to be remembered:

- Hard work
- Helping others
- Honesty
- Intelligence
- Kindness
- Love of God
- Love of fellowman/woman
- Team player versus tough negotiator
- Patriotism
- Making lots of money

Smiling Through the Pain



Do you notice how when you smile at people, they smile back?



Why is a smile a chain of events you want to participate in? Because research confirms that there are benefits for the person who smiles.

Physiological benefits of smiling:

- Releases **endorphins**—the body's naturally occurring pain killer.
- Releases **serotonin**—the body's natural anti-depressant.
- Lowers **blood pressure**.
- Lowers **heart rate**.
- Reduces **stress**.
- Increases **confidence/self-assurance**.
- Opens **communication**.

Human beings are wired to rate people who smile as more trustworthy and likable than those who do not.

- It benefits businesses to hire people who smile. Workers who smile make customers feel more satisfied with their experience. Studies show that workers who smile miss work less often.
- A nurse's smile can change a patient's attitude from one of despair to hope. Studies reveal that patients with pain feel less uncomfortable when a nurse enters their room smiling.

- Smiling enhances confidence. When a person smiles in unfamiliar or stressful circumstances, awkwardness falls away.
- A research experiment in which people played a dice game with a robot determined that when a robot smiled at a person, the person smiled back. When the robot frowned, a person mirrored the robot's face and frowned back. The study said we need to learn more about the context in which this happens. This research supports that even if you are weary and tired, putting on a fake smile may help someone else through difficult circumstances and change their day for the better.

Volunteering

Like anyone can smile, anybody can be a volunteer.

- Anyone can help someone else.
- You don't need a college degree.
- You don't have to speak or write perfectly.
- You only need to take your heart and spread its love out there.

Giving back helps you and others. Volunteering, regardless of the type, has significant health benefits. Some of the overall individual benefits gained by volunteering include:

- The Happiness Effect: This is the *feel-good* sense a person gets because chemicals like dopamine and serotonin are released in the brain when a person helps others.
- Meeting new people/gaining new support networks/developing friendships/enjoying time with others.
- Taking on new challenges that bring with them the satisfaction of accomplishing something for your community.
- Increased self-esteem by doing something meaningful and appreciated.
- Lower risk for depression.
- Lower risk for memory loss.
- Decreased blood pressure in people with elevated blood pressure history/lower rate of heart disease/lower risk for stroke/lower mortality rate. Older people who do at least 200 hours of voluntary work a year - which equals 25

eight-hour days - reduce their risk of high blood pressure by 40 per cent. These mechanisms are important because high blood pressure is a risk factor for heart disease and stroke.

The American Psychological Association for Psychology and Aging suggests that volunteer work may be an effective *non-pharmaceutical option* to help prevent hypertension. Research reveals that people who volunteer (considering physical health, age, socioeconomic status, and gender), live longer than those who do not volunteer. Studies show that people aged 60 and older receive greater benefit than younger volunteers.



Graduated Compression Stockings for Polio Survivors

By Susan L. Schoenbeck, MSN, RN, nurse educator and Vita G. MacArthur RN BSN, 31 years as an operating room circulator at Level 1 trauma centers.

Reviewed by Marny Eulberg, MD.



Circumference Disparities Polio Legs

Deep vein thrombosis (blood clots forming in the veins of the legs) is a serious condition. It may lead to disturbances in the circulation of blood and can cause stroke and pulmonary embolism which may lead to death.

Research shows that the use of graduated compression stockings decreases the risk of blood clots forming in the deep veins of the body. Stockings may be used in combination with medications for patients undergoing surgical procedures.

It is important for polio survivors to know that the risk for deep vein thrombosis is greater than 20% after major surgery and higher than 40% in patients having major orthopedic surgery such as knee and hip replacement. Polio survivors may suffer *wear and tear* arthritis and the cartilage that cushions the bones of the hip and knee diminish. Polio survivors are at higher risk than the general population for hip degeneration due to muscle imbalance causing tension in the joint. Discrepancy in leg length exacerbates this condition.

Polio survivors who have discrepancies in leg size will want to let surgeons and pre-operative healthcare staff know of leg differences so that each leg is measured and a graduated compression stocking ordered specific to each limb. These should be marked *left* or *right* to ensure that too small of a stocking is not placed on a limb leading to blistering and sores.

Use of compression stockings is not without risk for skin damage if wrongly sized for a limb. Inappropriately sized stockings have the potential to cause skin blistering and significant skin breakdown. In addition, a stocking, measured to fit a larger leg and placed on a smaller leg, risks not having proper compression to decrease risk of blood clotting.

Standard hospital practices should identify who is responsible for assessing and managing the risk of deep vein thrombosis in surgical patients. Generally, trained health care staff measure and fit patients with appropriately sized stockings at the time of admission. The National Institute for Health and Clinical Excellence (NICE), recommends that the patient admitted for surgery, except those with peripheral artery disease, wear graduated compression stockings from admission until returning to their usual level of mobility. NICE advocates thigh length stockings as superior to knee length stockings.

Although NICE findings conclude that post-surgical patients should be given two sets of properly fitting graduated compression stockings for home use, polio

survivors with leg size discrepancies may require four sets (two sets for each leg), properly marked for home use. Once home, the polio survivor should take over responsibility to check skin daily for any blistering or open areas.

Sources:

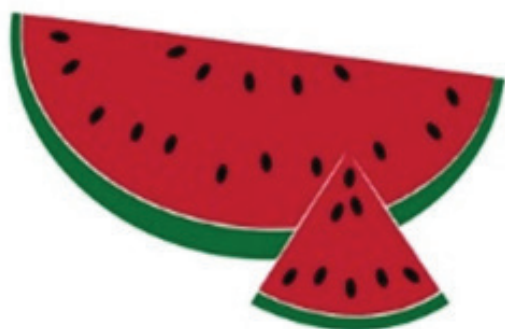
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The following is a summary of a presentation made by Toni Tinio at our March Polio Regina meeting. Jestoni (Toni) Tinio, BScN, RN, CCN, CMSN(C), MN, NP is a Nurse Practitioner at the Al Ritchie Heritage Community Health Centre

Nurse Practitioners in Saskatchewan: An Overview

Presented by Jestoni (Toni) Tinio, NP

Statistics

- 1.2 M SK residents
- About 200,000 are without primary care providers
- SK has about 328 NPs.
- About 10% of NPs are underemployed.

