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Canadian Paramedicine

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EDITORIAL

GILBERT MARABOTO ACP, B.Sc.

In March 2020, Canada and most of the world started protocols and measures to stop the new pandemic; this year was the new coronavirus. The world faced other respiratory pandemics before, like the AH1N1, or different types of pandemics like HIV and even the Evola threat a few years ago.

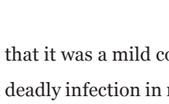
We are two years into the covid-19 pandemic, and it seems like it could be the end; most countries at the federal and local levels are relaxing the rules and restrictions for travel and public places. Last summer, some provinces lifted some restrictions to bring it back later that winter because of the mutations; by the end of 2021, a new variant was discovered, and it seems that we would have another 2020 again. Gladly this new mutation was softer than the predecessors, and most of the population is vaccinated, making the infection, in theory, mild.

Since the start of the global pandemic, some people believed that it was a mild cold, or maybe an intense cold, some others thought that was the worst deadly infection in recent history; there also the conspiracy theories about how the virus started and if it was on purpose or if it came from a market and spread by mistake. Regardless of the origin, existence, or part of the Illuminati for the new order, we had to take measures that some people liked while others hated it.

Most health workers now must wear a mask when with a patient, and, in my case, the patient also must wear a mask while under our care. It's hard to say if that measure works to prevent the spreading in the setting because you will need someone who only lived and interacted exclusively with the patient. And have absolutely no contact with the outside world. Otherwise, you could catch the virus outside the work setting. I noticed I got less sick than in previous years; I usually got a respiratory illness at least two times per year, and the symptoms lasted for months; however, for the past two years, I got sick once only with very mild symptoms. Again, I can't guarantee that was only because I was wearing masks and cleaning my hands more often because I became more active and ate better, so my immune system was also more robust. So in my personal opinion, the mask worked and prevented not only covid-19 but other respiratory illnesses that the patient transmitted to us or from us to the patient.

Regardless of everything else, we can only hope the lift of the restrictions is more permanent this time. We can go back to normal and stop dividing ourselves between maskers and anti-masker and vaccinated versus anti-vaxers; sadly, the world will divide now into pro-Ukrainian and pro-Russian.

I read somewhere on social media: "if Russia stops fighting, there will be no war; if Ukraine stops fighting, there will be no more Ukraine."



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Publisher/Editor
Gil Maraboto:
Gil@canadianparamedicine.ca

Contributing Writers:
Alan M. Batt
Ali Rengers
B.T. Murray
Becky Donelon
Cheryl Cameron
Chris Farnady
Dugg Steary
George Amolo
Jeanne Bank
Jennifer Bolster
Meghan Lysko
Mike Billingham
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Walter Tavares
Steve Whitfield

How to Contact us:
PO Box 65
Wakaw, SK S0K 4P0
www.CanadianParamedicine.ca
mail@canadianparamedicine.ca
Phone Number: 306-361-2945

Advertising and Sales
Declan O'Donovan
declan@canadianparamedicine.ca
Information Systems
Dean DiMonte
premergency.com

Subscription Inquiries:
mail@canadianparamedicine.ca

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DEVELOPING THE NATIONAL OCCUPATIONAL STANDARD FOR PARAMEDICS IN CANADA

ALAN M. BATT, PIERRE POIRIER, JEANNE BANK, JENNIFER BOLSTER, RON BOWLES, CHERYL CAMERON, BECKY DONELON, NOËL DUNN, TIM ESSINGTON, WILLIAM JOHNSTON, RENE LAPIERRE, MEGHAN LYSKO, PAIGE MASON, DUGG STEARY, AND WALTER TAVARES ON BEHALF OF THE NOSP DEVELOPMENT GROUP AND CSA TECHNICAL COMMITTEE.

INTRODUCTION

A recent study defined paramedicine as "a domain of practice and health profession that specialises across a range of settings including, but not limited to, emergency and primary care. Paramedics work in a variety of clinical settings such as emergency medical services, ambulance services, hospitals and clinics as well as non-clinical roles, such as education, leadership, public health and research. Paramedics possess complex knowledge and skills, a broad scope of practice and are an essential part of the healthcare system. Depending on location, paramedics may practice under medical direction or independently, often in unscheduled, unpredictable or dynamic settings" (1).

This definition represents one part of an ongoing global effort to better understand and more accurately reflect paramedicine and paramedic practice. Within Canada, the paramedic community has made similar efforts with the 2011 National Occupational Competency Profile (NOCP) (2) and reflecting advances in the profession additional investigations in 2016 such as the Paramedic Profile and Roles (3,4). Yet we continue to experience a disconnect between practice and activities such as education, warranting a re-examination. Examining and understanding contemporary (and future) paramedic practice in Canada will ensure that activities such as initial and continuing education and assessment are better informed. In this article, we will briefly describe this disconnect and its implications, then outline a recent effort by the Paramedic Association of Canada (PAC) and the Canadian Standards Association (CSA) Group to correct this problem, led by recent advances in competency framework development processes and a national group of experts.

First, paramedics in Canada care for diverse patient presentations, in highly variable emergency and non-emergency contexts. In order to do so, they require a broad set of clinical and non-clinical competencies, and these can be difficult to define due to the complexity and diversity of paramedic practice. Indeed, paramedic practice is unique and complex in that it can encompass several differentiated and undifferentiated patient presentations, across a spectrum of acuity and health and social needs, in constantly changing and challenging environments or contexts of practice. These contexts of practice are growing (e.g., industrial sites, isolated locations), as are the roles paramedics are playing in healthcare (e.g., community paramedicine programs, palliative care, integrated care programs), and in the scopes of practice. This growth, diversity, broadening and increasing complexity of practice presents a challenge when we attempt to describe it. Existing descriptions may be outdated or incomplete, calling for updated ways of reflecting and guiding the profession nationally.

This difficulty in finding suitable descriptions of or guidance for paramedicine in Canada becomes evident when we examine examples of the disconnect between practice and existing frameworks. Paramedics in Canada care for patients from differing environmental, social and cultural contexts on a daily basis that are not sufficiently represented in practice documents. For example, paramedics attend a significant number of calls to older adults (approximately 40%) (5), and yet there is a noticeable lack of focus in paramedic competencies on issues related to the care of older adults, or on intimate partner violence, victims of human trafficking, mental health patients, chronic disease conditions, social determinants of health and much more. Further, perspectives and considerations of other minority and vulnerable populations that paramedics regularly care for have also been ignored. This includes the unique health and social care needs of Canada's Indigenous communities, members of the LGBTQ+ community, refugees, individuals experiencing homelessness, and many others. The non-clinical aspects of paramedicine, such as desirable traits and non-technical skills are equally as varied and pose additional challenges when we attempt to represent practice (6).

As a result of these levels of complexity and diversity, existing descriptions of paramedic practice may fail to adequately or inappropriately represent practice. What can and does result when descriptions of practice are limited in this way, is a poorly aligned curriculum and workforce for the communities and patients they intended to serve, as well as a disconnect between what paramedics do and how the profession is described, examined, positioned, structured and advanced. Simply translating descriptions of paramedic practice from one jurisdiction to another may be insufficient. Attempting to represent paramedic 'competencies' in Canada well, must acknowledge a) jurisdictional variations; b) competencies within paramedicine are not well understood or researched; c) competencies are subject to continuous change and influence; and d) competencies must ultimately guide the preparation of paramedics for practice throughout their career.

THE NATIONAL OCCUPATIONAL COMPETENCY PROFILE

PAC published the first NOCP in 2001. The NOCP has since been used by regulators, paramedic services, educators and education accreditation agencies. Recognizing the shifting role of paramedicine in Canada in public safety and healthcare contexts, PAC renewed the NOCP in 2011. In 2016 additional work commissioned by PAC, examined the roles paramedics should embody as part of their work (e.g., clinician, reflective practitioner) (3,4).

