



June 2022-Winter Edition

Ken Hutt's 2022 Everest Assault

In the Summer 2021 edition of Polio Oz News (P14), the following item appeared:

Gary Newton, Polio Australia's Vice President and proud Rotarian, has been communicating with NSW-based Rotarian and paraglider, Ken Hutt, who contacted Polio Australia regarding a proposed 'Everest Assault'. Read more here.

Ken is planning for April/May 2022, using a glider he is having specifically built for this trip. This is to both promote awareness of Rotary's work, and to raise funds for their End Polio Now campaign. Ken was seeking the Board's permission to incorporate Polio Australia's logo on the wing of his glider to promote awareness of Polio Australia's work.

What follows is a first-hand account of Ken's campaign.

By Ken Hutt

I am writing this from the almost tropical conditions of lakeside in Pokhara, Nepal where our remaining team is patiently waiting for flights home. We hope to do a bit of paragliding with the backdrop of the Annapurna range but mainly just rest a bit and recovery from the high Himalayan mountains. On the 27th May we have been invited to a reception at the Australian Embassy in Kathmandu and then will be home on the 30 May.

What happened . . .

On the 12th of May we reached camp 2 on Everest for what, I thought, was going to be my last crossing of the Khumbu Ice Fall. My destination was The South Col, via camp 2, camp 3, and staying at least one night on oxygen at camp 4, then paragliding back down. Let me explain what happened . . .

The paragliding permit – what a long and protracted process! By necessity, we kept the processes and complications

of obtaining the permit quite secretive, for a good reason. Firstly, I have been working on this for over three years, using all contacts at my disposal, including local Rotary Clubs, influential local government officials, the Australian Department of Foreign Affairs, and the provision of official letters of request and recommendations. I seemed confident that this approach was working – but apparently not.

A permit to fly from Everest had never been granted before so we were at the cutting edge of a process that didn't exist. For two and a half months our application sat on a Tourism Ministers' desk without being assessed. No action, but also no rejection, which seemed strange. Fees hadn't been established, government department approvals needed to be gained from civil aviation, national parks' liaison officers needed to be agreed, we needed high altitude flying certification, and it kept going on and on. And still it sat on the same desk.

With the assistance of Babu Adventures (Babu himself), representations finally had some resolve and a permit was eventually achieved. There were continued efforts from our guiding

company. (Thanks, Sumit, for all your time and effort including the countless beetings you attended on our behalf.) We purposely did not advertise the permit process, just meetings additional in case an government department came forward with other requirements, thus adding additional costs or conditions. We thought - let's just move slowly and cautiously on this. We kept it off our social media reports.

Through discussions with other climbing agencies, we found out that there was another potential pilot from South Africa, Pierre Carter. I met him by chance at Loboche, a town relatively close to Everest Base camp. Pierre is a very experienced pilot and climber whose ambition it was to fly from the 7 highest

Polio Oz News

Polio Australia Representing polio survivors

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Winter is on my head, but eternal spring is in my heart 🗬 ~ Victor Hugo ~



Polio Australia's Websites

Polic Australia Representing polio survivors throughout Australia

Welcome to the Polio Australia website. Polio Australia is a not-for-profit organisation supporting polio survivors living in Australia. This website contains information about polio, the Late Effects of Polio, the work of Polio Australia and much more.

www.polioaustralia.org.au





Improving health outcomes for Australia's polio survivors

The Polio Health website is a comprehensive resource for both health professionals and polio survivors. It contains clinically researched information on the Late Effects of Polio; the Health Professional Register; and where Polio Australia's Clinical Practice Workshops for Health Professionals are being held.

www.poliohealth.org.au

Australian Polio Register Have you added your polio details?

The Australian Polio Register was established by Polio Australia in October 2010 to gather information on the numbers of polio

survivors living in Australia today, whether or not they contracted polio in this country. To make the Australian Polio Register truly reflective of the unmet need for polio services throughout Australia, we urge every Australian polio survivor to join the Polio Register. Our strength lies in our numbers-please help us to get you the services you need by adding your polio details to the Register. You can register online or by downloading and

www.australianpolioregister.org.au

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completing a paper copy.

President's Report



By Gillian Thomas OAM President

Australia now has a new government and Polio Australia now has a new challenge with government funding. I hasten to add that our problems are the result of the outgoing government. As Michael Jackson explains in his Clinical

Practice Workshop Update (P4), the Department of Health has not renewed grant funding for his program.

The Clinical Practice Workshops are a vital service provided by Polio Australia, which have benefitted untold polio survivors since 2017 as a result of better informed health professionals. Needless to say, we have been actively lobbying the relevant incoming health and aged-care Ministers, but they are still settling in, and it does take time to form new relationships. It took us 9 years to get the initial grant. And there are a lot of worthy not-for-profits out there competing for the same bucket of money.

I am very pleased to warmly congratulate Polio Australia's <u>Parliamentary Patrons</u> who retained their seats at the 2022 election: Mark Coulton MP (Nat), Steve Georganas MP (ALP), and

From The Editor



By Maryann Liethof

As I write this, I can tell you that winter has landed in Melbourne with a vengeance! Ssssooo cccoolldd!! And although we don't seem to be talking about it much anymore (a mixed blessing?), there is

still Covid-19—and now seasonal 'flu—out there making the rounds. Just carry on doing whatever you do to keep yourself safe.

So, what would make a person *choose* to head to the top of an icy mountain? You'll have to read the intrepid Ken Hutt's story (P1) to find out. I'd take my hat off to him, but, you know, *so cold* ...

How are your bowel movements going? You don't have to answer that, of course. I'm not a GP. However, if this is an issue for you, Nutritionist and Counsellor, Melissa Overall, has written an article which you might find useful (P11). I have been on an IBS-related journey with Melissa, which has led me to embrace a low FODMAP diet. If you haven't heard about FODMAPs, look it up because the acronym is really complicated. This has been thoroughly researched by Monash University: www.monashfodmap.com Catherine King MP (ALP). Well deserved success for the dedication shown to their respective communities and the Australian people. Rest assured, we'll be in touch!

We also said goodbye to Steph Cantrill at the end of April (P7). Steph's innovation of running Zoom information and chat sessions was a real life-line to many of our post-polio community during the Covid-19 lockdowns. I am sure she will be a great contributor in her new role.

My mate, Brett Howard, was posthumously awarded his OAM in April, and his proud son, Chad, sent through some words and photos of the day to share (P10). A good man taken too soon.

Paulette has pulled out a few interesting clinical web-based resources that Polio Australia has compiled over the years (P8). And while you are searching through these, you might also like to check out the information about how to keep warm this winter, and what concessions may be available in various states <u>here</u>.

Maintaining the website is only part of the important "Behind The Scenes" work carried out by Paulette (P6), which your EOFY donations (P9) can support. Polio Australia needs your help, so please consider a timely tax-deductable gift this June.

Gillian

This edition contains a number of articles discussing viruses, from the amazing dedication of *(late)* New Zealand virologist, Alan Murphy (P13), to The Enigma Of Post-Acute Infection Syndrome (P16). I found this article particularly interesting, as it mentions not only post-polio syndrome, but also range of more recent viruses, including Long COVID.

Another fascinating article talks about how 'live' polio vaccine fires up immune system (P17), which may protect people in developing nations from Covid-19. Who knew? Finally, there is a new polio vaccine (P19), which the Global Polio Eradication Initiative believes to be a "significant development for eradication efforts".

And not before time, really, as, sadly, there have been several recent outbreaks of polio in; Pakistan (P20), Israel (21), and Mozambique (22). The World Health Organisation (WHO), together with the mighty efforts of Rotary International and creative Rotarians like Ken Hutt, must feel constantly frustrated by news of outbreaks. But it's important to stop and think about how far we've come since the campaigns began in earnest 1988. It's still a little way off, but keep October 24 in mind for "World Polio Day"—click here for more information.

Take care, and maybe try this excellent FODMAP soup. Just off for a bowl now!



Clinical Practice Workshops Update



By Michael Jackson

Polio Australia Clinical Educator

With the most impactful aspects of the pandemic reducing slowly, there has been some pickup in our professional education workshops this year. Most workshops this year have been in private outpatient

clinics – they display increased confidence with external educators delivering in-person education.

Donvale Rehabilitation Hospital (VIC) workshop was notable as it was arranged as a trial for their facility. I was the first non-COVID and external educator visiting in-person to deliver on -site.

A particular highlight in March was being able to travel with Devalina and Steph (Community Development Workers) within South Australia to provide information to polio survivors and health professionals concurrently.

Workshops held since February 2022

- 10 x In-person Workshops (Victor Harbor Physio, Unley Physio, St Andrew's (Adelaide), Donvale Rehab, Sunshine Coast NeuroPhysio, Coffs Harbour (3 x clinics), Mater Rockhampton, Activate EP clinic, Yeppoon;
- 1 x Monthly Online Workshops (March + May = 7 registered but no attendees);
- 114 health professionals in total trained at these 11 workshops.

Workshops scheduled to end of June 2022

- 4 more In-person Workshops scheduled up until end of this FY (Qld, NSW, NT);
- 3 Remote Workshops scheduled in the next FY (VIC, TAS);
- 1 Monthly Online Workshops.

June is last scheduled; pending program status.