What are NPs?

- NPs are RNs with advanced education and clinical training.
- NPs have 4 years of RN education, at least 2 years of RN clinical experience, and at least 2 years of NP education and clinical training.

What do NPs do?

- Promote health and prevent disease.
- Assess, diagnose, and treat health problems.
- Order bloodwork and imaging tests (such as X-rays).
- Prescribe medications.
- Refer to specialists and other care providers (such as physiotherapy).
- Perform procedures (such as wart/mole removal, abscess drainage, suturing, Pap Test).

Some Common Health Conditions for NPs

- Cough, sore throat, constipation/diarrhea, nausea/vomiting, UTI
- Chronic diseases (asthma, COPD, diabetes, high blood pressure)
- Mental health management
- STI testing
- Wounds, skin infections
- Assistance with forms (social assistance, CRA)

Where do NPs work?

- Primary care (clinics, health centres)
- Emergency departments
- Long-term care facilities

- MAiD Program
- Mental health
- Neonatal units
- Oncology
- Private practice
- Women's health

Recent SHA Updates

- 2024-2025 budget includes funding for 25 new full-time NP positions.
- \$500, 000 for publicly funded NP-led clinics.
- \$150, 000 to explore roles and expand utilization of NPs in specialty practice.
- \$4, 000, 000 to integrate NPs in medical homes with collaborative practice.
- \$1, 800, 000 for permanent NP positions in Canora, Martensville, Melville, and Warman.

How to book an appointment?

- Call the clinic or community health centre (recommended option).
- Limited walk-in appointments available.

PPS – Does Everyone Get It?

Bruno BytesEncyclopediaRichardLBruno

10-05-2023

Written By Richard L. Bruno, HD, PhD

Question: Does everyone who had polio as a child, and have it seemingly go away, always see symptoms return as PPS later in life? Does PPS occur only in certain polio survivors?

Dr. Bruno's Response: The degree of initial damage by the polio infection and the degree of RECOVERY OF FUNCTION is the best predictor of PPS. The worse the damage and the better the recovery with the acute polio, "the harder you fall" with PPS.

Our years of research makes me think that all polio survivors who had neuron damage -- muscle weakness evident or not -- will have some symptom that can be related to the original poliovirus-damage to neurons.

The following is reprinted with permission from Post-Polio Syndrome Advocacy Group, August 2023 Newsletter.

What is Advocacy?

Advocacy is the act of supporting or promoting a cause or issue. It can be done on an individual or group level, and can take many different forms. Some common types of advocacy include:

- **Case advocacy:** This type of advocacy focuses on helping an individual or family achieve a specific goal, such as getting access to a service or benefit. The advocate may work with the individual or family to identify their needs, develop a plan, and advocate on their behalf with service providers, government agencies, or other decision-makers.
- **Self-advocacy:** This type of advocacy is when people speak up for themselves and their own rights. It can be done in a variety of settings, such as schools, workplaces, and healthcare facilities. Self-advocates may use a variety of strategies to advocate for themselves, such as writing letters, attending meetings, or testifying before a government agency.
- **Peer advocacy:** This type of advocacy involves people with similar experiences working together to support each other. Peer advocates can provide emotional support, information, and practical assistance. They can also help each other to advocate for their rights and interests.
- **Paid independent advocacy:** This type of advocacy is provided by a professional advocate who is not affiliated with any particular organization or agency. Paid independent advocates are trained to help people with disabilities, mental health conditions, or other challenges to advocate for themselves.
- **Citizen advocacy:** This type of advocacy involves a volunteer working with an individual to help them achieve their goals. The volunteer, known as a citizen advocate, may provide emotional support, companionship, and help with tasks such as accessing services or making decisions.

- **Systems advocacy:** This type of advocacy focuses on changing policies or practices that affect a group of people. Systems advocates may work to raise awareness of an issue, lobby decision-makers, or file lawsuits.

These are just a few of the many different types of advocacy. The best type of advocacy for a particular situation will depend on the needs of the individual or group involved.

Advocacy is an important way to ensure that everyone has the opportunity to live a full and meaningful life. It can help people to get the services and supports they need, to have their voices heard, and to make a difference in the world.

If you are interested in getting involved in advocacy, there are many ways to get started. You can contact a local advocacy organization, volunteer your time, or simply speak up for yourself and others when you see something that is not right. Every voice matters, and together we can make a difference.

Medications: Using them Correctly

[Richard L. Bruno](#) Bytes Encyclopedia

01-04-2024

Written By Richard L. Bruno, HD, PhD

Dr. Bruno's Original Post: A Prescription New Year's Resolution – because with medications, many times, Less is More! We have to take an active role and know the “why and what” before taking or changing meds. What's most important is that discussion with our physicians is VITAL. This article explains:

A Baby Boomer's New Year Resolution: Ask Your Doctor About Your Medicines

Newswise - by Saint Louis University Medical Center
 “If you're 65 or older and taking more than four medications, resolve to talk to your doctor about doing a New Year's triage to make sure too many pills aren't making you sick, advises Milta Little, D.O., associate professor of geriatrics at Saint Louis University.

As people grow older, they can develop a litany of

health problems and see multiple specialists who prescribe various drugs to treat common conditions such as osteoporosis, high blood pressure, diabetes, heart disease, arthritis and memory loss. ‘Drugs may not play well with each other, and problems can snowball for older adults who take five or more medicines,’ Little said.

‘As a geriatrician who quarterbackes the health care of my patients, I think six medicines usually is too many, and studies have shown mortality is higher among patients who are taking 10 medicines. I love to analyze medicines my patients are taking because reducing the number of drugs often makes them feel so much better. Many times, less is more.’