Paramedic practice continues to evolve and there is a duty to ensure the NOCP reflects the complexity of contemporary paramedic practice, and outlines the features required for competent practice in diverse contexts across Canada. Earlier we outlined the diverse contexts, presentations, and populations in which Canadian paramedic practice is enacted. Now, we propose that such contexts must be considered when we attempt to describe or represent paramedic practice. In doing so, we may realise that paramedic practice comprises interdependent healthcare and social care aspects. Indeed, as the role and scope of practice of paramedics has evolved, emergency care has become merely one aspect of broader practice, and as a profession we have the opportunity to evolve and develop larger social care and advocacy roles (7,8). As one example, community paramedicine has emerged across Canada as a non-urgent and public health care service across the country, which requires consideration and appropriate recognition within our renewed understanding of practice.

DEVELOPING THE NATIONAL OCCUPATIONAL STANDARD FOR PARAMEDICS

PAC has partnered with the CSA Group to manage the renewal of the NOCP and incorporate it into a new standard following accredited processes of the Standards Council of Canada – the National Occupational Standard for Paramedics (NOSP).

Development Group (DG)

PAC has appointed Dr. Alan Batt, a Professor in the Paramedic Programs at Fanshawe College, Ontario, and Adjunct Senior Lecturer in Paramedicine at Monash University, Australia to lead the NOSP development project on behalf of PAC. Dr. Batt's research focuses on improving the development of competency frameworks in healthcare professions, and better understanding contemporary professional practice. His award-winning doctoral research is being used to improve the development of competency frameworks in multiple healthcare and non-healthcare professions.

Dr. Batt is supported by research assistants Jennifer Bolster and Meghan Lysko. They will work closely with Jeanne Bank, a consultant for the CSA Group, and a committed Development Group (DG) of PAC, Canadian Paramedicine Educator Chapter (CPEC), and other paramedic educator members, including Pierre Poirier, Dr. Ron Bowles, Cheryl Cameron, Dr. Becky Donelon, Noël Dunn, Dr. Tim Essington, William Johnston, Rene Lapierre, Paige Mason, Dugg Steary, and Dr. Walter Tavares.

Technical Committee (TC)

A Technical Committee (TC) has been established pursuant to the CSA Directives. This TC contains representation from industry, education, research, government/regulatory, the profession, allied professions, the public, and international representation in a balanced matrix format. This ensures no one stakeholder or sector dominates the efforts of the committee to reach consensus. The TC will work in collaboration with the DG to produce a draft NOSP over the coming months.

Figure 1. NOSP Development Process. Informed by Batt et al. (9). Copyright A.M. Batt, 2022. Used with permission.

DEVELOPMENT PROCESS

The NOSP will be developed following the CSA Group's standards development process and using a six-step model for developing competency frameworks recently published by members of the DG (9) - see Figure 1. The development process will be collaborative and ensure the inclusion of diverse stakeholders' and end-users' views throughout the process. Each step will be conducted in collaboration between the DG and TC. The development of the NOSP will be informed by the principles guiding paramedicine in Canada (10), and the 2016 Paramedic Profile and roles (3).

Step 1.

The DG have drafted the purpose, intended uses, terminology, and scope of the Standard, along with identifying potential stakeholders and end-users who should be consulted as part of the development of the NOSP. This step involved collaboration with the consultant leading the development of the Canadian Organization of Paramedic Regulators (COPR) Paramedic Essential Regulatory Requirements (PERRs) project to ensure

the projects are aligned with regards to terminology and other developmental considerations. This draft document is now with members of the TC for input and feedback.

Step 2.

The TC and DG are working to identify the contexts of paramedic practice in Canada for consideration in the Standard. These contexts will inform the creation of working groups (WG), and subsequent methodology and data collection methods. We expect a call for WGs to be issued in the next month. Membership of WGs is open to all across Canada involved in paramedicine.

Step 3.

The DG will outline suggested methods of data collection for discussion with the TC. The DG will then plan the methods required for data collection, submit appropriate ethics applications, and oversee the conduct of the data collection methods with WGs over a several month-long period. The DG will analyse the data and prepare a summary for the TC.

Step 4.

The DG will analyse the data inductively and iteratively to identify competency statements. The group will create a draft Standard for consideration by the TC. Working with the TC, the group will clarify, refine, and edit the draft Standard.

Step 5.

A working draft of the Standard will be published on the CSA Group website, open for public review and comment for a minimum period of 60 days. During this time, the DG and TC will solicit feedback from diverse stakeholders, including individual healthcare professionals, in order to inform the finalised version of the NOSP. Comments received from the public review will be reviewed and actioned by the TC. The finalised version will be available to view on the CSA Group website free of charge.

Step 6.

The development of the NOSP will incorporate evaluation approaches throughout the development process, and a clearly outlined plan for the continuous update and maintenance of the NOSP.

CONTACT THE DEVELOPMENT TEAM

If you wish to contact the DG, please contact us via this form: https://forms.gle/zQUbNodND7LjSQ4t7. We will provide regular updates on the development of the NOSP in Canadian Paramedicine, and via social media.

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LONDON AMBULANCE SHIFT DURING COVID-19 SECOND WAVE

BY ALI RENGERS AND STEVE "SUNNY" WHITFIELD

BACKGROUND

Being a paramedic is a dangerous job (Maguire et al., 2014; Maguire & Smith, 2013). Paramedics experience violence, workplace injuries and sleep disruption as well as high rates of mental stress and fatigue on a daily basis. To compound these issues, the COVID-19 pandemic has put even more strain on frontline paramedics and ambulance officers. Recently, Rengers, Day and Whitfield (2021) published a description of 12-hour ambulance shift during the second wave of COVID-19 in London. The article explored the experience of paramedics on the frontlines for historical prosperity. This article is a plain language synopsis of this peer reviewed work.

Compared to many parts of Canada, London is a densely populated area with high volume local, national and international transport. These two factors paired with the aerosol transmission of the virus fuelled the rapid spread of COVID-19 throughout London (BBC, 2021; Flynn et al., 2020; Trust for London, 2021). The already strained National Health Service (NHS) and London Ambulance Service (LAS) adapted to continue service during the pandemic. As the pandemic surged the LAS enlisted the help of the London Fire Brigade (LFB), Metropolitan Police Service (MPS) and returning LFB members in order to respond to patients.

Initially, inadequate personal protective equipment (PPE) for healthcare workers meant large numbers became infected and died from COVID-19. As the pandemic's second wave struck, more suitable PPE was provided to health care workers. LAS paramedics use level two and three PPE to help reduce the risk of infection. Level two PPE, consisting of an apron, gloves and surgical face mask, is worn to assess every patient. Level three PPE is worn when performing aerosol generating procedures (intubation, suction etc.) and consists of a full-face reusable respirator, full sleeve surgical gown/ Tyvek suit, and double gloves. As personal-issue reusable respirators have become available, these are now worn when assessing COVID-19 suspected or positive patients.

In the LAS, category one (Cat 1) calls require a seven-minute response time. This level of call is enlisted for patients experiencing cardiac arrest, unresponsiveness, extended seizures or a high level of trauma. Category two (Cat 2) calls need an 18-minute response time. Cat 2 calls are for patients with altered level of consciousness (ALOC), difficulty breathing, chest or abdominal pain or a seizure that has stopped. Finally, category three (Cat 3) calls require a response time of less than two hours. Due to the strain on the healthcare system that COVID-19 has caused, some Cat 3 response times have been greater than eight hours (Perkins et al., 2020). This category is applied to patients who have fallen (mostly elderly) or are experiencing mental health issues or back pain (non-traumatic).