Workshops Outlook

 Sector (hospitals/clinics) confidence is increasing, however we are still experiencing poor conversions for the volume of outreach to all states and types of facilities.

- With state borders now open, border crossing and hotspot barriers have mostly dissolved.
- In the new FY we have scheduled:
 - 3 in-person workshops (Adelaide SA, and Mona Vale and RNSH in NSW);
 - 3 Remote workshops (Bass Coast, VIC and Calvary, TAS x 2);
 - Monthly Onlines have not been scheduled at this time.

Department of Health Funding

At the end of this financial year the three-year funding from the Department of Health will expire. The Clinical Practice Workshop Program was initially funded in 2017-18, and funding was extended in mid-2019. In mid-February 2022 we requested continued funding of this program by communicating with (then) Health Minister Greg Hunt. We were notified of the outcome of our funding request in mid-April, which was that funding NOT renewed.

Polio Australia is contesting this decision given the many factors which make this program valuable to consumers and clinicians across the country.

Your support for this program can be voiced by taking the time to contact your federal member of parliament. Contact Polio Australia to obtain talking points that support our case! contact@polioaustralia.org.au

In addition to delivering workshops, we are also in the thick of other projects, which include:

- data mining polio survivor hospitalisations across the country in order to better describe the population and their healthcare usage;
- compiling and sending hospital kits with pertinent resources to 100 hospitals across the country;
- editing one of the clinical manuals we have so that we have an updated second edition.

There is still much for our program to do to reach clinicians and to make the post-polio education available in Australia discipline-specific, on-demand, practical and impactful.



Care eLearning Course Update Aqed

By Michael Jackson

Polio Australia Clinical Educator

A point-of-entry education course on post-polio conditions for those assisting polio survivors who utilise Aged Care was rolled out in 2022, and has been active since early March 2022. Since deployment we have resolved registration issues, refined the course instructions, updated plugins, and continue to assist those who occasionally have questions/problems.

Over the 81 days we have had 37 register for the course, about one every second day. A total of 13 people have completed the course in full, residing across all states.

Feedback form the those who have completed he course:

- Very informative. ٠
- It was a good course. Maybe just a little too wordy which took a bit more time than needed, but all info was great.
- Easy to understand and work through the course. I could go back if I needed to clarify something or just reread a section. I enjoyed the course. Thank you.
- All information was very easily understood. •
- Thought this course was very informative. •
- Straight forward and easy to understand. •
- I have really enjoyed doing this course and • the education has been very good easy to follow and understand. I enjoyed doing the quiz on each topic.
- I now have knowledge on LEoP and PPS. I can now share my knowledge with my team at work. Thankyou Polio Australia for this great course.

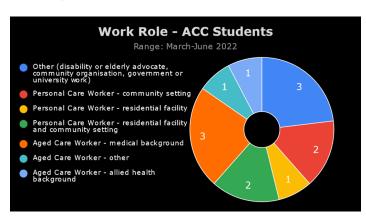
We recommend you promote this course to the Aged Care workers you know so that they can become LEoP-informed and improve the quality of your and others' care. Although it is designed for the 200,000+ Aged Care personal care workers (who are not an allied health or medical professional), others working in health can certainly benefit from doing the course, as you can see from the graphs "Work role" and "Reason completed".

Polic Australia

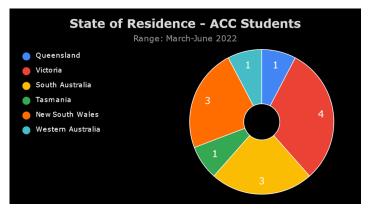
Improving health outcomes for Australia's polio survivors

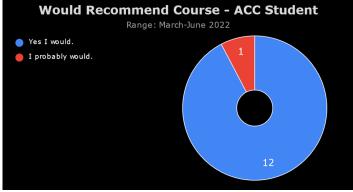
Working with Polio Survivors: A Professional **Development Course for Aged Care Workers**











Community Programs Update



By Devalina Battacharjee Community Development Worker

On the 21st, 22nd and 24th of March, Polio Australia and Polio SA collaborated to arrange Late Effects of Polio (LEoP) Seminar Events in Adelaide, Victor Harbor and Port Augusta, respectively. These events were of immense

significance to us as an organisation because they marked our official return to in-person sessions, a first in over two years, and gave us an opportunity to renew our bond with our wonderful South Australian community members.

Thanks to some robust promotion courtesy of Polio SA, classifieds of *Victor Harbor Times* and *The Transcontinental*, as well as the Coast FM radio station, we were able to attract 90 participants across all three venues.

The sessions were very well received with feedback that was overwhelmingly positive. Many members were particularly appreciative of Rod Muller's personal polio journey at our Victor Harbor session. Thanks Rod!

We have also recently concluded smaller but just as well received community information sessions in Goulburn and Wollongong on the 25th and 26th of May, respectively. These sessions were held in collaboration with <u>Polio NSW</u> and the aim was to attract new members to join our existing community and spread awareness about LEoP.

Behind The Scenes



By Paulette Jackson

Administration Officer

Over the last three months, administrative aspects of the programs have been progressed (in the midst of the quieter part of the year for workshop delivery) including:

- Promotion of <u>Clinical Practice Workshops</u> and external outreach
- Sending email reminders regarding the Aged Care Course and troubleshooting registrant issues
- Promoting the <u>Aged Care Course</u>
- Posting Medic Alert cards to State Networks
- Uploading research/journals into the <u>online</u>
 <u>research database</u>

To that end, we were successful. In promoting our sessions through the *Southern Classifieds* and radio stations Vox FM and Radio Pulse, we were able to reach survivors and carers who had not been privy to any information regarding LEoP and Post-Polio Syndrome (PPS). The information given out in these sessions was deemed informative and helpful, with one Wollongong participant saying it was great to finally be able to have a name for all that her husband was going through.

Apart from the community information sessions, Polio Australia participated in the General Practice Conference & Exhibition (GPCE) held in Sydney from the 19th to the 21st of May. We were able to establish contact with many GPs who were interested in knowing more about LEoP. They were keen to incorporate questions in their admission questionnaire that would better help in identifying and aiding survivors who developed LEoP symptoms.

Polio Australia was also in attendance at the <u>Digital Health Festival</u> which was held in Melbourne from the 31st of May to the 1st of June. We were able to soak up lots of information pertaining to forthcoming new and exciting technological advancements that promise to usher in a new era of dignity and comfort for the aged and the differently abled.

Monthly Zoom chats are still being held for Australia's post-polio community on the first Monday of each month, at 11am Australian Eastern Daylight Saving Time/Australian Eastern Standard Time (depending on the month!). Please check the right time in your area so you don't miss it! Book <u>here</u>.

Until next time, stay safe and warm!

- Mailing/emailing out book orders
- Website listings and preparations for Clinical Practice Workshops

Other office administrative projects include:

- Website management updating Community Information Sessions, <u>Health Professional</u> <u>Register</u>, <u>Australian Polio Register</u> (reconciling entries and activating new entries)
- Sending a Welcome email to new polio survivors
- Updating <u>brochures</u> and <u>fact sheets</u>
- Sending *Thank You* cards to donors
- Uploading social media posts
- Responding to emails as necessary
- Assisting the Community Development Worker with email outreach campaigns
- Compiling Agenda and Minutes for Monthly Team Meetings

Farewell From Steph



By Steph Cantrill Community Programs Manager

On the 8th of May 2022, I would have been celebrating four years with Polio Australia. And what an almost-four-years it's been! Starting part-time while I continued working as an occupational therapist, I began tentatively reaching

out to people in the Victorian polio community, finding my feet as I went along. Everyone was very kind, sharing their stories and helping me make valuable connections. My first community information session, pictured below, went off without any enormous hitches – a big confidence boost!

After a few more info sessions around Victoria, I moved into a full-time role and extended my reach into other south-eastern states. While I was sad to leave my OT role behind, I was excited for what I was moving into. And I've loved all the opportunities I have been given. I've seen parts of the country I'd never been to before, met some wonderful people in my travels, and absolutely loved those 'a-ha' moments as people realised they weren't alone in their post-polio experiences. It's been an absolute privilege to share information about Late Effects of Polio, talk through some helpful self-management strategies, and connect people to services wherever possible. Whether it was five people or 105, in a small meeting room in a rural town or a sports centre in a big city, it was a great opportunity to bring the community together.

And then, just as I moved into a national role with the full intention of arranging sessions all around the country, a certain pandemic we all know took hold. Sessions in northern NSW were cancelled in early March 2020, and are yet to be rescheduled. But what the cessation of in-person sessions did bring us was one of the buzz words of 2020 – the 'pivot' to online events. I have been blown away by the way the community adapted to our Zoom chats and webinars, and it's been a great learning curve for many of us (especially me, I think!). We also used this opportunity to more actively share the range of factsheets and other resources on our <u>Living with</u> <u>Polio</u> site, grow our <u>Facebook community</u>, and add a series of videos to our <u>YouTube account</u>. Check these out if you haven't already!

Sadly, an era is ending for me on the 28th of April, and I won't get the chance to pop the fouryear champagne. But I am happy to be leaving the Australian polio community in very capable hands. With her health professional experience, excellent organisational skills, initiative, and gentle, thoughtful approach to her work, I am confident that <u>Devalina</u> will do an excellent job looking after Community Programs. I hope that <u>Michael</u> and <u>Paulette</u>, the very accomplished Clinical Education team, will be able to continue their amazing work for years to come. <u>Shylie's</u> quiet commitment to the behind-the-scenes support of staff is a wonderful asset to the organisation. And the incredible <u>Gillian</u> works tirelessly and patiently to keep the team in line!