Every patient is unique with different health goals and challenges that change as a person ages, which is why one-size-fits-all guidelines don't work, Little adds. She advocates an annual medicine check-up, where patients ask doctors to assess the drugs they are taking, being mindful that vitamins, supplements and over-the-counter medicines count, too.

‘Supplements and other nonprescription medications, which are often less rigorously regulated than prescription medications, are a major cause of dangerous drug-drug interaction in elderly patients,’ Little said. “I don't recommend a multi-vitamin or ginkgo for brain health for everyone. The supplements are for specific people, and I prescribe them like anything else, only for those who need them.”

Here are questions Little asks as she analyzes the medicines her patients take:

- “How old is my patient? Guidelines on what constitutes good health loosen with age. For instance, a good blood pressure for a younger adult – 120/60 – is much lower than a healthy blood pressure for an older adult – 160/90. And a person who has a blood pressure with a top (systolic) number that's too low – 130 – could fall or become dizzy, which creates additional health risks. ‘My prescriptions for patients who are 65 are different than those for patients who are 80,’ Little said. ‘For patients who are 100, I probably wouldn't prescribe any medicine at all. If they've lived to be 100, it's probably nothing doctors did.’ “

- “How long has the patient taken the medicine? Prescriptions are not forever, and should be reviewed periodically to make sure they’re still necessary. ‘It may have been appropriate for you 10 years ago, but may not be today,’ she says. ‘Under your doctor’s guidance, don’t be afraid to try going off your medicine.’ For instance, there is no evidence that shows a 76-year-old patient who has high cholesterol but hasn’t had a heart attack or stroke within the last year would benefit from taking a statin, although he might have been prescribed the statin 16 years ago, when it likely could help.”
- “Is the dosage right? As people grow older their bodies change. A smaller dose of medication might yield the same response as a younger adult. Often times, a half-dose of a psychotropic medication works better in older patients than a full dose, as does a smaller dose of medicine for osteoporosis. ‘Start low and go slow,’ Little says. ‘You can always give more but you can’t take it out of the body once it’s given.’ “
- “What are the drug’s side effects? A medicine might address one problem, but create another. For instance, antidepressants can cause frequent urination, which can lead to incontinence. Statins and blood thinners worsen frailty, which makes patient vulnerable to more medical problems. An anti-diuretic for blood pressure can worsen symptoms of gout, which is a form of arthritis.”
- “How well do medicines play with each other? Drugs given for one illness could make another condition worse. Medicine given for acid reflux can reduce the effectiveness of blood thinners because of the way the medicines are broken down in the liver.”

“Some older adults believe taking a pill will make them healthier, which is not always the case, particularly when they’re taking many pills for different health issues. Too many medicines can make older adults feel fatigued, and undermine the quality of their lives,’ said Little, who is the author of an editorial on overmedication in the elderly that appeared in a 2016 issue of JAMDA. ‘We have a lot of evidence that

non-medical treatments, such as exercise, yoga and massages, work better in improving a person’s health. But they’re work.’ ”

Established in 1836, Saint Louis University School of Medicine has the distinction of awarding the first medical degree west of the Mississippi River. The school educates physicians and biomedical scientists, conducts medical research, and provides health care on a local, national and international level. Research at the school seeks new cures and treatments in five key areas: infectious disease, liver disease, cancer, heart/lung disease, and aging and brain disorders.

Blood Pressure Drugs More Than Double Bone-Fracture Risk in Nursing Home Patients

15-May-2024 4:05 PM EDT,

by [Rutgers University-New Brunswick](#)

Newswise — Records from nearly 30,000 nursing home residents indicate that blood pressure medications more than double the risk of life-threatening bone fractures, according to Rutgers Health research.

The authors of the study, which appears in JAMA Internal Medicine, said the increased risk stems from the medications’ tendency to impair balance, particularly when patients first stand up and temporarily experience low blood pressure that deprives the brain of oxygen. Interactions with other drugs and low baseline balance in many nursing home patients compound the problem.

“Bone fractures often start nursing home patients on a downward spiral,” said Chintan Dave, academic director of the Rutgers Center for Health Outcomes, Policy and Economics and lead author of the study. “Roughly 40 percent of those who fracture a hip die within the next year, so it’s truly alarming to find that a class of medications used by 70 percent of all nursing home residents more than doubles the bone-fracture risk.”

While many patients have high enough blood pressure that the benefits of treatment outweigh these dangers, “Such patients require careful observation,

particularly when treatment begins, and that's not happening," Dave said. "Caregivers think of blood pressure medication as very low risk, and that's not true in this patient population."

Dave's team analyzed Veterans Health Administration data from 29,648 elderly patients in long-term care facilities from 2006 to 2019. Researchers compared the 30-day risk of fractures to the hip, pelvis, humerus (upper arm) radius or ulna (forearm) for patients who began using blood pressure medications with similar patients who didn't. To maximize the chance that medication use — and not some other factor — drove the different outcomes, they adjusted for more than 50 baseline covariates, such as patient demographics and clinical history.

The 30-day fracture risk for residents who began blood pressure medication was 5.4 per 100 people per year and 2.2 per 100 people per year for patients who took no blood pressure medication.

Further analysis showed drug usage predicted particularly elevated fracture risk in certain subgroups. Patients with dementia, systolic blood pressure above 139 (the first number in the blood pressure reading), diastolic blood pressure above 79 (the second number) or no recent use of blood pressure medication all experienced at least triple the fracture risk of unmedicated patients.

About 2.5 million Americans live in nursing homes or assisted living facilities. Up to 50 percent suffer falls in any given year, and up to 25 percent of those falls result in serious injury.

The Rutgers Health study indicates that blood pressure medication causes many of those falls and that a combination of less medication and better support could significantly reduce the problem.

"Caregivers can't strike this right balance of risk and reward if they don't have accurate data about the risks," Dave said. "I hope this study gives them information that helps them serve their patients better."