THE SHIFT

The LAS advanced life support (ALS) crew clock on at 0830 for their shift. The crew are immediately dispatched to a Cat 3 call that has already been held for six hours. The patient, a 37-year-old female, has a cough, so the crew are required to don Level three PPE. The patient is thoroughly assessed, deemed non-critical and left at home with self-care recommendations. The crew doff their PPE, clear the case and are immediately dispatched to a 53-year-old female patient with non-specific back/ flank pain. Although the patient has no reported COVID-19 symptoms, protocol dictates that the crew don Level two PPE in order to transport the patient to hospital. During transport dispatch broadcasts to all crews that multiple calls are currently on hold. To attend to these waiting patients faster, while at the hospital one officer triages the patient while another resets the ambulance.

After triaging the patient, doffing their PPE and clearing the case the crew are dispatched to 58-year-old female patient with a five-day history of abdominal pain and diarrhoea. Upon arrival at the scene the crew don Level two PPE in order to assess the patient. The decision to transport is made, and during the transport to hospital dispatch broadcasts to all crews that assistance is required due to increasing call frequencies. The patient is handed over to the hospital and the crew doff their PPE before clearing the case. The crew are immediately assigned Cat 1 to an actively seizing 96-year-old patient with a history of fever. Prior to attending the patient, the crew don Level two PPE. The patient is treated on scene and transported to hospital, however, is unable to be offloaded due to a bed shortage. This brief delay allows the crew to eat some food. One officer remains in PPE with the patient while the other removes themselves, doffs their PPE and decontaminates before eating as quickly as possible, so that the other officer also has the chance to eat.

Following handover, the crew are dispatched to a 57-year-old female in respiratory distress. The crew are required to don Level three PPE before entering the scene. On arrival the patient is confirmed as COVID-19 positive. The patient's oxygen saturation is 70% on room air and their respiratory rate is tachypnoeic at 44 breaths per minute. The patient has a tachycardic heart rate of 120 beats per minute and is febrile with a temperature of 39 degrees Celsius. While the patient is obviously unwell, she is not the most severe COVID-19 patient the crew has attended this week. The crew provide the patient with high flow oxygen before transporting to hospital. Once the patient is handed over, due to her COVID-19 positive status, the ambulance and equipment undergo extensive decontamination. While decontaminating the vehicle the crew is all too well aware of the growing list of delayed calls and the pressure to become available.

Following the completion of decontamination, the crew are dispatched to a Cat 2 call. The 52-year-old male patient, confirmed as COVID-19 positive, is in respiratory distress. Prior to entering the scene, the crew don Level three PPE. The patient is thoroughly assessed, deemed non-critical and the decision is made to leave him at home in the care of family with health advice. As the patient is confirmed COVID-19 positive, another extensive decontamination is required of kits and vehicle before the crew can be dispatched to another patient. With decontamination and doffing complete the crew are immediately dispatched to another COVID-19 positive patient, a 32-year-old female in respiratory distress. The crew again don Level three PPE and administer the patient urgently required oxygen therapy. The patient is transported to hospital where the crew wait in line behind seven other ambulances. Hospital staff take blood samples and patient vital signs in the waiting ambulances. The crew remain in full Level three PPE for three hours due to bed shortages. A bed becomes available at 2130, and after a thorough ambulance and kit decontamination the crew arrive back at station almost two hours after their log off time.

CONCLUSION

This is a description of a standard 12-hour shift experienced by London based paramedics during the COVID-19 second wave. COVID-19 has greatly affected the delivery of ambulance services in London and around the world. The impact has not only been on the patients, but also the paramedics delivering care. The day outlined in this article is intended to add to experiential data as well as to let other health care providers undergoing a similar experience know they aren't alone.

The full article is available here https://ajp.paramedics.org/index.php/ajp/article/view/976

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ABOUT THE AUTHORS

Steve Sunny Whitfield is a lecturer at Griffith University School of Medicine (paramedicine) with experience in humanitarian operations, high altitude expeditions, marine expeditions and flight and retrieval medicine. In 2015 Steve founded a platform that became the international collaboration Medics Beyond Borders to support health care in remote communities. Steve is also a keen geographer, surfer and climber.

Ali Rengers is a paramedicine student at Griffith University who recently achieved First Runner Up with the KJ McPherson Foundation Scientific Poster competition for her team's poster, "Out of hospital cardiac arrest." Post-graduation she aims to pursue critical care studies while continuing to contribute to research in the paramedicine field. Ali also enjoys climbing and bouldering in her spare time.

STORY TELLING AS A TEACHER

BY B.T. MURRAY

Have you ever asked a very simple question of one of your patients such as, “So how did you hurt your leg?” and end up with them telling you their life story as a result? I’m sure you have. It’s annoying, isn’t it? But the thing is, you have to listen to it. You have to let them say what they want to say, at least for a short time, before possibly interrupting them to get to a specific answer you are looking for. Why do you need to do this? You need to do this because you just met this person. You need to do this because you have no idea how this person talks normally and what kind of communicator they are. You need to do this because if you, as the questioner, also utilize effective listening skills you may actually end up with half or more of your questions answered before you have to say another word.

In order to learn as much as possible from your patient, you need to find a way to establish a pattern of effective communication. What allowing your patient to tell their story does is it begins to immediately build that bridge between the two of you that will allow this to occur. What is also does is garner co-operation from the patient that maybe you would not have otherwise. When we first make contact with patients their levels of stress and excitability are sometimes at such a level that establishing effective communication between the two of you initially might seem next to impossible. By giving them thirty to sixty seconds to vent their frustrations, whether that be about what is currently happening or about life in general, it allows them to be heard and will in turn allow you to gain some control of the scene. That will only occur however, if you acknowledge what they have said and show them that you are listening and how you can effectively do that is by repeating something that they said during their venting. By mirroring something from within their story, it will show your patient that you have been listening. This will earn you some respect from them and garner further co-operation as you move forward.

Also, in the time it takes to allow this to happen, your partner has taken one full set of vital signs, completed a 12 lead EKG, and if the patient has continued on for ninety to one hundred twenty seconds, an IV as well. All this while the patient is telling their story, impervious to what your partner is even doing to them. But when my partner did have them distracted for just a moment, I took a glance at the patient’s medications that were right there on the kitchen table before allowing the patient to continue once again. By the time the patient is done with their story, I can have most if not all of the information I need to move forward with a treatment plan. It would all be because I allowed them to be heard.

LET ME TELL YOU A STORY

Whenever a student or a newly hired paramedic asks me the question “What is the most interesting call you’ve ever been on?”, my answer is always the same and probably will never change. My answer to this question is not the worst call I’ve ever been on, nor the most challenging call I’ve ever been on. It is however, the most “interesting” call I’ve ever been on.

Guess what? The call I consider to be the most interesting call I’ve ever been on is not what you might think. It is not the high speed MVC with multiple lives lost. It is not one of the multiple suicides that have occurred. It is not one of the criminal cases that I’ve testified in court about. It is not even a call that required my own life to be put in jeopardy.

The most interesting call I have ever been on… was a transfer.

To this day I do not recall his name, but it matters not. What I do recall is his story, and how he told it. I only ever realized many years later what I had actually learned from the encounter with this gentleman. In the short term it was just a very cool call to have been on. Something to tell my peers about when I returned.

He was an elderly gentleman who had been in my town visiting some family. He lived in a nursing home in a different town that was three hours away. While visiting his family he ended up sick and in the hospital. In the end it was decided an ambulance should take him back home.

I’ll be honest, I remember hoping this gentleman would have a long nap during this trip because I had no idea what I might talk to him about for three hours. However, when I first met him, I took note of the fact that he had an old army hat on. That of course lead me to a potential topic of conversation. Maybe this fella is a Veteran. I’ve always been a bit of a history fan. Especially when it comes to all of the different wars that have been fought, whether civil or world. So I asked the question. The answer I received was in the form of a story. It was a story that took nearly two hours to complete. This was in part because the gentleman talked very slowly. It was also in part because of the very fine detail that he outlined while telling it.