I can't quite say enough thanks to the team, the Board, the state networks, or the polio community as a whole. I'm so grateful for all the support I've received over the years, and for the way the polio community has worked together to support each other. Special thanks also to Maryann who, along with <u>Bev Watson</u> (Polio Network Victoria) and <u>Shirley Glance</u> (Post-Polio Victoria), saw enough potential in me to hire me for the position. In the two years we worked together – and beyond – Maryann imparted her wisdom and experience and left me with the confidence to take the role and make it my own. And I can't leave without mentioning <u>Jill</u> <u>Pickering</u>, who made it all financially possible. Thank you for believing in community connection and engagement, and thank you for all the encouragement you gave me.

So, this is goodbye! I'm sorry there hasn't been a chance to say our farewells in person, but I wish you all the best in your journeys, whatever they may be.

Steph running her first community information session.



Polio Australia's Clinical Sources

By Paulette Jackson

Are you familiar with and utilising Polio Australia's clinical resources? These documents can be handed or sent by you to your medical providers to assist them with understanding post-polio conditions. Here is the link to the resources: <u>https://www.poliohealth.org.au/diagnosis-and-management/</u>

Resources available include:

RESOURCE	WHEN TO PROVIDE IT								
The Late Effects of Polio: Do you know the signs?	Fact sheet for polio survivors and health professionals outlining the signs and symptoms of the late effects of polio.								
Managing Muscles and Mobility	Clinical practice resource for health professionals outlining best practice in the management of individuals living with polio, the late effects of polio and/or post-polio syndrome.								
<i>The Late Effects of Polio: Introduction to Clinical Practice</i>	Provides an overview of the broad range of symptoms associated with the late effects of polio and post-polio syndrome. This resource assists health professionals in the management of these conditions.								
St Vincent's Hospital Melbourne's Anaesthesia and Surgery: A guide for people with a history of polio	Excellent resource for anyone who has had polio and will be having surgery. There is also a section for healthcare providers to alert them of necessary precautions when administering anaesthesia. This also has an outstanding history of polio form that we recommend you use at the start of any episode of care.								
Spinal Life Australia's <i>Late effects of polio – A guide to management for medical professionals</i>	Clinical resource for general practitioners to assist with the management of post-polio conditions.								
<i>Late Effects of Polio: Information for Theatre Nurses</i>	Resource for theatre nurses outlining nursing considerations for individuals with a history of polio who are having a surgical procedure.								



Financial Update

Polio Australia would like to thank both individuals and organisations for their generous support of **\$2,430** for the first quarter of 2022. Be assured that 100% of these tax-deductable donations are used to support Australia's post-polio community.

If you would like to see how your 'living bequest' can support polio survivors now, click on the following link: <u>www.polioaustralia.org.au/donations-bequests/</u> or contact the Polio Australia office on Ph: 03 9016 7678 or Email: <u>contact@polioaustralia.org.au</u>.

End Of Financial Year Call Out

The team here at Polio Australia would like to thank you for being a part of our community. We have worked hard over the past financial year to raise awareness for polio survivors, educate health professionals about the late effects of polio, and host information sessions and webinars for polio survivors and their carers.

However, our mission to standardise quality polio information and service provision across Australia for polio survivors is an ongoing effort and is now at risk. Recently, we found out the Department of Health funding for our Clinical Education Program will be ending in June, and we need your help to continue our work.

As a non-profit organisation, we heavily rely on community support and grants. None of our efforts would be possible without the help of donors, volunteers, and supportive community members like you. Any and all support is greatly appreciated! This EOFY, would you consider donating to help us continue to ensure all polio survivors in Australia have access to appropriate health care and the support required to maintain independence and make informed choices?

Past campaigns have enabled us to:

- host information sessions and webinars for polio survivors and their carers
- develop, print and distribute fact sheets for polio survivors and health professionals
- translate fact sheets in 10 different community languages
- connect to polio survivors through our Australian Polio Register – there are 3,821 entries to date
- support vital organisational costs including web-based development and maintenance, promotion of activities, operational equipment, and business compliance

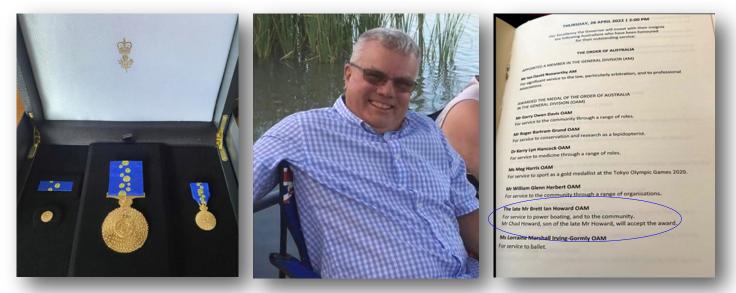
If you would like to donate, please visit our donation page at <u>www.polioaustralia.org.au/donations-bequests/</u> or send a cheque to PO Box 2799, North Parramatta, NSW, 1750

Polio Australia is a non-profit organisation and is endorsed by the Australian Taxation Office as a Health Promotion Charity and a Deductible Gift Recipient, making all Australian donations over \$2 to Polio Australia tax deductible.

Please <u>click here</u> for a copy of Polio Australia's Constitution. You can also <u>click here</u> for Polio Australia's 2020-2022 Strategic Plan.



Remembering Brett Howard



In *Polio Oz News* (P9), Autumn 2022 Edition, we reported that Brett Howard had been posthumously awarded the Order of Australia Medal in the Australia Day Honours list. Brett was nominated for his dedication to powerboat racing and within the broader community. Brett was also the President of Polio South Australia for more than 10 years and also served on the Board of Polio Australia.

The Order of Australia Medal Investiture was presented on the 28th of April 2022. Chad Howard received the Order of Australia Medal on behalf of his late father, Brett, and kindly shared some words and pictures from the day.

"Very honoured and privileged to attend the investiture of the OAM awarded to my late father Brett Howard OAM today at Government House. The Order of Australia Medal was awarded to him for all of his endless work with Australian Power Boat Association, Adelaide Speedboat Club, Polio Australia, Polio SA, Port Adelaide Football Club, SANFL. Very proud day to represent him and receive the medal on his behalf along with other worthy recipients of an OAM for their community and charity works. All such great people."

New Fact Sheet Available Painaustralia:

Did you know that only 1 out of 100 people living with chronic pain will receive multidisciplinary care, and that around one-fifth of all GP presentations in Australia involve chronic pain? Our new fact sheet (below) is available for download here.





Constipation Is A Pain In The . . .

By Melinda Overall JP

Nutritionist / Counsellor www.overallnutrition.com.au

The irony isn't lost on me that I'm writing this article about constipation just hours before I commence drinking the bowel preparation solutions for a colonoscopy tomorrow. The last thing on my mind tonight will be constipation!

Anyone who has experienced constipation will tell you just how uncomfortable a condition it can be. It might not be such a big deal if you experience once in a while but chronic constipation can really impact quality of life.

Generally, having fewer than three bowel movements a week that require straining, with hard and lumpy stools is how constipation is understood.

Chronic constipation, more precisely, is defined by the Rome V Criteria (Rome Foundation)¹:

Must have two or more of the following:

- Symptoms experience for 3 or more months prior with symptom onset 6 or more months ago
- Straining
- For 25% of defecations:
 - Lumpy or hard stools form 1 of 2 on the Bristol stool chart (see image)
 - Sensation of incomplete evacuation
 - Sensation of anorectal obstruction/ blockage
 - Manual manoeuvres to facilitate defecation e.g. digital evacuation, pelvic floor support; for >1/4 (25%) of defecations
- Fewer than 3 spontaneous bowel movements per week

What causes constipation?

Constipation is often idiopathic, but there are some common triggers that can be easily attended to:

- Drinking insufficient water aim for 30ml per kg of body weight per day)
- Not getting enough fibre adequate intake for women is 25g per day and me 30g per day². White bread can have as little as 0.6g of fibre per slice, whilst some wholegrain breads can have almost 7g. Read more about fibre here: <u>www.healthdirect.gov.au/high-fibrefoods-and-diet</u>
- Too little physical activity/immobility
- Side-effects of medications
- Resisting or ignore the urge to poo

Other causes of constipation can be more insidious such as, colorectal cancers, bowel obstruction or strictures. Additionally, constipation can be a symptom of other condition/diseases. This can include hormonal issues that slow bowel motility, diabetes, overuse of laxatives, neurological and/or spinal disorders – Parkinson's disease, irritable bowel syndrome and other functional gastrointestinal disorders, and some autoimmune diseases such as lupus and scleroderma.

It's important to note that if constipation is a new symptom for you, and especially if you note any blood or mucous in your stool, you should consult your GP for a proper diagnosis.

Why is it important to deal with constipation?