[Blood Pressure Drugs More Than Double Bone-Fractur | Newswise](#)

Vision Issues and PPS

[RichardL Bruno Bruno Bytes Encyclopedia](#)

01-04-2024

Written By Richard L. Bruno, HD, PhD

Dr. Bruno's Post: Polio survivors occasionally ask if poliovirus affected vision. The poliovirus was actually injected into the visual part of the brain of monkeys and had no effect on the neurons, as if they had no poliovirus receptors and couldn't be damaged. The optic nerve is not affected by poliovirus and muscles that allow the eyes to focus should not be affected.

Since sympathetic/vagus nerves were damaged, pupil opening/closing could be affected. But I have not seen pupil problems treating hundreds of polio survivors.

Certainly, voluntary facial muscles (that move the eyes and open and close the lids) could be affected by poliovirus. Polio survivors can have lag ophthalmias, where they don't completely close their eyes, causing dry eyes and disturbed sleep.

This article explains more:
["Abnormal Eye Movements and PPS"](#).

Neurogenic Bladder

[Bruno Bytes RichardL Bruno Encyclopedia](#)

04-03-2024

Written By Richard L. Bruno, HD, PhD

Question: Do we have a Neurogenic Bladder?

Dr. Bruno's Response: It could be.

"Millions of Americans have neurogenic bladder. Neurogenic bladder is the name given to a number of urinary conditions in people who lack bladder control due to a brain, spinal cord or nerve problem. This nerve damage can be the result of diseases such as multiple sclerosis (MS), Parkinson's disease or diabetes. It can also be caused by infection of the brain or spinal cord, heavy metal poisoning, stroke, spinal cord injury, or major pelvic surgery. People who are born with problems of the spinal cord, such as spina bifida, may also have this type of bladder problem.

Nerves in the body control how the bladder stores or empties urine, and problems with these nerves cause overactive bladder (OAB), incontinence, and underactive bladder (UAB) or obstructive bladder, in which the flow of urine is blocked.” ([University of Michigan](#))

As you know the vagus nerve control centers in the brain stem were damaged by the poliovirus and vagus nerve activity is an essential factor in controlling the bladder. There are several types of neurogenic bladder But just as with all things PPS don’t automatically blame Polio if you’re having bladder issues. Talk to your doctor and be evaluated.

Walking More Enjoying It Less

[Bruno BytesRichardLBrunoEncyclopedia](#)

04-03-2024

Written By Richard L. Bruno, HD, PhD

Question: I had polio when I was 8 months old, it affected my right leg. More than 50 years later, I have started to feel the effects of PPS. I wear a brace on my right leg. I have stopped the kickboxing classes I used to do, and started water aerobics. It worked okay for a while but wasn’t enough cardio and I gained 10 lb. I have started walking more and am using a stationary row machine.

My left leg (good leg) has started to get very muscular (calf areas mostly) and is often very stiff and painful. I can hardly stand on it sometimes. I have been using, biofreeze, magnesium and massage therapy, but nothing seems to help. Any thoughts?

Dr. Bruno’s Response: Your body is telling you that walking more and using a stationary rowing machine are over stressing the remaining polio-affected neurons in your left leg. Yes, I said left leg.

You may think that your “good leg” was not affected by the polio. But remember that polio survivors needed to lose 60% of the motor neurons in a given muscle for there to be any weakness at all. So, your “good” left leg could have lost more than half of its motor neurons to polio and still have normal strength. The fact that your left leg is getting very muscular in the calf shows that you are increasing the size of muscle fibers as a result of your exercising. Bigger fibers are a problem because the bigger the muscle fiber the

more work poliovirus-damaged motor neurons have to do to make the fiber contract, which leads to more “overuse abuse” of the already damaged neurons.

My thoughts are to stop the damaging exercise, look at the Post-Polio diet to lose weight and in general “Conserve to Preserve” your remaining poliovirus - damaged motor neurons.

To start with, take a look at these 2 articles:

- [Exercise - Use It and Lose It](#) and
- [Post-Polio Protein Power: Eat Well, Be Well](#)

Look in the Index of the [Encyclopedia of Polio and PPS](#) under the topics of “Diet” and “Exercise” for more information that can help.

PPS - It’s a Chronic Health Condition

[Bruno BytesRichardLBrunoEncyclopedia](#)

04-03-2024

Written By Richard L. Bruno, HD, PhD

Original Post: “I had the strangest thought. I have an illness. I have a chronic health condition that affects every day of my life, hourly, minute by minute, daily, everyday, all month, all week, all year. It dictates my life. Where I go, what I do and what I don’t do because of what I can’t do. It affects my ADLs, my home making chores, my social life and lack of.

Shame, guilt, embarrassment have nothing to do with it although I do have these feelings more often than I want or like. Shame, guilt, fear, emotional turmoil; they provide nothing of what I need. Perhaps I should concentrate on moving away from those always present, always constant, always debilitating, always shameful feelings.

My chronic illness is polio and PPS. I also have Gastroparesis, a bit of arthritis and a somewhat serious back issue.

It’s just the weirdest thing to me. It’s such a new information, discovery, realization. Admission. It seems I have fought so hard against everything all my life. Although old emotions and habits die hard and I am tired of it.

That was hard to say out loud.” Survivor Ryn Daughterly

Fatigue

RichardLBrunoBruno BytesEncyclopedia

01-04-2024

Written By Richard L. Bruno, HD, PhD

Question: I am tired all the time but sometimes I forget just how bad it gets. I swear I could sleep away the rest of my life! The doctor ordered 2 pages worth of blood tests. They have already ruled out thyroid & all the ‘normal’ things like vitamin deficiencies. What’s left to do?