He was in fact a WW2 Veteran. He was an infantry soldier who had taken part in Operation Overlord, storming the beaches of Normandy on D-Day. The details given of this battle were enough to hold my attention. I was riveted. He had managed to survive D-Day, but most of his unit did not. He described how this was what happened to most of the units and the aftermath of D-Day was all about finding out who had survived, mold multiple units together to form a new one, and push forward with their plan of attack.

He went on to describe the next few weeks of the war for him with amazing detail and powers of recall until eventually he made his way to the point in his story that he received his injuries. I had not only taken note of his army hat, but also of the obvious bodily injuries he had suffered at some point. There was no point in bringing them up in conversation as it was an obvious thing to point out. I figured if he wanted to talk about them, he would. And he did.

Although I remember everything he described about his final battle in the war, what I remember most is the description of what happened post battle. His moment-by-moment description of how he fought for his life after he was left for dead is what will stick with me forever. This article and outlet is not the proper place to give a complete descriptor of this man’s harrowing journey that day. The one thing I can tell everyone is that the three hours with him passed by as if time stood still.

THE TAKEAWAYS

What did this story teach me? First and foremost, war is hell. Absolute hell. From all accounts that would be an obvious thing to say. But without ever being in a war, what would bring me to that conclusion after this encounter? It is not only what this gentleman told me, but how he told his story. As mentioned earlier, this man was elderly at the time and had probably told his story a few hundred times by the time I ever heard it. Is it possible the story had gone through a few alterations to either falsify or exaggerate his plight? Possibly, but I do not think so. What made his storytelling effective is how he delivered it. He was calm. He was precise with his statements and descriptions. He hardly lost eye contact at all with me. That was

perhaps the biggest action that held my attention through the entire trip. He was invested in what he was saying and because he was invested, I was too. When we were arriving at his destination, I remember him being reassuring towards me that he was doing just fine and had been in a good place for many years. But it would never leave him. It would never leave me either.

THE TRANSITION

I only ever really started writing about thirteen years ago and when I began to research and learn about how to write or tell a story, I quickly realized how much there was to glean from that simple, no active treatment, three plus hour transfer. After thinking about it from a writer's perspective, I eventually also realized I could and should transfer these skills over into how I practiced as a paramedic.

I did transfer these skills over and I continue to tell myself the following reminders all the time.

1. Stay Calm – The demeanor of the paramedic will have a direct impact on the demeanor of the patient. If you are calm, they will have a better chance of being calm. If you are excitable and escalate, they will do the same.
2. Explain and be Precise – It goes along with remaining calm. Speak calmly, precisely and in terms that your patient can understand. Stay away from medical jargon and slang terminology. Adjust your language to with whom you are speaking. How you speak to an elderly person will and should be much different than how you speak to a teenager or child.
3. Make Eye Contact – Do this both when speaking and listening. This will let your patient know that you are actively invested in what is happening to them. It is a sign of respect.
4. Be Reassuring and Kind – Go into every call as if the patient you are there to help is a family member. Being kind and acting in a professional manner at all times will help build bridges between the public and the health care system. It cannot be stressed how important this is. This is especially important to any paramedics who might have to visit the same patients in their homes that you have.

CONCLUSION

Every single person on this Earth has a story and many of them are simply amazing. In many instances we simply do not have enough time with people to learn their stories as we are busy with patient care. There are of course also times where our patients simply do not wish to talk and are very private or introverted. But if you do have time and the patient is open to talking, dive in. Ask them about themselves. The geriatric population often are the people with stories that are quite interesting. They will have lived during a time when most of us were not even alive and the accounts from life back then can at times both shock and amaze.

Talk and listen to your patients. You might just learn something about not only how to be a better communicator, but perhaps a better person as well.

ABOUT THE AUTHOR

B.T. Murray lives on the far east coast of the beautiful country of Canada. He is quite old and is not going to admit how long he has been a paramedic. Any opinions put forward in his articles, unless otherwise stated, are his alone and do not necessarily reflect those of his employer or anyone associated with him.

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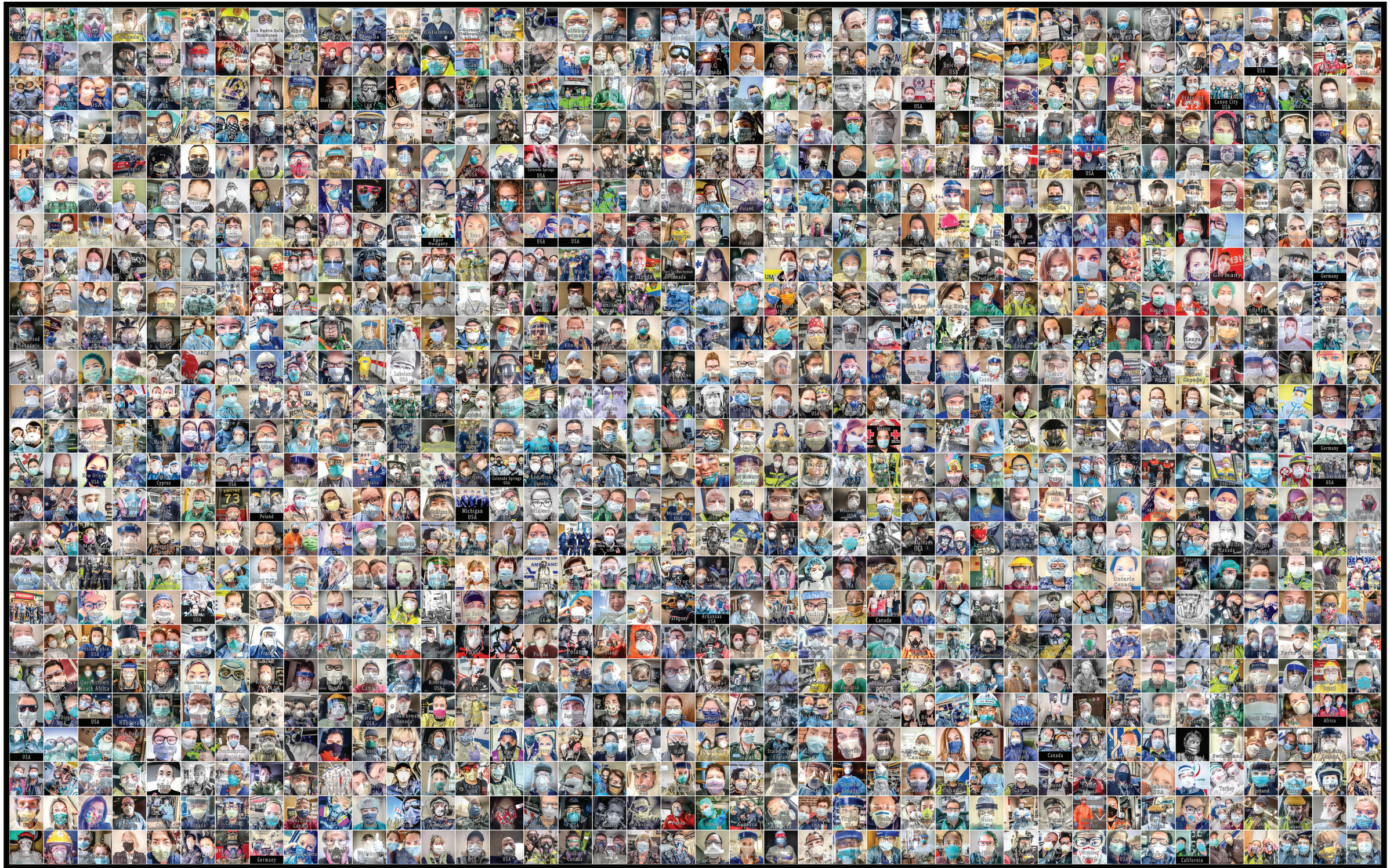

Covid 19 Selfie Project

April 2020

Dan Sun

IT'S ALL IN THE NAME, OR IS IT: THE CHARACTERIZATION OF "LONG COVID"

BY CHRIS FARNADY

As scientific progress is made to understand further the SARS-CoV-2 virus, there remain many unanswered questions about the virus and its long-term effects on the human body and human psyches. Long-COVID, as a stand-alone subject within the current pandemic, is perhaps difficult to limit to one short article. This two-part piece will examine the characterization of long COVID and other associated terms used in addition to its overall impact on those who survive the infection. The impact portion will explore mental health, employment and complications experienced post-infection.