Chronic constipation that is not managed can lead to other health issues including:

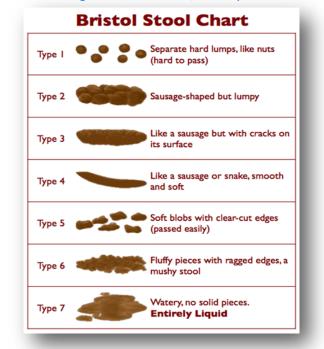
- Anal fissures (tears in lining of the anus)
- Haemorrhoids
- Diverticulosis
- Faecal impaction
- Urinary incontinence due to pelvic floor muscles being damaged through straining

If you are eating well and including plenty of fibre, drinking plenty of water and moving as much as you can, and are still experiencing with constipation, please check in your GP or other health provider to help get you moving.

Stay well. 🔶

References:

- Rome Foundation (2016, 16th January) 'Rome IV Criteria' <u>https://theromefoundation.org/</u> rome-iv/rome-iv-criteria/
- National Health and Medical Research Council (2019, 9th May) 'Dietary Fibre' <u>https://</u> www.nrv.gov.au/nutrients/dietary-fibre



Ken Hutt's 2022 Everest Assault (cont'd from P1)

mountains in each of the 7 continents, Everest being his second last of the 7. (Vinson in Antarctica will be his final flight.)

To cut to the chase, a permit was issued to both Pierre and myself through Babu Adventures, to fly from 8000m, not the summit as we were hoping. My only thoughts as to why this was the case is that, I believe, the ultimate height was being saved for climbers. The Tourism Ministry was, possibly, protecting the summit for the benefit of mountaineers, not wanting to risk the ultimate draw card in any way. Further commercialising of the summit could occur by opening it up to paragliding pilots.

I wish to congratulate Pierre for his flight from 8000m on Everest, the first legal flight from Everest. His flight was scheduled 2 days prior to mine. He launched from camp 4 at 8000m and landed at Gorek Shep, some 3000m below. Well done Pierre! And thank you for your good wishes for my flight. I was honoured to share the preamble to the flight with such a well-known pilot as yourself. A bit of history created.

I arrived at camp 2 on the 12th May, completely exhausted. I mean *completely* exhausted. I was suffering quite severe coughing bouts and severe dehydration, but felt I could continue and that these symptoms could be overcome. The icefall conditions were more difficult than previously negotiated due to the hot weather, and the slog up the Western Cwm was done in the extreme heat of the day. Our entire team really did it tough, even our Sherpas. The following day was a rest day. But for me, with chest and breathing difficulties, this was not enough time to recover – not usual for me, as I generally recover quite quickly. I was still carrying the Khumbu cough, which was getting worse and coming from deeper in my chest. This was really starting to be of concern.

I decided another rest day was needed and waved off our other four team members who left camp 2 for the eventual summit. They each have stories to tell, three of them being successful, which I personally found so gratifying. When you spend so much time with a team, you really start sharing their dream, their challenges, and also their success.

Joel, Ludmila and Gabriel, congratulations and thank you for sharing OUR polio dream. The photos of the END POLIO NOW banner on the roof of the world are brilliant and really cemented our efforts for polio eradication (see photo p1). Carlos, to attempt Everest without oxygen is superhuman. I'm sorry you didn't get the view from the top, but so close my friend you should stand proud.

On the 15th of May, with Lobsang Sherpa, I left camp 2 with the plan of climbing and spending

the night at camp 3 the following day, then ascending to camp 4. The plan was then to launch the glider as soon as weather conditions would allow. Not 200 metres from camp 2, the coughing fits started and my non-existent energy levels meant a decision needed to be made. To continue on at that time would be fool hardy. Camp 2 is the altitude limit of helicopter rescue, and to continue on puts yourself in quite dangerous situation should deteriorating а health occur. I had made a friend of an experienced high-altitude doctor at camp 2, Christian, so returned to seek his advice, which he gave enthusiastically.

His response, however, was not what I was hoping: "as a climber you have spent a lot of energy and resources to get here, so I don't want to tell you to go back. But as a doctor, my firm and only instruction is to go down. You are not going to get better up here, so I think this is your only option. Go down, recover and have another go." Dr Christian made a preliminary diagnosis, using the limited resources that he had, as most likely pneumonia.

OK, easy decision, let's get back to base camp, recover and meet the weather window due for the 21st of May back at camp 4. A major setback but not the end. We can still do this.

Returning through the ice fall (again) that day, and completely drained of energy, I went directly to the base camp clinic. There was no sign of any altitude illness, so I thought a couple of days down lower would sort out the chest Unfortunately, the chest infection issues. deteriorated. Today is the 23rd of May and the chest infection has not cleared. We are, of course, off the mountain, and the expedition has been concluded. Everest season has come to an end until next year.

Cont'd P13

Returning unwell from camp 2 after coming back through the icefall again. My son, Matt, and me; WOW to be met by your

son!



Ken Hutt's 2022 Everest Assault (cont'd from P12)

To say I am disappointed at how it ended is obviously an understatement, at the very least. I was not done, and there was work left unfinished. We were on target for something great, but without fitness and good health, high altitude climbing is like pulling the tail of the tiger – you just never really know the consequences. And this is without adding the further risks of high altitude launching and flying. I know of 3 deaths reported on the mountain this year alone, just on Everest. We are playing a dangerous game.

I made some definitive promises before we left Australia:

- to do our very best to succeed;
- to do what we could for the eradication of polio; and
- to come HOME.

This sport is all about pushing the limits. If you don't, you may as well not even bother. However, there comes a time that common sense should prevail, and despite the personal drive to continue and keep the dream alive, the risk to life is just too great. I rang home and my wife, Elle, told me in no uncertain terms, "You have done enough. It's time to come home."

I wish to thank all our supporters at home and everywhere. The good wishes have been inspiring; the heartfelt comments of support unparalleled; the donations to polio eradication have been humbling; and I think, together, we have all made a positive difference – this always being our only true goal. My team was always about what we could do for Rotary's *Polio End Polio Now* eradication program, and we will continue to promote this until complete eradication is achieved. We are very close!

Read more about Ken Hutt's adventure here: <u>www.abc.net.au</u> - 27 May 2022

Ken Hutt set out to paraglide from the top of Mount Everest — he didn't make it, but his message to end polio did

By Julius Dennis

Alan Murphy: July 1923 to March 2022

By Christine McMahon

Source: <u>www.theage.com.au</u> – 29 March 2022

Alan Murphy: virologist tackled polio, influenza and German measles

In 1959 the NSW Health Department established the Institute of Clinical Pathology and Medical Research as a separate entity from the hospital laboratories. It was to train pathologists and medical technologists; perform tests for country hospitals; and carry out special tests which were increasing in number, complexity and cost.

One of the departments was the virus laboratory. There had been a small virus laboratory at Prince Henry Hospital employing four scientists, but this had closed. The Health Department was worried that, should a poliomyelitis epidemic occur, they would not have the ability to determine its cause. Victoria had three virus laboratories but the thought of sending specimens to Melbourne was a political anathema.

The Department was keen to appoint a virologist and Alan Murphy was recruited from New Zealand. His responsibilities were to set up a viral diagnostic laboratory and to investigate any outbreaks and epidemics that occurred.

Alan Maxwell Murphy was born in July 1923 in Auckland. His father was Frederick George Murphy, a baker, and his mother was Ann McDowell, who worked in retail. Alan graduated in chemistry from Auckland University in 1945 and was employed as assistant biochemist in the pathology department of the Auckland Public Hospital. However, he later became more interested in microbiology.

In 1951 the Auckland Hospital Board decided to establish a virus diagnostic and research laboratory (partly financed by a private bequest) and Murphy was asked to take charge. He toured Australia for most of 1952, working in the Hall Institute in Melbourne (then under the direction of Sir Macfarlane Burnet), at the Prince Henry Hospital in Sydney, and finally at the Queensland Institute of Medical Research. He then returned to Auckland and organised the planned virus laboratory.

The year 1952 was a seminal year in the history of medical virology. American scientists demonstrated that all three types of poliovirus would multiply and destroy cells grown in the laboratory, and this could be observed under the normal microscope. Ultimately this resulted in



Alan Murphy (cont'd from P13)



the production of Salk vaccine and later to Sabin vaccine. It also led to the discovery of a multitude of previously unknown viruses resulting in the celebrated publication, Viruses in Search of Disease. Murphy worked with the scourge of the time poliomyelitis - and he was the first person in New Zealand to grow the virus in the laboratory from a fatal case.

Moving to Sydney in 1959, Murphy investigated the poliomyelitis epidemic of the summer of 1960-61 (the last to occur in NSW). He realised that the epidemic was caused by type 1 poliomyelitis virus, with a smaller number of people with type 3 virus. He also found that patients who had already been vaccinated with the Salk type vaccine were not immune to the polio type 3 variant of the virus. As a result, the type 3 component of the locally-produced vaccine was increased in subsequent batches to give better protection.

Starting with one assistant, Murphy built up an efficient diagnostic and epidemiological laboratory employing 26 staff by the time he retired from the NSW Public Service in 1984 to establish his own diagnostic laboratory.

In 1969 Murphy travelled overseas on behalf of the Health Department to learn about the latest research in different laboratories. He visited the United States, Canada, Britain and Denmark.

Coffee With Polio Experts

Dr Ananda Bandyopadhyay, Bill & Melinda Gates Foundation

In this two-part video series, we chat with Dr Ananda Bandyopadhyay, Deputy Director of Polio Technology, Research & Analytics, BMGF, about the new tool in GPEI's kit to combat cVDPV2: novel oral polio vaccine type 2 (nOPV2).