Dr. Bruno’s Response: First of all, a sleep study is vital for all polio survivors with fatigue to show if you have disordered breathing obstructive or central sleep apnea or shallow breathing that is disturbing your sleep. Sleep disordered breathing can be treated with positive pressure ventilation using BiPAP, a machine that cycles blowing air into your lungs at one pressure and then decreases the pressure to allow you to exhale and prevent carbon dioxide from building up. Second, as part of the sleep study, electrodes need to be placed on your muscles, legs and arms. Our research has found that 50% of polio survivors have muscle twitching that disturbs sleep and that half of them don’t even know it! We found that a low dose of alprazolam 60 minutes before bed stops twitching and allows sleeping. Finally, we did do a study of bromocriptine, a drug used to treat Parkinson’s disease, in polio survivors who did not respond to The Post Polio Institute “conserve to preserve” treatment and lifestyle modifications. We found that bromocriptine was somewhat helpful in reducing daytime fatigue. However, the side effects were unpleasant and of those taking the drug there were a handful of patients out of all who did not respond to self-care treatments. I don’t recommend taking the drug.

I recommend these articles:

- [Abnormal Movements in Sleep as Post Polio Sequelae](#) and
- [Bromocriptine in the Treatment of Post Polio Fatigue](#) “

For more information, go to the [Encyclopedia of Polio and PPS](#) and look in the Index under the topics “Fatigue” and “Abnormal Movements

Tracheostomy vs Tracheotomy

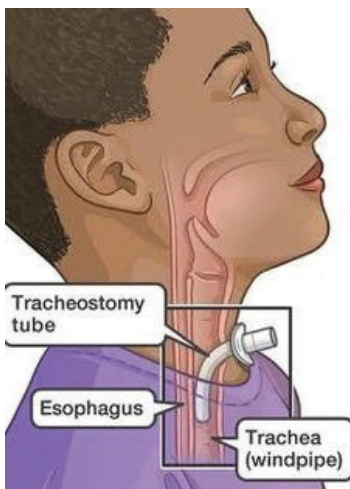
RichardLBrunoBruno BytesEncyclopedia

01-04-2024

Written By Richard L. Bruno, HD, PhD

Question: I read that a breathing specialist at Rutgers University does NOT recommend tracheostomies for polio survivors. Can you give me more information? And what is the difference between a tracheostomy and a tracheotomy?

Dr. Bruno’s Response: A tracheotomy is an incision made on the front of the neck, below the vocal cords, opening a direct emergency airway to the lungs through the trachea (windpipe) allowing a person to breathe without the use of the nose or mouth.



A tracheostomy is a permanent, surgically created stoma (opening) into the trachea.

Dr. John Bach, the physician that I describe as the world’s expert on breathing and polio, says NO polio survivor should have a tracheostomy unless there is

damage to the upper airway stopping the flow of air. The treatment for sleep-disordered breathing or inadequate breathing during the day is the use of positive pressure ventilation via a volume ventilator, not CPAP.

Dr. Bach’s website, videos and contact information:

- www.BreatheNVS.com (or) www.doctorbach.com

Videos :

- John R. Bach, MD Faculty Video Profile
- John R. Bach, MD Noninvasive ventilatory care in patients with breathing muscle weakness
- John R. Bach, MD Ways to Avoid Respiratory Complications with Polio and Post

Internal Shivering

RichardL Bruno Encyclopedia Bruno Bytes

04-03-2024

Written By Richard L. Bruno, HD, PhD

Question: I have been experiencing a lot of internal shivering. It used to wake me up at night but now is coming and going throughout the day as well. The problem seems to stem from my spine between and just below my shoulder blades, could this be something to do with my weakened respiratory and diaphragm muscles.

Dr. Bruno's Response: The first step to find a cause for shivering is to make sure nothing is going on, like an infection or thyroid abnormality.

That said, I have heard over the years from a number of polio survivors reporting "internal shivering". Your experience is probably not related to respiratory or diaphragm muscles. And it makes sense that you feel the shivering below your shoulder blades since it is your core muscles, especially in the lower chest, and also leg muscles that are the primary shivering muscles.

Remember the form and function of shivering: rhythmic contraction of muscles to generate heat and help you stay warm. Polio survivors should shiver more easily because poliovirus-damage opens skin blood vessels, allowing hot blood to flow to the skin surface, dump heat into the environment and drop your core body temperature.

There may also be a brain reason for polio survivors to shiver more easily. The "shivering center" in the brain (the posterior hypothalamus) was consistently damaged by the poliovirus, possibly making polio survivors more sensitive to being even slightly cold (for example not being warm enough in bed) and therefore shivering more easily.

Speaking of being in bed, many polio survivors have reported internal shivering in the early morning while they're still in bed, shivering sometimes waking them from sleep. Sleepy-time shivering may have to do with your circadian body temperature rhythm. By early morning your core body temperature is at its nadir, about 3°F lower than usual, a temperature drop possibly triggering shivering.

A drop in core body temperature also may be one of the factors responsible for shivering associated with

anesthesia. Studies have reported shivering in as many as 65% of non-polio survivors after general anesthesia and up to 33% after epidural/spinal anesthesia. Shivering after anesthesia is why we recommend all polio survivors' physicians order a heating device called a "Bair Hugger" www.bairhugger.com/3M/en_US/bair-hugger-us/ postoperatively to prevent both discomfort and shivering- caused postoperative problems.

[Preventing Complications in Polio Survivors Undergoing Surgery \(or\) Receiving Anesthesia](#)

For more information about temperature regulation in polio survivors, look for the topic of Temperature in the [Index of the Encyclopedia of Polio and PPS](#)

Polio Outbreaks in the US and "Wild" Polio

RichardL Bruno Bruno Bytes Encyclopedia

01-04-2024

Written By Richard L. Bruno, HD, PhD

Question: Is it true there haven't been any polio outbreaks in the US since 1979? I've never understood "wild" polio vs the other.

Dr. Bruno's Response: There haven't been any **Wild** polio cases since 1979 (that came from a source within the US). In the 1980s there were outbreaks among

- the Amish in Minnesota, when the virus was brought in from the Netherlands;
- one woman who was not vaccinated developed bulbar polio and brought it in from Mexico;
- and an immunodeficient woman in Minnesota retained the vaccine strain and passed it to her children who were not paralyzed.

Wild poliovirus is the real thing, the original, found in nature that's been around at least since the pyramids were built. The "other" polioviruses are vaccine strains, either the live, oral vaccines (which are wild polioviruses passed through monkeys until they becomes non-neuron-killing polioviruses) or injectable polio vaccines where polioviruses were killed with formaldehyde.