As we mark the end of 2021 and celebrate the start of 2022, the COVID-19 pandemic continues to strain health care systems around the world. Science and medicine have learned much about the SARS-CoV-2 virus since the onset of the pandemic. We now know that the incubation period for the virus is said to be approximately 4 to 5 days [1]. According to Ahmad et al. (2021), the World Health Organization has noted that most positive COVID-19 cases - roughly 80 to 85 % clinically manifest a mild or asymptomatic form and may resolve within two weeks of onset. The primary symptoms have been noted to be fever, sore throat, cough, headache, myalgia, anosmia and diarrhea [1]. A severe increase in disease reported to last approximately six weeks has been observed in 10 to 15% of cases, requiring hospitalization and supplemental oxygen therapy [1]. Critical illness is said to occur in 5% of the affected population. The virus affects their lungs and brings about multi-organ dysfunction, requiring ICU admission and subsequent mechanical ventilation [1].

While most positive COVID-19 cases have been reported to completely resolve in 3 to 4 weeks after the onset of infection, many individuals continue to experience symptoms for weeks or months following the start of the disease. This aspect of COVID-19 has continued to fuel debate and challenge what is known about "long COVID" [1,2]. Many experts appear to agree that persistent COVID-19 symptoms lasting longer than 30 days or more with the prevalence of individual symptoms are the fundamental characterizations of post-acute sequelae of COVID-19 or PASC for short [2]. Debate continues in the scientific community concerning developing a more specific time frame characteristic, breaking down the classification of post-COVID-19 infections even further. Fernández-de-Las-Peñas et al. (2021) suggest the following time frame characterization:

- Potentially infection-related symptoms - up to 4 to 5 weeks
- Acute post-COVID symptoms - 5 to 12 weeks
- Long post-COVID symptoms - 12 to 24 weeks
- Persistent post-COVID symptoms - more than 24 weeks[3]

The understanding of PASC is evolving, understanding the diagnoses, phenotypes, and epidemiology is promising. Most research regarding PASC to date has centred around hospitalized COVID-19 patients. However, Bell et al. (2021) note that most individuals with COVID-19 end up not being hospitalized, leading to PASC being poorly characterized in this COVID-19 population subset [2]. Bell et al. (2021) conducted the CoVHORT study from a diverse population-based group of Arizonans to estimate the prevalence of PASC. As of February 24, 2021, the study comprised 3,468 participants who were subject to a positive PCR or antigen and subsequently were not hospitalized for their illness. The study excluded participants who had incomplete COVID-19 testing data, leaving 543 participants to receive a follow-up survey. Bell et al. (2021) note that 303 (55.8%) of the 543 participants completed the follow-up survey [2]. The group had a mean age of 44 years and ranged from 12 to 82; 70% were female, while non-Hispanic whites consisted of 68% of participants. 38% of the group had a college or higher form of education. 67% of the group reported a pre-existing chronic condition, consisting of 42% reporting seasonal allergies, 16% reporting asthma and 15% reporting hypertension [2]. In contrast, females were more likely to experience PASC than males, 73% versus 63%; Bell et al. (2021) highlight that this finding did not reach the statistical significance threshold with a p-value of 0.07 [2].

The follow-up conducted at 30 days and greater consisted of 208 of 303 participants (68.7 %, 95% CI: 63.4, 73.9) reporting experiencing PASC. The median number of symptoms reported by these individuals experiencing PASC was noted to be 3 with a range of 1 to 20. A median follow-up of 63 days with 30 to 250 days [2]. At 30 days or greater, the ten most common symptoms noted by Bell et al. (2021) were:

- Fatigue (37.5%)
- Shortness of breath (37.5%)
- Brain fog (30.8%)
- Stress/anxiety (30.8%)
- Altered taste or smell (26.4%)
- Body aches or muscle pain (26.0%)
- Insomnia (22.1%)
- Headaches (20.7%)
- Joint pain (20.2%)
- Congestion or runny nose (19.2%)[2]

Participants who were followed for 30 to 59 days post-diagnosis, 87 (59.6%, 95% CI: 51.6, 67.5) of them reported experiencing PASC, while 121 participants (77.1% 95% CI: 70.5, 83.6) who were followed for more than 60 days reported experiencing PASC. While the frequency of symptoms was observed to be higher at longer follow-up, prevalent symptoms appeared to be similar, such as fatigue, shortness of breath, and brain fog [2]. Additionally, Bell et al. (2021) found that only 6 participants reported stress/anxiety as their sole symptom, demonstrating that this non-specific symptom was not a driver of PASC prevalence in their study.

Those without follow-up data, when compared to eligible participants with follow-up data, were found to be younger, 39 years versus 44, more likely to be male – 37 versus 30%, be of Hispanic ethnicity – 32 versus 23%, more likely to smoke or vape – 25 versus 13% and possess a lower level of education – 60 versus 72% who had completed college. Lastly, disease severity ratings were similar also – 4.9 versus 4.7 out of 10 in addition to rates of pre-existing conditions – 64 versus 70% [2].

The prevalence of PASC among other studies has been similar. For instance, Huang et al. (2021) noted a majority of 76% at six months. Carfì et al. (2020) found a prevalence of 87% at two months, while Lopez-Leon et al. (2021) noted a PASC prevalence of 80% through a systematic review of 7 studies examining mixed follow-up and severity of both hospitalized and non-hospitalized patients [2]. Other notable studies examining PASC prevalence include:

- Logue et al. (2021) - reported a prevalence of 33% among outpatients – the lower prevalence rate may be due to a longer follow-up time of 169 days.
- Haverall et al. (2021) – reported an estimated prevalence of 26% amongst mild cases
- Sudre et al. (2021) - reported 13% in a mixed-severity group

Bell et al. (2021) noted that a large study utilizing Veteran Administration electronic health records reported an "increased risk of death, morbidity, health resource utilization, and medication use" among those who survived at least 30 days following their COVID-19 diagnosis [2]. The lower prevalence rate of PASC in Aly, Xie & Bowe (2021) may partly be due to their use of electronic health records compared to Bell et al. (2021).