Click to videos here

He was particularly interested in development of the diagnosis of Hepatitis B. An American scientist, Dr Baruch Blumberg, discovered this virus in an Indigenous Australian in 1965 and it was initially known as 'Australian antigen'. However, a diagnostic test was not developed for another three to four years.

In 1971 Murphy was made a Fellow of the Royal College of Pathologists and, in 1996, he was appointed an Honorary Life Member of the Australian Society for Microbiology. He was author or co-author of 84 articles published in medical and scientific journals including the *Medical Journal of Australia* and *The Lancet*.

Over the years, he and his group investigated many viral outbreaks and epidemics, among them *influenza* and the pandemic of *German measles* in 1964-65 (with the Children's Medical Research Foundation). They showed babies infected in utero could remain infectious for two to three years after birth. Another interesting study concerned the large Sydney outbreak of gastroenteritis in 1978. It resulted from consumption of oysters grown in the Georges River that were contaminated by the so-called *Norwalk Virus*. This had not been identified previously in Australia and it was traced to sewage pollution of the river. Oyster farming in the river was then prohibited.

In addition, Murphy developed several new laboratory tests to aid in the diagnosis of viral diseases, perhaps the most notable being a test for determining German measles in pregnant women and another for Q fever, a common infection in abattoir workers.

In 1950, he married Betty Williams, a nurse. After moving to Sydney, they settled in Beecroft, both becoming Australian citizens by the early 1980s. They had three children – Jonathan, Elizabeth and Roger. Betty died in 2007 and Alan passed away on March 21, 2022. He is survived by his children, nine grandchildren, and three great-grandchildren.



Ananda talks about development of the nOPV2 vaccine and its pathway to rollout.

Polio Oz News

To The Children Of The World

By Gay Riseborough

Source: evanstonroundtable.com - 23 March 2022

Glenna Goodacre's sculpture celebrates Rotary's battle against polio

At One Rotary Center in downtown Evanston stands a figurative sculpture by well-known artist Glenna Maxey Goodacre (1939-2020). Not one but two plaques accompany the statue, which is highly unusual for public art and more typical for a museum.

Titled *Polioplus*, the sculpture, which was installed in 1991 in front of Rotary International World Headquarters at 1560 Sherman Ave., was a private gift to Rotary International and dedicated by Rotary to "the children of the world". The second plaque begins, "The monument was made possible by the creativity, time and talent of the artist Glenna Goodacre."

The sculpture is a traditional grouping, one that might remind us of a Norman Rockwell illustration, with a boy and a girl looking admiringly at a kindly physician as he cradles a baby in his arms, administering the polio vaccine. The figures are slightly larger than life size.

The sculpture takes its name from "*PolioPlus"*, the title of Rotary's most notable global project: the eradication of polio. It is done in the roughly textured style that the great sculptor Rodin used.

Rotary, a worldwide service organization, is justifiably proud of its great accomplishment in reducing global polio cases by 99.9% through its worldwide support of the poliomyelitis vaccine and partner programs in the Global Polio Eradication Initiative. The program was launched in 1985 and, at present, Afghanistan and Pakistan are the only two countries where 'wild' polio remains endemic.

Goodacre, a Texas-born American artist, worked out of Santa Fe, New Mexico. She graduated from Colorado College and studied at the Art Students League of New York, beginning as a painter. At the time, she was one of few women creating large, commemorative sculptures. Early in her career, she signed her work "G. Goodacre" out of concern that people would not buy art made by a woman.

Her works, including paintings, have been exhibited across the United States and are in collections in more than 40 countries. Her bestknown public artwork is the <u>Vietnam Women's</u> <u>Memorial</u> on the National Mall in Washington, D.C.



Glenna Goodacre's Polioplus *Photo by Gay Riseborough*

In 1997, Goodacre won an international competition to create the Irish Memorial at Penn's Landing in Philadelphia, an ambitious group of 35 life-size figures documenting the immigration of survivors of the Irish potato famine to the United States.

Goodacre's other large-scale public monuments in bronze include *After the Ride*, a larger-thanlife statue of Ronald Reagan installed in 1998 at the Reagan Presidential Library in Simi Valley, California. The 8-foot-high bronze Reagan is shown in casual wear – jeans, denim jacket and cowboy boots, with Stetson hat in hand.

Goodacre's work also appears on the <u>Sacagawea</u> <u>Golden Dollar coin</u>, which bears a portrait of a young Native American woman. The coin was introduced in 2000 and issued between 2000 and 2008. Despite its name and appearance, it's not really made of gold; it has an outer layer of manganese brass, giving it its golden color.

The Enigma Of Post-Acute Infection Syndromes

By Pooja Toshniwal Paharia / Reviewed by Aimee Molineux

Source: <u>www.news-medical.net</u> – 20 May 2022

In a recent review published in the journal <u>Nature Medicine</u>, researchers summarized known literature findings of the unexplained post-acute infection syndromes (PAISs).

Overview and clinical presentation of PAISs

Unfortunately, the chronic sequelae of acute infections often go undiagnosed due to the nonspecific symptoms and lack of objective diagnostic features. Such an illness characterizes PAISs, in which patients are not able to recover entirely from the acute infections, the cause of which is unexplainable, and the causative pathogen remains unidentifiable by routine diagnostic methods.

Q fever fatigue syndrome is a well-established PAIS that is caused by the *Coxiella burnetiid* bacterium and is a very debilitating condition. Another PAIS with an established causative pathogen is the post-dengue fatigue syndrome, caused by the mosquito-borne dengue virus.

Other PAIS include the post-Ebola syndrome (PES), **post-polio syndrome (PPS)**, and Post-chikungunya chronic inflammatory rheumatism (pCHIK-CIR), the causative pathogens of which are the Ebola virus, poliovirus, and chikungunya virus, respectively.

However, several pathogens such as the Epstein Barr virus (EBV), West Nile virus, Ross River virus, Coxsackie Ba virus, H1N1/09 influenza virus, Varicella Zoster virus (VZV) virus have been reported to cause unexplained and unnamed PAISs. Further, **Post-Polio syndrome** can manifest even after 15 to 40 years after a poliomyelitis infection.

PAIS by neurotropic organisms such as the West Nile virus has been reported to cause persistent changes similar to those observed in **post-polio syndrome**. Likewise, the symptomatology of Ross River virus-induced PAIS and chikungunya virus infection are known to be similar.

H1N1/09 influenza A virus, VZV, and coxsackie B have been associated with an increased risk of myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS), underpinning the development of chronic sequelae on exposure to certain pathogens.

The core symptoms of PISs are centered on fatigue, exertion intolerance, sensory and neurocognitive impairments, flu-like symptoms, irritability, poor sleep, sweating, arthralgia, and myalgia, with a wide spectrum of non-specific and varied symptoms.

The neurocognitive symptoms include loss of concentration, brain fog, and memory loss. The symptoms are recurrent or chronic in nature. Other symptoms are disease-specific, such as eye disorders in Ebola virus-induced PAISs and anosmia and/or ageusia in long coronavirus disease (COVID).

Long COVID

Long COVID or post-acute sequelae of severe acute respiratory syndrome coronavirus 2 (SARS -CoV-2) infection (PASC) is a term that encompasses several chronic effects observed among SARS-CoV-2-positive patients post the acute infection. PASC has been identified in mild, moderate, and severe COVID 2019 (COVID-19) patients. The symptoms last for several months and cannot be explained by another diagnosis.

Common PASC symptoms include cough, dyspnea, chest pain, anosmia, cognitive impairments, and fatigue. The symptoms also affect the performance of daily activities and may relapse or fluctuate. Long COVID patients present with variable symptoms that last for different time durations.

PASC patients recovering from severe SARS-CoV -2 infections may either present with pulmonary damage subsequent to acute respiratory distress syndrome (ARDS) or pneumonia or may exhibit persistent post-intensive care unit (ICU) syndrome symptomatology. Most of the PASC individuals have been reported to be elderly males with severe COVID-19.

PASC patients recovering from asymptomatic or mild to moderate COVID-19 may present with fever, arthralgia, myalgia, sensory disturbances, and intolerance to exertion, similar to those observed among ME/CFS patients. Such PASC presentations have been predominantly found in women.

Researchers have postulated that SARS-CoV-2 infections may trigger or unmask medical conditions such as diabetes, postural orthostatic tachycardia syndrome (POTS), Guillain–Barré syndrome, and thrombotic disorders.

Pathogenesis of PAISs

All types of pathogenic organisms such as bacteria, fungi, viruses, and parasites have been implicated in the pathogenesis of PAISs.

The long-term presence of pathogens (bacteria/ virus/fungi/parasite) presenting as persistent infections or persistent unviable pathogen remnants leads to chronic stimulation of the host immune system. Subsequently, T lymphocytes and B lymphocytes are activated, which enables the interaction of the persistent pathogen with the pathogen-associated molecular patterns (PAMPs) of the host.

The Enigma Of PAISs (cont'd from P16)

Subsequently, the pathogenic ribonucleic acid (RNA) binds to the pattern recognition receptors (PRR) of the host cell. The pathogen-PRR binding stimulates innate immunity.