Problem is that the live, oral vaccine can sometimes mutate and become neuron-killing again like it did in NY in 2022. See: [Polio. It's happened again, right here in the US.](#)

That's why the news of a BILLION doses of the NEW, oral polio vaccine being distributed is so important. It's less likely to mutate.

Physical Therapy: A Reminder

Bruno Bytes Richard L Bruno Encyclopedia Living with PPS

04-03-2024

Written By Richard L. Bruno, HD, PhD

For those being pushed by a PT to exercise and “feel the burn.”

AUTOPSY OF A POLIO SURVIVOR WITH MUSCLE WEAKNESS

This isn't the first autopsy of a polio survivor with PPS. But it does remind us that:

1. Progressive muscle weakness means motor neurons are dying;
2. The original poliovirus attack killed motor neurons not only in the spinal cord area that controlled this man's the left leg but also caused “silent damage” THROUGHOUT THE SPINAL CORD, silent in that the patient had no muscle weakness in the right leg or his arms after polio but did have arm and leg muscle weakness beginning at age 58;
3. Neuron death caused glial scars in the spinal cord, the same type of scar our MRI studies found in fatigued polio survivors' brain activating systems;

4. NONE of the markers for ALS were found.

Conserve to Preserve. The neurons you save will be your own!

An Autopsy Case Of Progressive Generalized Muscle Atrophy Over 14 Years Due To Post-polio Syndrome.

Oki R, et al. Rinsho Shinkeigaku. November, 2015

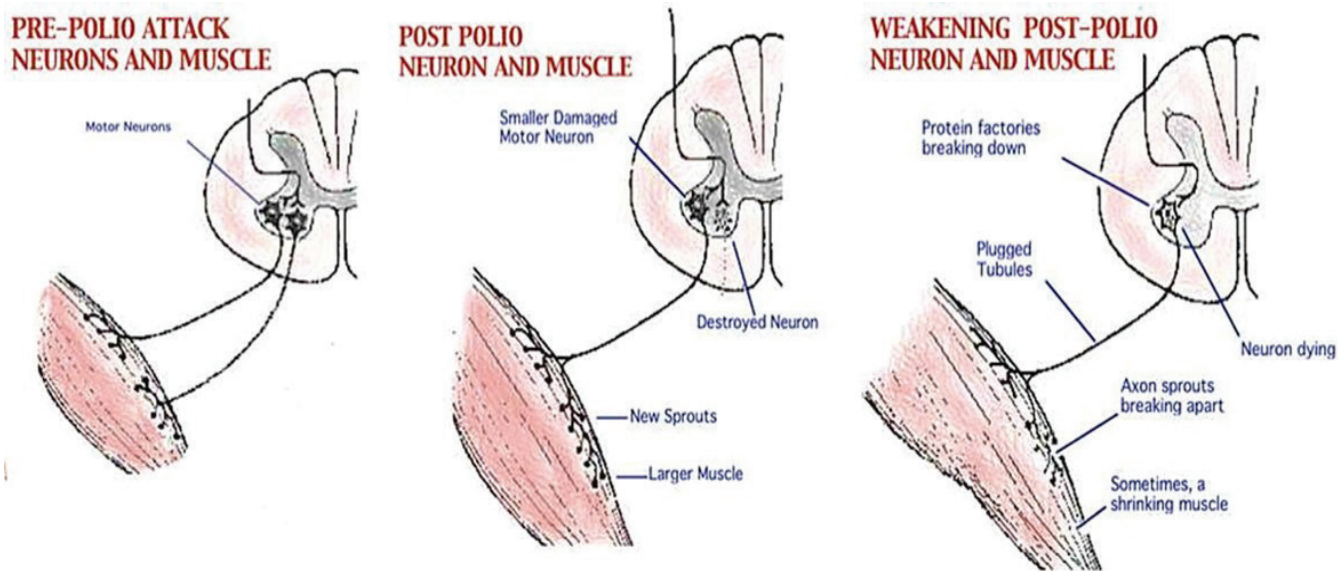
“We report the case of a 72-year-old man who had contracted acute paralytic poliomyelitis in his childhood. Thereafter, he had suffered from paresis involving the left lower limb with no relapse or progression of the disease.”

“In his 60s he began noticing slowly progressive muscle weakness and atrophy in the upper and lower extremities. At the age of 72, muscle weakness developed rapidly, and he demonstrated shortness of breath on exertion and difficulty swallowing. He died after about 14 years from the onset of muscle weakness symptoms.”

“Autopsy findings demonstrated MOTOR NEURON LOSS and GLIAL SCARS not only in the motor neurons in the anterior horns, which were result of his old poliomyelitis, BUT ALSO THROUGHOUT THE SPINE. NO Bunina bodies, TDP-43 or ubiquitin inclusions, which are seen in ALS, were found.

The pathological findings in the patient are considered to be related to the development of muscle weakness.”

Richard L. Bruno, HD, PhD



This may be similar to the Brain Fog experienced by Polio Survivors. Having had both Polio and COVID would be a double whammy.

Rutgers Health Researchers Profile Clinical, Gene and Protein Changes in ‘Brain Fog’ From Long COVID

Scientists examined cognitive impairment and recovery time in patients following COVID-19 infection.

16-May-2024 8:00 AM EDT, by **Institute for Health, Health Care Policy and Aging Research at Rutgers University**

Newswise — Long COVID is associated with active inflammatory changes in the nervous system, but the condition is distinct from Alzheimer’s disease and other neurodegenerative disorders, according to a Rutgers Health study.

The study, published in *Cell Reports Medicine*, was one of the most detailed investigations into “brain fog,” a common long COVID symptom in which patients experience difficulty thinking or concentrating. Researchers examined people who recovered from COVID-19 in the New York City-New Jersey area to better understand the factors that impact long COVID.

The condition encompasses a wide-range of health problems that people experience after being infected with COVID-19 including brain fog, fatigue, shortness of breath, headaches and sleep problems, among other symptoms, according to [the Centers for Disease Control and Prevention](#). The symptoms may be difficult to explain and manage because of limited understanding of the condition.