Patients experiencing PASC also appear to suffer in terms of quality of life. Aiyegbusi et al. (2021) cited multiple studies that used the generic EuroQol Five Dimension (EQ-5D) index score, the EuroQol Visual Analog Scale (EQ-VAS), the RAND Short Form-36 questionnaire (SF-36) and the PROMIS Global Health instrument in determining the level of impact on quality of life. Evidence suggests that individuals experiencing PASC suffer a significant reduction in quality of life [4]. According to Aiyegnusi et al. (2021), the work of Weerahandi et al. (2021) considered the quality of life between a 4-to-12-week follow-up. It examined previously hospitalized patients with COVID-19 in the United States. They found that scores on the PROMIS Global Health-10 instrument revealed worse general health following acute illness than baseline. While patients' summary scores in the physical and mental health domains were slightly above the US mean at baseline, patients did report a reduced ability to carry out social activities 4 to 6 weeks after being hospitalized [4]. Moreno-Perez et al. (2021) comparison of EQVAS scores showed a significant difference in overall quality of life in patients noted to have ongoing symptoms and those who reported no symptoms following acute infection at 10 to 14 weeks of follow-up (43.2% versus 66.9%, p = 0.0001) [5]. Aiyegbusi et al. (2021) further noted that another study consisting of a six-month follow-up of previously hospitalized patients revealed an overall EQVAS score of 80%, indicating persistent reductions in quality of life [4]. The study of previously hospitalized patients with COVID-19-related ARDS revealed that 61 out of 91 individuals (67%) experienced a decrease in their quality of life six months post-infection. Comparing their EQ-5D index and their EQ-VAS scores before acute infection and six months post-infection underscored a significant difference in the quality of life. (EQ-5D Index 0.965 pre- and 0.705 post-infection, p<0.001) and EQ-VAS 87.6% pre- and 66.4% post-infection, p<0.001) [4]. Analogously, significant impairment in functional status was noted among these patients; 30.8% reported no limitation in their daily activities; the findings were based on the Post-COVID-19 Functional Status scale. A further study highlighted by Aiyegbusi et al. (2021) noted that 72% (28/39) of individuals who regularly engaged in sports before hospitalization due to COVID-19 were able to resume physical activity after three months. Nearly half of those could only do so at a lower intensity [4].

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ABOUT THE AUTHOR

Chris is a graduate of Loyalist College's Primary Care Paramedic program (Bancroft, ON), Durham College's (Oshawa, ON) Advance Care Paramedic and currently pursuing his Bachelor of Health Science from Thompson Rivers University. Chris began his prehospital care career in 1997 working as an EMR in Alberta's oil and gas industry and has enjoyed the privilege of working as a Primary Care and Advanced Care Paramedic in Ontario, Northern Manitoba and Alberta. In April 2018 Chris accepted a position with Advanced Paramedic Ltd. and returned to Northern Alberta as an Advanced Care Flight Paramedic for Alberta Health Services' transport medicine program. In his time away from work, Chris enjoys being at home with his wife and two children. Chris can be reached for comment at chris.farnady@gmail.com.

QUIZ

A PHARMACY QUIZ

BY RON OSWALD

In today's world of emergency medicine, pharmaceuticals play a role in treatments as well as medical emergency causes. It is important for paramedics to have an understanding of the importance that drugs have in our society. This quiz is intended to be a simple primer for the subject of pharmacology. As with most topics in the world of medicine, pharmacology provides never ending material for continuing education.

1. What are the safety requirements for drug administration?

a.) Titration must not be done in the field

b.) Requirements are jurisdiction dependent

c.) The dose must be determined by a physician

d.) The seven rights of medication administration

2. What is the term that describes what the drug does to the body?

a.) Pharmacodynamics

b.) Biotransformation

c.) Pharmacokinetics

d.) Synergistic effect

3. What is the term that describes what the body does to the drug?

a.) Excretion

b.) Pharmacokinetics

c.) Biotransformation

d.) Pharmacodynamics

4. Where do drugs come from?

a.) Plants and minerals

b.) Lab synthesis

c.) Animals

d.) All of the above

5. What is the standardized term for describing how long it takes the body to metabolize and excrete a drug?

a.) Half life

b.) Interference

c.) Antagonism

d.) Displacement

6. What is the ratio of a drug's LD50 to its ED50?

a.) Lethal dose threshold

b.) Effective dose range

c.) Therapeutic index

d.) Half life

7. Which principal informs drug selection?

a.) Rh factor

b.) Health status

c.) Desired action

d.) All of the above

8. Which aspect of drug administration depends on body weight, desired action and therapeutic index?

a.) Concentration

b.) Route

c.) Time

d.) Dose

9. Why are some drugs never given orally?

a.) First-pass effect

b.) Topical absorption

c.) Mucos membrane toxicity

d.) All drugs may be administered orally

10. In the hospital or institutional setting, healthcare workers may provide care to multiple patients. How is the correct patient identified?

a.) With photo identification

b.) At least two identifiers

c.) By a family member

d.) By the doctor

11. Why is rate of administration important, especially with intravenous drugs?

a.) Rate of administration is not important

b.) Effects differ depending on rate of administration

c.) Administration rate that is too fast damages the veins

d.) Slow administration rate causes accelerated drug metabolism

12. How does Ipratropium bromide affect the body?

a.) Via muscle function regulation

b.) Parasympathetic suppression

c.) Alpha1 receptor stimulation

d.) Beta2 receptor stimulation

13. Which other class of drug is used for the same desired action that adrenergic agonists produce?

a.) Anticholinergics

b.) Sympathomimetics

c.) Muscarinic agonists

d.) Cholinesterase inhibitors

14. How do non-steroidal anti-inflammatory drugs (NSAIDs) exert their effect on the body?

a.) Via inhibition of norepinephrine reuptake

b.) Via inhibition of cyclooxygenase (COX)

c.) Via agonistic affect on Kappa receptors

d.) All of the above

15. Analgesics are said to work centrally or locally. How do local analgesics decrease pain ?

a.) By slowing the reuptake of dopamine

b.) By blocking conduction of nerve impulses

c.) By blocking the formation of prostaglandins

d.) By altering the perception of the pain impulse

16. How do respiratory drugs affect the body?

a.) Bronchoconstriction

b.) Bronchodilation

c.) Negatively

d.) Positively

17. How do glucocorticoids help with respirations?

a.) Suppress inflammation

b.) Stimulate sympathetic nerves

c.) Support efferent nerve function

d.) Regulate smooth muscle function

18. Magnesium is said to be an effective treatment of Torsades de pointes. What is the pharmacodynamics of magnesium with respect to the heart?

a.) Cardiac membrane stabilization

b.) Calcium channel blockade

c.) Sodium channel blockade

d.) All of the above

19. Intravenous potassium is given to patients who are hypokalemic, but it can cause cardiac arrest if the solution is to concentrated or administered too fast. Which is a sign or symptom that administration is too fast?

a.) Tremors

b.) Tachycardia

c.) Feeling of despair

d.) Uncomfortable heat

20. An asthma patient has two puffers, Ventolin HFA and Flovent HFA. What is Flovent (Fluticasone propionate)?

a.) Methylxanthine

b.) Anticholinergic

c.) Glucocorticoid

d.) Beta2 Agonist

21. Which best describes the action of succinylcholine?

a.) Nicotinic agonist

b.) Muscarinic agonist

c.) Nicotinic antagonist

d.) Muscarinic antagonist

22. Where do muscarinic receptors get their name from?

a.) Terpsichore muscara (Goddess of dance)

b.) Giovani Battista Muscarini (Anatomist)

c.) Moro-muscaria reflex (fear paralysis)

d.) Amanita muscaria (Mushroom)

23. Diphenhydramine (Benadryl) is a first generation H1 antagonist. What does it have in common with Atropine?

a.) Muscarinic agonism

b.) H1 receptor inhibition

c.) H1 receptor stimulation

d.) Muscarinic antagonism

24. A syncopal patient is on furosemide, lisinopril, carvedilol and K-Dur. Which condition is this patient being treated for?

a.) Congestive heart failure

b.) Sick sinus syndrome

c.) Pulmonary fibrosis

d.) Atrial fibrillation

25. How are paramedics most likely to receive an accidental dose of a patient's medication?

a.) Via ingestion

b.) Via inhalation

c.) Via absorption

d.) Via injection

THE ROLE OF PARAMEDICS IN PREVENTING SUICIDE IN KENYA

BY GEORGE AMOLO

UNDERSTANDING WHY SUICIDE PREVENTION FITS WITH YOUR ROLE AS A PARAMEDIC

Marvyn, a 4th-year student paramedic responded to a call that was dispatched as a suicide attempt. He found a young man, his wife, and an empty bottle of organophosphate (animal insecticide). The distressed husband said his wife had taken a large amount of the animal insecticide to try to kill herself.