An alternative mode of activation of the immune system involves the impairment of regulatory T (Treg) lymphocytes by the persistent pathogen, as a result of which, autoreactive lymphocytes target antigens of the host (self) and induce antibodies causing autoimmune impairment of the host immune systems.

Persistent and chronic infections could also occur due to microbiome dysbiosis or dysregulation of the microbiota-gut-brain axis due to reactivation of latent pathogenic organisms and activation of microglia by afferents of the vagus nerve. Either of the mechanisms could result in organ damage such as brain atrophy, lung fibrosis, cardiovascular damage, renal dysfunction, vasculature damage, and villous atrophy.

To conclude, PAISs represent an enigmatic spectrum of medical diseases. Further biomedical research is required to elucidate their underlying molecular mechanisms and develop objective markers for prompt diagnosis and effective treatment.

Journal reference:

Choutka, J., Jansari, V., Hornig, M. *et al.* Unexplained post-acute infection syndromes. *Nat Med* 28, 911–923 (2022). <u>https://doi.org/10.1038/s41591-022-01810-6</u>, DOI: <u>https://doi.org/10.1038/s41591-022-01810-6</u>, https://www.nature.com/articles/s41591-022-01810-6

'Live' Polio Vaccine Fires Up Immune System

Source: <u>Global Virus Network</u> – 31-March 2022

Live' Polio Vaccine Fires Up Immune System Providing Protection From SARS-CoV-2 Infection

Global Virus Network (GVN) studies suggest that the oral polio vaccine can protect people in developing nations that do not yet have access to COVID vaccines.

Newswise — Two new studies from the <u>Global</u> <u>Virus Network (GVN)</u> in partnership with the Petroleum Industry Health Organization of Iran provide evidence that getting the oral polio vaccine made from live, weakened poliovirus may protect people from COVID-19 infection by stimulating the immune system.

One of these studies demonstrated a lower incidence of COVID infections in countries in which people received the 'live' polio vaccine compared to countries that only received the polio vaccine that does not contain a live virus. These findings were published on March 17, 2022, in *PLOS One.*

Another report from the research team showed that when young children received the 'live' polio vaccine their mothers, who were indirectly exposed to the poliovirus vaccine, did not get infected with COVID. This study was published late last year in *JAMA Network Open*.

Within a few hours of exposure to any pathogens — including weakened viruses like those in the oral polio vaccine —, the immune system activates its first line-of-defense. This defense produces an immune response to a broad variety of pathogen-related molecules and ramps up the immune system's readiness for invaders: a process sometimes called 'trained innate immunity.' The outcome from one of these newest studies indicate that this trained innate immune response spurred by vaccination using the live poliovirus may provide protection for up to 6 months against COVID infection.

The researchers say that this implies that these live vaccines, technically known as live attenuated vaccines, may be used temporarily to protect people in low-income countries that do not yet have access to COVID vaccines.

"Although countries like the U.S. and those in Europe are dropping pandemic restrictions, many people in lower income countries remain unvaccinated due to lack of supply. Individuals in these countries are still at high risk for COVID infection and potential complications, particularly since these regions still lack the latest treatments and enough ventilators for those who need them," said co-author Shyam Kottilil, MBBS, PhD, Professor of Medicine and Director of the Division of Clinical Care and Research, Institute of Human Virology, Chief of the Division of Infectious Diseases at the University of Maryland School of Medicine, and senior advisor to the GVN. "These live vaccines may provide a stop gap to reduce hospitalizations and deaths until we can get these people COVID vaccines."

Senior author on the studies Robert Gallo, MD, The Homer & Martha Gudelsky Distinguished Professor in Medicine, Co-Founder and Director of the Institute of Human Virology at the

Polio Oz News

'Live' Polio Vaccine (cont'd from P17)

University of Maryland School of Medicine, a GVN Center of Excellence, and Co-Founder of the GVN and Chair of the GVN's Scientific Leadership Board, said, "Early in the COVID-19 pandemic, prior to development of effective vaccines we proposed using live attenuated vaccines as a temporary solution to boost immunity until the vaccine could be developed. This idea directly stemmed from my GVN colleague and co-author Dr. Konstantin whose parents were Chumakov, vaccine researchers in the 1970s Soviet Union. His parents observed that flu rates seemed to drop *in those people given the oral polio vaccine. Other GVN colleagues joined us in advocating for* studies to determine if these live attenuated vaccines would be a feasible strategy during the coronavirus pandemic. Now we have some of the first evidence that they do offer protection. I hope funders take notice and increase support for these types of trials that study the innate immune response and provide significant hope in mitigating future pandemics.

Co-author Konstantin Chumakov, PhD, a GVN Center of Excellence Director, said, "These observations are yet another confirmation that live vaccines induce broad protection against infections caused by pathogens other than their direct target. They urgently call for the direct prospective clinical studies of this phenomenon that could lead to the development of a novel class of vaccines based on stimulation of trained innate immunity. Such vaccines could become the badly needed universal countermeasure against emerging infections."

"The GVN serves as a catalyst to bring together the world's foremost virologists," Christian Bréchot, MD, PhD, President of the GVN, Associate Vice President for International Partnerships and Innovation at University of South Florida (USF), and Professor, Division of Infectious Disease, Department of Internal Medicine at the USF Health Morsani College of Medicine, the GVN Southeast U.S. Regional Headquarters. "We are pleased to work with varying nations to initiate these important clinical trials."

In the *PLOS One* study, the researchers compared infection rates per 100,000 people in 146 countries that received both the live and the injectable polio vaccine, which does not contain live virus, compared to 56 countries that only used the injectable, non-live version. They found infection rates in countries that did not use the live polio vaccine were about three times higher than those that did use the live polio vaccine.

For the JAMA Network Open study, the researchers followed 419 mothers in Iran whose young children were given the live polio vaccine compared to 3,771 mothers whose children did



WHO delivers laboratory supplies to Islamic Republic of Iran

not receive the live polio vaccine. None of the mothers whose children received the live polio vaccine developed COVID, whereas 28 mothers whose children did not receive the live polio vaccine did contract COVID within 9 months. Researchers know that poliovirus and even the weakened virus from the vaccine can be shed in the stool. The researchers surmise that the mothers were exposed to virus when caring for their children through bathing and diaper changing.

"It is heartening to find similar study results obtained from very different approaches strengthening our hypothesis that using the oral vaccine may provide protection against SARS-CoV-2, the virus that causes COVID," said the first author on the studies Farrokh Habibzadeh, MD, Special Consultant on Public Health for the GVN and the Managing Director of the Research & Development Unit of the Petroleum Industry Health Organization of Shiraz, Iran. He added that, "This hypothesis should be tested in additional quality clinical trials, preferably conducted in countries where the oral polio vaccine is currently in use as part of their national immunization for polio."

Co-author Kristen Stafford, PhD, MPH, Associate Professor of Epidemiology & Public Health at the Institute of Human Virology at the University of Maryland School of Medicine and member of the GVN, said, "Some high-income countries declare pandemics over when in fact they just transition to only affecting low-income countries. We do not want this pandemic to become like the HIVepidemic, where years and years of delays led to millions of excess deaths because the antiretroviral medications were too limited in supply or expensive to reach those disproportionately affected.

'Live' Polio Vaccine (cont'd from P18)

We need to find simpler, inexpensive solutions to protect people until they can get their full doses and boosters of the COVID vaccines."

One of the limitations of the live, weakened vaccines, is that they are not recommended for people with suppressed immune systems, as it could lead to infection.

"The important observations that the oral polio vaccine may protect against different infections such as COVID-19 is crucial for future pandemic preparedness. Understanding the mechanisms of protection induced by the oral polio vaccine and other live attenuated vaccines can open the door for the development of improved vaccination strategies to protect against broader infections, and thus provide partial protection against new pathogens during a pandemic until specific vaccines can be developed," said Mihai Netea, MD, PhD of the Department of Internal Medicine and Radboud Center for Infectious Diseases, Radboud University Medical Center, a GVN Center of Excellence, and GVN Center Director.

Additional authors on the studies include Mohammad Sajadi, MD, Professor of Medicine at the Institute of Human Virology at the University of Maryland School of Medicine and member of the GVN; Mahboobeh Yadollahie, MD, Ashraf Simi, BScN, Saeid Saeidimehr, MD, (JAMA Network Open only), Mohammad Rafiei, MD, (JAMA Network Open only), and Iman Hafizi-Rastani, MSc (PLOS One only) of the Petroleum Industry Health Organization of Iran.

A New Polio Vaccine Has Now Been Delivered

By Madeleine Keck

Source: <u>www.qlobalcitizen.orq</u> - 31 May 2022

Three hundred and fifty million doses of newlydeveloped polio vaccine nOPV2 have now been distributed across 18 high-risk countries, a feat the Global Polio Eradication Initiative (GPEI) says marks a "significant development for eradication efforts."

The new oral polio vaccine was developed to better address the constant risk of type 2 circulating vaccine-derived poliovirus (cVDPV), a rare, mutated version of polio found in severely under-immunized communities low in adequate sanitation access.

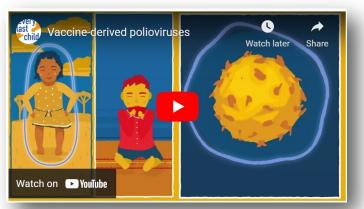
While rare, with fewer than 1,000 cases recorded in the last decade, cVDPV has increased in recent years.