“Participating in this research study helped validate everything I was feeling, including the brain fog,” said a Rutgers Health study participant, who has been struggling with long COVID symptoms for over three years. “It’s so important for people to consider clinical trials so we can get accurate information about long COVID, and people can go on to do whatever is necessary to help them improve.”

Scientists previously had proposed that long COVID may display molecular features of Alzheimer’s disease, but in the most recent study, Rutgers Health researchers found that long COVID doesn’t elicit Alzheimer’s-type changes. Instead, they found that cerebrospinal fluid immune cells in persistent brain fog from long COVID bears a closer resemblance to viral infections than to Alzheimer’s disease or post-infectious processes.

“The findings from our study lead us to believe that interferon – the body’s natural antiviral – and other drugs which target COVID-19 will be most beneficial in people with long COVID,” said William Hu, director of the Center for Healthy Aging Research at Rutgers Institute for Health, Health Care Policy and Aging Research and senior author of the study.

Researchers also found that recovery from long COVID symptoms is often very slow, with 50 percent of the patients experiencing cognitive improvement after two years.

“Because brain fog – nine months after initial COVID-19 – shares gene signatures with acute infections, future clinical trials should focus on interferon- and antiviral-based therapies instead of rehabilitation or brain training to expedite the recovery time for patients experiencing brain fog and other long COVID symptoms,” said Hu, an associate professor and the chief of Cognitive Neurology and Alzheimer’s Disease Clinic at Rutgers Robert Wood Johnson Medical School (RWJMS).

Coauthors of the study include Milota Kaluzova, Mini Jomartin and Ashima Nayyar of the RWJMS Department of Neurology; Alice Dawson, Victor Sotelo and Julia Papas of the RWJMS Department of Neurology and Rutgers Institute for Health, Health Care Policy and Aging Research; Alexander Lemenze of the NJMS Department of Pathology and Laboratory Medicine; and Carol Shu and Sabiha Hussain of the RWJMS Department of Medicine-Pulmonary and Critical Care.

The research was supported by TMCity Foundation, a philanthropy focused on brain and mental health; Rutgers Health, and the National Institutes of Health. [Rutgers Health Researchers Profile Clinical, Gene | Newswise](#)

Scientists want to know how the smells of nature benefit our health

15-May-2024 2:05 PM EDT, by [University of Washington](#)

FROM: James Urton, University of Washington
jurton@uw.edu

Newswise — Spending time in nature is good for us. Studies have shown that contact with nature can lift our well-being by affecting emotions, influencing thoughts, reducing stress and improving physical health. Even brief exposure to nature can help. One well-known study found that hospital patients recovered faster if their room included a window view of a natural setting.

Knowing more about nature’s effects on our bodies could not only help our well-being, but could also improve how we care for land, preserve ecosystems and design cities, homes and parks. Yet studies on the benefits of contact with nature have typically focused primarily on how seeing nature affects us. There has been less focus on what the nose knows. That is something a group of researchers wants to change.

“We are immersed in a world of odorants, and we have a sophisticated olfactory system that processes them, with resulting impacts on our emotions and behavior,” said Gregory Bratman, a University of Washington assistant professor of environmental and forest sciences. “But compared to research on the benefits of seeing nature, we don’t know nearly as much about how the impacts of nature’s scents and olfactory cues affect us.”

In a paper published May 15 in *Science Advances*, Bratman and colleagues from around the world outline ways to expand research into how odors and scents from natural settings impact our health and well-being. The interdisciplinary group of experts in olfaction, psychology, ecology, public health, atmospheric science and other fields are based at institutions in the U.S., the U.K., Taiwan, Germany, Poland and Cyprus.

At its core, the human sense of smell, or olfaction, is a complex chemical detection system in constant operation. The nose is packed with hundreds of olfactory receptors, which are sophisticated chemical sensors. Together, they can detect more than one

trillion scents, and that information gets delivered directly to the nervous system for our minds to interpret — consciously or otherwise.

The natural world releases a steady stream of chemical compounds to keep our olfactory system busy. Plants in particular exude volatile organic compounds, or VOCs, that can persist in the air for hours or days. VOCs perform many functions for plants, such as repelling herbivores or attracting pollinators. Some researchers have studied the impact of exposures to plant VOCs on people.

“We know bits and pieces of the overall picture,” said Bratman. “But there is so much more to learn. We are proposing a framework, informed by important research from many others, on how to investigate the intimate links between olfaction, nature and human well-being.”

Nature’s smell-mediated impacts likely come through different routes, according to the authors. Some chemical compounds, including a subset of those from the invisible realm of plant VOCs, may be acting on us without our conscious knowledge. In these cases, olfactory receptors in the nose could be initiating a “subthreshold” response to molecules that people are largely unaware of. Bratman and his co-authors are calling for vastly expanded research on when, where and how these undetected biochemical processes related to natural VOCs may affect us.

Other olfactory cues are picked up consciously, but scientists still don’t fully understand all their impacts on our health and well-being. Some scents, for example, may have “universal” interpretations to humans — something that nearly always smells pleasant, like a sweet-smelling flower. Other scents are closely tied to specific memories, or have associations and interpretations that vary by culture and personal experience, as research by co-author [Asifa Majid](#) of the University of Oxford has shown.

“Understanding how olfaction mediates our relationships with the natural world and the benefits we receive from it are multi-disciplinary undertakings,” said Bratman. “It involves insights from olfactory function research, Indigenous knowledge, Western psychology, anthropology, atmospheric chemistry, forest ecology, [Shinrin-yoku](#) — or ‘forest bathing’ — neuroscience, and more.”

Investigation into the potential links between our sense of smell and positive experiences with nature includes research by co-author [Cecilia Bembibre](#) at University College London, which shows that the cultural significance of smells, including those from nature, can be passed down in communities to each new generation. Co-author [Jieling Xiao](#) at Birmingham City University has delved into the associations people have with scents in built environments and urban gardens.