Marvyn asked the depressed-looking woman, Alice, what had happened. She said she was stressed and had taken some animal insecticide. Marvyn asked Alice directly, but compassionately, if she had been trying to kill herself. Alice could not give a clear answer, so Marvyn asked if she had ever attempted suicide. Alice became emotional and started to cry and said she had attempted it when she was in high school and had promised to never do it again. But now life was too difficult for her husband was unemployed and lost his job due to the covid-19 pandemic, and she couldn't take it anymore. Marvyn advised Alice and her husband to go to the hospital to talk with a doctor to get some help for Alice.

Like Marvyn, Paramedics are often called to situations involving an individual who is suicidal. These include:

- A person is communicating a desire or an intent to attempt suicide
- A person has just made a suicide attempt
- A person has died by suicide

On reaching the hospital, Marvyn told the emergency department doctor that Alice had taken a large amount of animal insecticide, had attempted suicide in the past, and now just couldn't take it anymore. The doctor thanked Marvyn and said it was helpful.

KEY STEPS TO REDUCE SUICIDE RISK AMONG THE COMMUNITY YOU SERVE

- Understand why suicide prevention fits your role as a paramedic
- Identify patients who may be at risk of suicide
- Respond to patients who may be at risk for suicide or have attempted suicide
- Help suicide loss survivors at the scene
- Consider becoming involved in suicide prevention in the university and community

You have an important role to play in these situations. You are key in addressing any immediate medical needs the patient may have. You can also provide clarity and support to the patient and other people at the scene.

You may also notice and document behavior and suicidal means that may help hospital staff determine the best care for the patient .The case about Alice shows how important a sensitive, direct response can be.

KNOW THE SUICIDE REPORT

Suicide touches everyone-all ages and incomes; all races, ethnic communities, and religious groups; and in all parts of the country.

- Suicide takes the lives of about 500 Kenyans are reported to have committed suicide in three months to June this year, more than the whole of 2020, according to the Kenyan police.

The youngest person to take their life was nine years old; the oldest 76.The 483 deaths recorded during the period were a marked increase on the annual average of about 320 cases, the Ministry of Health reported.

- Data from the World Bank puts suicide mortality rates in Kenya at 6.1 people in every 100,000 with men in every 100,000 affected.
- Globally, 703000 people take their own life every year, with the WHO stating that suicide
- Was the fourth leading cause of death among 15-to-29-year-olds in 2019.

However, there is help and hope when individuals, communities, and professionals join forces to prevent suicide

- Identify People Who May Be At Risk for Suicide
- Look for signs of immediate risk for suicide

There are some behaviors that may mean a person is at immediate risk for suicide that should prompt you to take action right away:

- Talking about wanting to die or to kill oneself
- Talking about family rejection,bullying,violence
- Talking about feeling hopeless or having no reason to live

Other behaviors may also indicate a serious risk, especially if the behavior is new; has increased; and/or seems related to a painful event, loss, or change. Ask if the patient has been showing these behaviors:

- Talking about feeling trapped or in unbearable pain
- Talking about being a burden to others
- Increasing the use of alcohol or drugs
- Acting anxious or agitated; behaving recklessly
- Sleeping too little or too much
- Withdrawing or feeling isolated
- Showing rage or talking about seeking revenge
- Displaying extreme mood swings

(Adapted from suicide prevention Resource center) Suicide Prevention hotline in Kenya

There are very few organizations addressing suicide in Kenya despite the number of incidences in the country.

The Befrienders Kenya is a 24-hour service line for people in suicidal crisis or emotional distress. The phone number is +254736542304/+254722178177.or go to http://www.befriendskenya.org

Be alert to problems that increase suicide risk

Certain problems may increase a person's risk for suicide. Asking if the patient has any of these risk factors can help you assess the current situation more accurately and enable you to provide more complete information to medical staff.

Some of the most significant risk factors to ask about are:

- Prior suicide attempt(s)
- Alcohol and drug abuse
- Mood and anxiety disorders, e.g., depression, post-traumatic stress disorder (PTSD)
- Access to a means to kill oneself, i.e., lethal means

Suicide risk is usually greater among people with more than one risk factor. For individuals who are already at risk, a "triggering" event causing shame or despair may make them more likely to attempt suicide. These events may include relationship problems or breakups, problems at work, financial hardships, legal problems, and serious illness. Even though most people with risk factors will not attempt suicide, they should be evaluated by a professional.

(Adopted from cdc.gov/suicide/index.html)

ADDRESS CULTURAL DIFFERENCES

Differences in cultural background can affect how people respond to problems, the way they talk about their attitudes toward suicide, as well as how they feel about sharing personal information and seeking help. It is important to be aware of these possible differences and tailor your responses accordingly.

Responding to Patients Who May Be At Risk for Suicide or Have Attempted Suicide

PREPARING AHEAD OF TIME

- Review the protocols and procedures required by your organization and in your local area for responding to potential suicides.
- Consult your medical team leader or supervisor to learn how you should handle a suicidal patient who refuses to be taken to hospital for an evaluation.
- Meet with law enforcement officers to discuss how to work together with suicidal patients, including those who refuse to be taken to hospital.

ARRIVING AT THE SCENE

Take all suicide threats and attempts seriously. Follow the recommendations below:

1. Ensure the safety of everyone present. This includes working with law enforcement officers to remove any lethal means the patient may have.
2. Address any serious medical needs first, for example, if the patient is unconscious or having difficulty in breathing.
3. Establish rapport with the patient. Talk in a calm, accepting, and supportive manner. Explain what is happening and how you can help.
4. Assess the patient:
   a. If the patient has just made a suicide attempt, first determine any medical needs and intervene appropriately.
   b. Whether or not an attempt has been made, encourage the patient to talk about how he or she is feeling. Acknowledge the feelings and do not judge them. Since patients may be inhibited by the presence of law enforcement officers, it is often best to have officers stay outside the specific area while you are assessing the patient.
   c. If the patient has not made an attempt, ask several direct questions to determine the person's risk for attempting, such as "Are you thinking about ending your life (killing yourself)?" and "Do you have a plan?" Do not be afraid to ask these questions. Asking a person about suicide will not encourage him or her to attempt suicide. Many people who are suicidal are relieved to find someone they can talk with about how they are really feeling.
   d. Ask whether the patient has been behaving in ways, or having any of the problems, described earlier that indicate potential suicide risk.
5. Monitor the patient constantly. If necessary, set up protective measures so that the patient cannot engage in suicidal behavior.
6. Collect items such as toxic substances, alcohol, drugs, or medications that might have been taken (even just empty containers). Bring these items to the hospital to help medical and mental health staff determine the appropriate treatment.
7. Transport the patient to the hospital. Many Paramedics advise that any patient whose words or actions indicate he or she may be suicidal be taken to a hospital for an evaluation. If the situation is unclear or the patient refuses to be treated or taken to the hospital, follow your organization's protocols and/or call the medical team leader or your immediate supervisor for assistance.

DOCUMENTING YOUR FINDINGS

Document all of your findings on the patient's intervention sheet, including suicidal statements or behavior, suicide notes, pills, rope, weapons, information provided by people at the scene, and any other evidence showing the person may be suicidal. These findings will be used for the following:

- Patient treatment and support as needed before arriving at the hospital
- Assessment and treatment of the patient by the hospital staff
- Reports on the numbers and types of suicide-related calls to which Paramedic respond

Interacting with family or friends present at the scene

- Family and friends who are present at the scene are often the ones who called the emergency number. Give them support, reassurance, and a general explanation of what you are doing.
- Family and friends may be able to provide you with useful information and help calm the patient.
- You may also want to obtain information directly from the patient, away from others who are present.