The new vaccine has become the first to be authorized under the World Health Organization's Emergency Use Listing apparatus, which allows unlicensed vaccines to be accessed during public health emergencies, like polio outbreaks.

"Outbreaks of circulating vaccine-derived poliovirus continue to pose an equally menacing threat to countries," the <u>GPEI explained in a</u> <u>press release on May 25</u>. "Through the rollout of a new vaccine to counter the most prevalent form of these outbreaks, cVDPV2, transmission has been stopped in the majority of countries that have deployed the tool."

According to the GPEI, the vaccine has been "triple-locked using genetic engineering to prevent it from becoming harmful." Benin, Congo, Liberia, Nigeria, and Sierra Leone are just some nations among the 18 high-risk countries that have received nOPV2 so far.

Earlier in May, at the 75th World Health Assembly



in Geneva, the GPEI released its polio eradication strategy for the next four years. Despite a 47% decline in circulating vaccine-derived polio cases between 2020 and 2021, and just five cases of wild polio reported last year, the initiative says the world cannot become complacent.

Wild polio remains endemic in Afghanistan and Pakistan, and, in 2022, a case occurred in Malawi, the first since 1992. On May 18, Mozambique similarly announced a wild polio case for the first time in three decades.

The GPEI will hold a replenishment event this October in Germany in the hope of securing renewed financial support.

"A strong and fully funded polio program will benefit health systems around the world," said Niels Annen, Germany's Parliamentary State Secretary. "The polio pledging moment this October is a critical opportunity for donors and partners to reiterate their support for a polio-free world."

The GPEI will be able to vaccinate 370 million children over the next five years if its strategy is fully funded.

Annen added: "We can only succeed if we make polio eradication our shared priority."

Pakistan Reports Seventh Wild Polio Case

Source: <u>reliefweb.int</u> – Govt. Pakistan Press Release – 1 June 2022

ISLAMABAD, 01 JUNE 2022 – A seven-monthold girl was confirmed to be paralyzed by wild polio on Wednesday. This is the seventh wild polio case in Pakistan this year and the sixth in Mir Ali, North Waziristan. The child had an onset of paralysis on 2 May.

"The outbreak in North Waziristan appears to be following the same pattern as that witnessed in 2014 and 2019 when there was a surge in cases in the same area. We are working tirelessly to ensure that we break this pattern," said Federal Health Minister Abdul Qadir Patel.

The southern districts of Khyber-Pakhtunkhwa, namely North and South Waziristan, DI Khan, Bannu, Tank and Lakki Marwat, are at highest risk of wild poliovirus. Bannu also reported two positive environmental samples between April and May this year, confirming that ongoing wild poliovirus transmission is not limited to North Waziristan. "These cases are happening in the same part of the country but parents and caregivers around Pakistan must remain extremely vigilant and give their children repeated doses of the polio vaccine," said Federal Health Minister Abdul Qadir Patel.

According to preliminary investigations, the child had been paralyzed in both lower limbs and left arm. "We are administering the polio vaccine to children up to the age of 10 at all entry and exit points from southern KP to stop the spread of the virus," said National Emergency Operations Coordinator Dr. Shahzad Baig.

All children confirmed with wild polio this year belong to North Waziristan, where more cases are expected due to high refusal rates and instances of finger-marking without vaccination during campaigns. With this new case, the global count for wild polio in 2022 has reached eight from the endemic countries, with one case reported from Afghanistan in January.

Spectre Of Polio Returns To Haunt Pakistan

By Haroom Janjua

Source: <u>www.theguardian.com</u> – 26 April 2022

First case in a year sparks fears of new outbreak despite success of national programme to wipe out the disease

Global development is supported by Pakistan has confirmed its first case of polio after more than a year, damaging the country's hopes of eradicating the virus. Health officials have announced that a baby boy in North Waziristan, bordering Afghanistan, is paralysed after contracting polio.

Dr Shahzad Baig, a coordinator with the Pakistan Polio Eradication Programme, confirmed the "deeply saddening" case.

"This is the most critical time for the programme. The detection of this latest case of wild poliovirus is not unexpected," Baig said. "The Pakistan programme anticipated this risk and put in place contingency plans to enable a rapid response. It continues to intensify its efforts to eradicate all remaining residual transmission of any strain of poliovirus."

Pakistan's new prime minister, Shehbaz Sharif, said he will hold an emergency meeting of the national polio taskforce.

The case has created fear of a new outbreak in vulnerable areas around the Afghan border where vaccination campaigns are treated with



A health worker delivers the polio vaccine in Islamabad earlier this year in Pakistan's latest drive to stamp out the disease. Photo: Anadolu Agency/Getty Images

suspicion and refusal is common.

According to the World Health Organization, Pakistan is among one of only two countries, along with Afghanistan, still to eradicate the crippling polio virus, which has disabled and killed millions.

Baig said: "It is important to emphasise that the number of polio cases has been significantly reduced this year due to the unwavering commitment of health workers, support of communities, and various stakeholders. The programme continues to take pride in these efforts."

Polio Returns To Haunt Pakistan (cont'd from P20)

The last case of paralysis as a result of polio in Pakistan was reported in January 2021. Afghanistan, in 2021, reported four polio cases, but low detection numbers mask a larger presence of the virus. Polio workers and their guards are frequently targeted in Pakistan, where Islamist militants and hardline clerics encourage beliefs that government vaccination is a cover to sterilise children and allow infiltration by western spies.

Zainab Wazir, from North Waziristan, told the Guardian why she refused the vaccine for her two children: "The US are using the so-called polio vaccination cover for their own interests, and objectives like espionage and injecting infertility into our children, which is our future and they are destroying them. Tribal people are forced to take these vaccinations from their own government's hands. It is made up of alcohol and pig fat to humiliate the Muslim population." Militant groups in Pakistan have killed more than 100 healthcare workers and security staff since 2012.

In northwest Pakistan in April 2019, more than 25,000 children were taken to hospital after the spread of unfounded rumours that a polio vaccine was causing sickness.

Baig said: "The programme has worked closely with the community to address vaccine refusals and hesitancy across Pakistan, particularly in the tribal areas. Community engagement practices have started with female religious support persons, who are offering awareness-raising sessions to women in the area. This is, so far, [is] running very successfully.

In addition, the provision of health camps is making major ground in addressing vaccine refusal. This has decreased significantly over the last 18 months, and it is important to note that the current case is not a refusal."

Israel's Current Polio Outbreak Tip Of The Iceberg

By 103FM

Source: <u>www.jpost.com</u> – 5 April 2022

Health Ministry director-general Prof. Nachman Ash addressed the renewed outbreak of polio in Israel on Tuesday morning.

In an interview on the program of Golan Yochpaz and Anat Davidov, he explained that *"it is very acute in my eyes. Although the number of cases is small, it is just the tip of the iceberg that indicates infections mainly in Jerusalem, but also all over the country."*



Photo: ARAB RESIDENTS of Jerusalem take their children to get the polio vaccine at a Tipat Halav clinic in the Armon Hanatziv neighborhood in 1988. (credit: AYALON MAGGI/GPO)

According to Ash, "We must eradicate this disease, it is a disease that can simply be eradicated through vaccines and that is what we are doing. We set out with an extensive vaccination campaign that began in Jerusalem and will spread throughout the country. Children up to the age of 17 are vaccinated with the weakened oral vaccine, two drops, and I very much hope that we will eradicate this disease."

Ash also clarified that he is aware that there is public fatigue regarding vaccines, following the vaccination campaigns against coronavirus:

"In 2013, there was a similar operation that caught the public's attention widely, but this time it's much harder. They're tired of the coronavirus, of the vaccines, but we just talk about it as much as possible in public outreach. This is extremely important, it is not a big hassle, it is an old vaccine that we are familiar with, so I hope that the public will respond and come and get vaccinated."

Who needs to complete the vaccination?

"This is a fairly large number of about 2 million children, with those who have not received two oral vaccines in the past being the ones who need to arrive. Since 2013, we have been vaccinating with two oral vaccines, but there is a large group between 2005-2013, who probably only received one dose and they need to arrive."

How do you know about vaccines?

"There are several ways, either with the vaccine booklet, whoever kept it, or the small children have to get to the Tipot Halav (Baby Clinics) and

Israel's Current Polio Outbreak (cont'd from P19)

the older children to the HMOs and there they will be told. If in doubt — you should get another dose, it is not harmful."

Will the extra dose be boosted across the country?

"Yes, we started this in Jerusalem and will expand it to the whole country since we have found isolations of the virus in other places outside of Jerusalem," said Ash.

When asked about the vaccination of adults, he explained: "Our assumption is that they are vaccinated. The child population has the potential for infecting one another and therefore there is no need for an adult vaccine."

Ash stressed that despite fears that Israel is not currently dealing with an epidemic: "Certainly not, we have one case of illness, but there is an outbreak of infections that in this case we, because of the possibility of eradicating the virus and because it can cause severe illness and lifelong paralysis, want to eradicate it."

Referring to the coronavirus situation, he said: "We are not done with it, we have about ten thousand infected every day, we are a little dull to these numbers, these are very large numbers. We are still in the remnants of the fifth wave, slowly descending to lower numbers, and I hope we stabilize at such numbers and that we can continue to live almost as usual."