Other co-authors have shown that nature leaves its signature in the very air we breathe. Forests, for example, release a complex chemical milieu into the air. Research by co-author [Jonathan Williams](#) at the Max Planck Institute for Chemistry and the Cyprus Institute shows how natural VOCs can react and mix in the atmosphere, with repercussions for olfactory environments.

The authors are also calling for more studies to investigate how human activity alters nature's olfactory footprint — both by pollution, which can modify or destroy odorants in the air, and by reducing habitats that release beneficial scents.

“Human activity is modifying the environment so quickly in some cases that we're learning about these benefits while we're simultaneously making them more difficult for people to access,” said Bratman. “As research illuminates more of these links, our hope is that we can make more informed decisions about our impacts on the natural world and the volatile organic compounds that come from it. As we say in the paper, we live within the chemical contexts that nature creates. Understanding this more can contribute to human well-being and advance efforts to protect the natural world.”

Other UW co-authors on the paper are [Peter Kahn](#), professor of psychology; [Connor Lashus](#), a graduate student in the School of Environmental and Forest Sciences; and [Anne Riederer](#), a clinical associate professor of environmental and occupational health sciences. Additional co-authors are [Gretchen Daily](#) of Stanford University; [Richard Doty](#) at the University of Pennsylvania; Thomas Hummel of the Dresden University of Technology; [Lucia Jacobs](#) of the University of California, Berkeley; John Miller of Wildwood|Mahonia; Anna Oleszkiewicz of the University of Wrocław; [Hector Olvera-Alvarez](#) of Oregon Health and Sciences University; [Valentina](#)

[Parma](#) of the Monell Chemical Senses Center; [Nancy Long Sieber](#) and [John Spengler](#) of Harvard University; and Chia-Pin Yu of National Taiwan University.

Scientists want to know how the smells of nature b | Newswise

“Physiatrist” (Rehabilitative Physician)

[Bruno Bytes](#)[RichardL Bruno](#)[Encyclopedia](#)

04-03-2024

Written By [Richard L. Bruno, HD, PhD](#)

Original Post: I am so discouraged. My doctor (a physiatrist) questions whether I have PPS.

Additional Post: My PPS was diagnosed by a Physiatrist. He encouraged me not to overdue, he spoke to the PT, explained PPS and what should and should not be done. He suggested what assistive aids would help me and explained it was my decision to decide when I was ready. I got my cane, my brace, then KFO, walker and finally my scooter. When I found I could no longer work, he filled out all my papers for disability. I am thankful to him because I learned “early” not to overdue and the need to preserve.

Dr. Bruno's Response: Physiatrists (rehabilitation medicine physicians) are not new. Physical medicine and rehabilitation (PM&R) dates back to the second world war and was really expanded, in terms of numbers of doctors and knowledge, by the polio epidemics. Polio survivors actually promoted an entire medical specialty!

Physiatrists don't want to “fix” everything by cutting, like orthopedists do, or “cover” problems over, like pain management docs do by using narcotics. What physiatrists do is treat the cause of a problem to reduce symptoms and to make you as functional as you can be by using therapy and assistive devices, from a cane to a power wheelchair.

For more information, this article can help: [What is a Physiatrist?](#)

Disclaimer

Information published in the Polio Postbox may not represent the opinion of Polio Regina. It is not to be regarded as Polio Regina's endorsement of treatment, products, or individuals. If you have or suspect you may have a health problem, please consult your health care professional.

You Are Invited

Polio Regina is inviting people who have had poliomyelitis and are now experiencing new symptoms such as fatigue, muscle weakness and cold intolerance, to join our self-help support group to learn how they can cope with post-polio syndrome. Spouses, partners, and family members are also welcome. Polio Regina Inc. was formed to help people from Saskatchewan.

Our Objectives:

- To develop, promote and increase awareness of Post Polio Syndrome.
- To disseminate information concerning research and treatment pertaining to Post Polio Syndrome.
- To provide support to survivors of polio, other than financial aid.

Where to Meet

Recently we have been conducting some of our meetings by Zoom, some in person and some hybrid in person-Zoom. There are no meetings in January, June, July, August, or December. We usually have our Spring Picnic in May and our Christmas party in November, at a restaurant. For more information on meetings phone 306 757-8051 or check out our website: <http://nonprofits.accesscomm.ca/polio/> for more information on Polio Regina and links to other useful related information or you can just Google **Polio Regina**. Our email address is: ivan.jorgensen@sasktel.net

Alternative methods of payment: Canadahelps.org

There is the option to use Canadahelps.org website which has a Polio Regina page. This will be arranged to deposit the membership/donation directly into the Polio Regina bank account.

1. Go to the website link www.canadahelps.org/charities/polio-regina-inc
2. OR on the Canadahelps.org website enter Polio Regina Inc in the charity search.
3. Enter the amount, your name, address, email address and payment information.
4. Canadahelps issues a receipt directly to the donor by email. They take 4% administration fee and deposit the net amount directly in the Polio Regina bank account.
5. The Polio Regina treasurer, David Cotcher will be able to access the information and acknowledge the membership/donation.

Bank e-transfer

We do not currently have the ability to directly deposit e-transfers in the Polio Regina bank account. However, some have sent e-transfers to treasurer David Cotcher and he takes that amount in cash and deposits in the Polio Regina bank account. Then a receipt will be issued and mailed for the amount. Please contact David Cotcher at email cotcher@sasktel.net or phone 306-949-1796 for these arrangements.

MEMBERSHIP APPLICATION POLIO REGINA Inc.

Name _____

Active () if you had polio Associate () New () Renewal ()

Address _____

Postal Code _____ Phone: _____

Annual membership fee: (Jan.- Dec.)

\$10 Single; \$15 family \$ _____

My donation to Polio Regina Inc.: \$ _____

Total \$ _____

Please make cheque payable to: **Polio Regina Inc.** and mail this application form and cheque to:
Polio Regina Inc., 78 Petersmeyer St., Regina, SK S4R 7P7 (Official receipt for income tax purposes will be mailed.)