Mozambique Polio Outbreak Linked To Pakistan

By Associated Press

Source: <u>abcnews.go.com</u>— 18 May 2022

JOHANNESBURG — Health authorities in Mozambique declared a polio outbreak Wednesday after confirming that a child in the country's north-eastern Tete province had been paralyzed by the disease.

The case in Mozambique is the second imported case of polio in southern Africa this year, following a case discovered in Malawi in mid-February. It's the first case of wild polio in Mozambique since 1992, although cases linked to a mutated virus from the oral vaccine were detected in 2019.

The latest case in Mozambique was found in a child who experienced signs of paralysis in late March, according to a statement issued by the World Health Organization.

Sequencing indicates that the case in Mozambique is linked to a strain of polio spreading in Pakistan in 2019, similar to the case reported in Malawi earlier this year.

WHO declared Africa free of the wild polio virus in August 2020 even though numerous countries across the continent have reported outbreaks linked to the vaccine in recent years. There is no difference between the disease caused by the wild virus or the mutated virus from the vaccine.

"The detection of another case of wild poliovirus in Africa is greatly concerning, even if it's unsurprising given the recent outbreak in Malawi. However, it shows how dangerous this virus is and how quickly it can spread," said Matshidiso Moeti, the World Health Organization's Africa director.

In response to the case in neighboring Malawi, Mozambique recently carried out two mass



Photo: FILE - A baby receives a polio vaccine during the Malawi Polio Vaccination Campaign Launch in Lilongwe, Malawi, on March 20, 2022. In neighbouring Mozambique, health authorities declared Wednesday May 18, 2022, an outbreak of wild poliovirus after confirming that a child in the country's northeastern Tete province had contracted the disease. (AP Photo/Thoko Chikondi, File)

vaccination campaigns in which 4.2 million children were vaccinated against the disease, said WHO.

Disease surveillance is being strengthened in five countries: Malawi, Mozambique, Tanzania, Zambia and Zimbabwe. Vaccination campaigns in the coming weeks are planned to reach 23 million children aged five years and below.

Polio is highly infectious, spread mostly via water and largely affects children younger than five years. There is no cure for polio, and it can only be prevented by immunization. WHO and its partners began an effort to eradicate polio globally in 1988 and have missed numerous deadlines to wipe out the disease.

Polio This Week

Global Circulating Vaccine-derived Poliovirus (cVDPV) as of 24th of May 2022

				(Per				AFP cases (Paralysis oriset between 2016-2022)									Other sources (Human) ⁴ (Collection between 2016-2022)									
	Country	2016	2017	2018	2019	2020	2021	2022	Onset of most recent case	2016	2017	2018	2019	2020	2021	2022	most recent collection date	2016	2017	2018	2019	2020	2021	2022	most recent collection dat	
	Madagascar					2	13	1	07-Jan-22						25	4	17-Jan-22						31	2	05-Jan-22	
	Yemen				1	31	3		27-Mar-21				1				07-Jul-19									
	Malaysia				3	1			14-Jan-20												12	9			13-Mar-20	
Line and	Philippines				2				28-Oct-19				1				31-Oct-19				14				28-Nov-19	
cVDPV1 ¹	Myanmar Indonesia			1	6				09-Aug-19 27-Nov-18				6				21-Aug-19 13-Feb-19									
	PNG			26					18-Oct-18			7	2				20-Sep-18			7					06-Nov-18	
	Laos	3		20					11-Jan-16	5	<u> </u>						09-Feb-16			1				_	00-1404-10	
	Total type 1	3	0	27	12	34	16	1		5	0	7	10	0	25	4		0	0	7	26	9	31	2		
	Mozambigue	ų.		1			2	1	26-Mar-22	, ,		2	10				17-Dec-18	÷								
	DR Congo		22	20	88	81	28	37	24-Mar-22		19	15	29	95	6	3	28-Jan-22					1	3		24-Dec-2	
	Nigeria	1		34	18	8	415	21	13-Mar-22	2 ²		53	18	8	204	14	17-Mar-22	1		44	64	5	302	30	16-Feb-22	
	Dibouti					-																	5	5	27-Feb-22	
	Egypt																					1	12	2	23-Feb-22	
	Somalia			65	3	14	1	2	18-Feb-22				2	13		1	22-Feb-22		2	19	5	26	1		23-May-2	
	Côte d'Ivoire					64			18-Oct-20					24			01-Nov-20				7	95		2	09-Feb-22	
	Yemen						61	5	07-Jan-22						12	3	08-Jan-22						6		17-Oct-21	
	Ukraine						2		24-Dec-21						18		09-Oct-21									
	Mauritania														4		19-Jul-21						7		15-Dec-21	
	Niger			10	1	10	17		14-Dec-21			4	6	2	1		13-Aug-21					9				
	Senegal						17		27-Oct-21						34		17-Nov-21					1	14		18-Nov-2	
	Chad				11	101			28-Nov-20				6	17			15-Oct-20				10	3	1		10-Nov-2	
	Central African Republic				21	4			29-Oct-20				43	1			05-Oct-20				9	2	1		03-Nov-2	
	Uganda																						2		02-Nov-2	
	Cameroon					7	3		11-Oct-21					4	3		29-Oct-21				4	9	1		25-Oct-2	
	Ethiopia				14	36	10		16-Sep-21				9	7			13-Oct-20				3	4				
	Benin				8	3	3		08-May-21						2		08-Sep-21					- 5	1		09-Sep-21	
	Pakistan	1			22	135	8		23-Apr-21				14	2			11-Nov-20	4			40	135	35		13-Aug-21	
	Guinea					44	6		01-Apr-21					1			05-Sep-20					1	2		11-Aug-21	
cVDPV2 ¹	Guinea-Bissau						3		15-Jul-21						1		26-Jul-21								03-Aug-21	
CVDPV2	Afghanistan					308	43		09-Jul-21					36	2		03-May-21					175	40		23-Jun-21	
	Tajikistan					1	32		26-Jun-21						22		24-May-21						17		22-Mar-21	
	Burkina Faso				1	65	2		09-Jun-21					12			19-Sep-20									
	Sierra Leone					10	5		28-Feb-21					6	8		19-Mar-21						9		01-Jun-21	
	Congo					2	2		10-Feb-21					2			12-Oct-20					1	3		01-Jun-21	
	Liberia						3		28-May-21					2	5		21-Jan-21					7	14		20-Apr-21	
	South Sudan					50	9		10-Apr-21					19	5		25-Feb-21					6			01-Dec-20	
	Iran																25 1 - 21					3	1		20-Feb-2	
	Kenya													1	2		25-Jan-21			1		1	1		13-Jan-21	
	Gambia					60			23-Dec-20					3			15 Aug 20						9		28-Dec-20	
	Mali					52 59											15-Aug-20					4			29-Aug-20	
	Sudan				10				18-Dec-20				10	11			01-Oct-20				17				09-Nov-20	
	Ghana				18	12			09-Mar-20 03-May-20		-	-	16	10 9			22-Feb-20				1/	20			17-Sep-20	
	Togo Angola				138	3			03-May-20 09-Feb-20				22	à			09-Jul-20 31-Oct-19				17				02-Dec-19	
	Malaysia				130	à			031100120								anound				3	5			02-Dec-19 04-Feb-20	
	Philippines				12	1			15-Jan-20				6				23-Nov-19				19	4			16-Jan-20	
	Zambia				2	-			25-Nov-19				2				25-Sep-19				19	4			10-9d11-20	
	China				1				25-Apr-19				3				18-Aug-19			1					18-Apr-18	
	Syria		74		<u> </u>				21-Sep-17	1 ³	66		-	_			12-Sep-17								ile ripr'ile	
	Total type 2	2	96	71	366	1079	672	66	ar sep n	3	85	74	177	285	329	21	a sep o	5	2	65	198	537	487	39		
	Israel		50		500	1913	with .	1		ý.				-00	94.9	3	24-Mar-22	4		33	1310	1	5	25	15-Mar-22	
	Occupied Palestinian Terr.							· ·									are true ada						7	9	12-Mar-22	
cVDPV31	China		-								-	-		1			22-Jul-20						1		25-Jan-21	
CVDFV3	Somalia			75					07-Sep-18			2					22-Jun-18			11					23-Aug-18	
	Total type 3	0	0	7	0	0	0	1	07-sep-16	0	0	2	0	1	0	3	23-301-10	0	0	11	0	1	13	34	E.J. Hug-Ic	
	Female (all sero type)	3	54	34	151	493	395	33		Ų	U	2	Ų		Ų	Ş		Ų	Ų		0		1.J	34		
Gender	Male (all sero type)	2	42	70	215	610	290	35																		
Seller I neller	Gender Unknown			1.4	13	10	3			-	-								_		-	_			-	

Environmental surveillance for poliovirus in selected sewage sites established and working Changes from previous w

Due to backlog reporting or reconciliation of viruses from member states, numbers in this table may increase without being notified as new case/specimen in the current week

If a population is seriously under-immunized, there are enough susceptible children for the excreted vaccine-derived polioviruses to begin circulating in the community.

If the vaccine-virus is able to circulate for a prolonged period of time uninterrupted,

it can mutate and, over the course of 12-18 months, reacquire neurovirulence.

These viruses are called circulating vaccine-derived polioviruses (cVDPV).