HELP SUICIDE LOSS SURVIVORS AT THE SCENE

When it is clear that an individual has died by suicide, the police and a medical examiner become responsible for the body. Paramedics need to turn their attention to any family or friends of the deceased who are at the scene.

Here are some recommendations for helping survivors:

1. Establish rapport and explain that you are there to help. Be sensitive to the feelings of suicide loss survivors. Allow the survivors to express their thoughts and feelings. Convey caring and compassion provide support, and let them know that their emotions are okay.
2. Help survivors identify other people from whom they can get support, such as other family members, close friends, or clergy. Offer to contact any of these people.
3. Provide written information about community organizations they can contact for support, such as mental health providers and suicide survivor groups. Also consider giving them information on coping with a suicide death.
4. Take care of yourself after you have left the scene. It is natural that paramedics may be affected by what they have seen and experienced in helping people who are suicidal and suicide loss survivors. It is important to pay attention to your feelings and get support from other people you trust, such as co-workers, family, friends, or your organization's employee assistance program.

SUICIDE LOSS SURVIVORS' REACTIONS

Survivors of suicide loss include anyone who is close to the person who has died. They will likely experience a mixture of strong and conflicting feelings, including emotional shock, confusion, denial, grief, guilt, blame, anger, and shame. They may show physical and behavioral signs similar to those of victims of other types of emotional trauma.

CONSIDER BECOMING INVOLVED IN SUICIDE PREVENTION IN YOUR ORGANIZATION AND COMMUNITY

Helping individuals who are suicidal is a crucial role for Paramedics. In addition, you may want to participate in broader suicide prevention efforts in your organization and local community. Here are some ways you can get involved:

- Suggest that your employer sponsor a presentation on suicide awareness by a mental health professional for co-workers, community groups, or the general public.
- Identify a gatekeeper training program for your colleagues or members of your local community. Gatekeeper programs help people learn how to identify individuals at risk for suicide and respond appropriately
- Distribute, to your colleagues and the public, written materials on suicide prevention developed by national organizations, such as the American Foundation for Suicide Prevention, American Association of Suicidology.

HELPING YOUR COLLEAGUES

Suicide can occur among your colleagues as well as among the people you serve. Paramedics are at risk for suicide because of the stresses of their jobs. If you notice signs of risk for suicide among your colleagues, you can assist them in receiving help.

For more information on helping co-workers,see the Resources section,including the information sheet The Role of co-workers in suicide prevention.

RESOURCES

A guide for Early Responders Supporting Survivors Bereaved by Suicideu, By winnipeg scuicide prevention network(2012)

The Role of Co-Workers in Preventing Suicide, By Suicide Prevention Resource Center(published 2006;partialy updated 2011)

http://www.suicide.org/sites/default/files/resource-program/CoWorkers.pdf

This information sheet helps people in any type of workplace learn how to respond to the warning signs for suicide in their co-workers.

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ABOUT THE AUTHOR

George Amolo is a Student Paramedicine BSc(Hons) Masinde Muliro University of Science and Technology, Registered and accredited AREMT-Global assessor, Registered and accredited AREMT-Advanced EMT, Co-founder Paramedic Association Of Kenya , Over 9yrs Practicing as an EMT.

NEW MANAGER: AN INTERVIEW

BY MIKE BILLINGHAM

When I first had this idea, I asked several people whom I respect what they thought about interviewing a Paramedic Manager and sharing those perspectives with our readers.

The people that I spoke to felt that maybe if I interviewed a manager on their way out that I might get some honest answers, but they all felt that that Managers are afraid to speak out for fear of retribution. A significant issue for those who are not protected by a union.

I think that I was able to find someone with honest answers, and an inspiring vision. So, I would like to thank my anonymous source for this article.

Question:

With all that is going on in the world and in the middle of the 100th? wave of the pandemic, why would you want to take on such a high-pressure position?

Answer:

I don't see it as a high-pressure job. The role of the Manager is the least high pressure. My role is to support paramedics, and they have all the pressure.

I get to create my schedule and do what is needed for my area. As a paramedic we are always dealing with the unknown and schedules can be chaotic for families. As a Manager I get to ask questions, and support people in their growth and decision-making processes.

I field phone calls; I just have a discussion and help them figure things out for themselves. My view is that the Managers role is an educational one. I just give crews ideas on how to navigate new or unique situations for themselves.

If you help support people to do their Job, your job actually becomes easier.

When the pandemic started, it was all about making new standard operating procedures, finding ways to get them rest breaks and cleaning time. It was about supporting and protecting the workplace, educating them on when they could work safely and when they needed to stay home. Some of the algorithms weren't in the best interest of the organization initially. There was guidance for people having symptoms to come to work. We had to re-think that specific guidance and realize that it was better for the individual paramedic and the organization for them to stay home in some situations. We had to take a long-term view as opposed to staffing the car that day.

Question:

How do you hope that the role of the EMS manger can evolve?

Answer:

Being available and present is important. People say, "I don't ever see the manager unless I'm in shit." That needs to change.

They should be excited to have that opportunity to discuss the issues and what they see as solutions. The subject matter experts are the people doing the job. They have some really good ideas, and in most cases, know what the solutions are. I think the front-line staff, they need to drive the change.

Increased integration into health care is important. For example, I was recently in a multidisciplinary meeting discussing the opioid crisis. I met with hospital administrators, police, and others. There were lots of different perspectives.

Paramedics have a unique perspective, and we often fill the gaps. I feel that we can help other professions understand how the people on the street feel and what they need.

Creating Naloxone kits was a start, but we need to do something pro-actively. My personal view is that we need to take this into the schools. The party program was a big success. I remember going into schools every year and having discussions with teenagers about drinking and driving. A kid recognized me in the grocery store the other day and said, "I remember you; the 'Party Program' changed my choices when I was young".

I think if we prevent them from becoming addicted in the first place, we have a chance. Maybe we need to encourage recovered addicts to come in and share some of their stories. Maybe we need to do more to make sure that kids know how to access mental health and community supports.

I feel that we should be teaching them about resiliency at a very young age.

Question:

Shouldn't that meeting have had educators and social workers there as well?

Answer:

I'm not sure if I have the ability. I'll put ideas out and see what is allowed. Maybe we don't have the capacity right now. Maybe all we're able to do is plant some seeds. Maybe this is something that starts out driven by our paramedics like the Party Program. Maybe some paramedics are willing and able to spend a couple of hours of their time. Maybe a pilot project. A few years ago, we went into the high school, and we staged a scenario of a drug overdose. It was quite realistic and detailed the treatments. There were paramedics and a doctor involved and it really made a big impression.

Question:

What advice would you give to someone starting out that wanted to become a Paramedic Manager?

Answer:

That's an interesting question and I can only speak about my own journey. It depends on what your natural abilities are. I started out as a paramedic and that was the job for me. Then I got to teach paramedics and I loved every minute of it. Eventually, I went into a leadership position, and I got to support and teach new employees. I spent a bunch of time and effort in becoming the very best I could be at each level. Once someone finds that passion, they need out figure out what they can do to make it happen. There is an evolving understanding that successful teams need balance. You may not be great with spreadsheets and finance, but you have fantastic communications skills, or you may be passionate about patient care and technical aspects of the job. Everyone has something to offer, and we need people who care a lot to get involved.

Question:

What are the biggest challenges that you face professionally in your role?

Answer:

Paramedicine is one of the least sought-after jobs right now. My challenge is to try to understand what gets people interested in becoming a paramedic and what we can do to retain them. What are their biggest concerns, why are they leaving and what draws them away from us and into a different profession?

Question:

What are the biggest challenges that you face personally in your role?

Answer:

Patience. I want to make a lot of changes and I want to show appreciation and make sure we are supporting crews, but I know I have to be patient with the process. I noticed that during the pandemic every time we made changes, we created new unintended issues that needed to be fixed. For example, some said 'just make

everyone full time' - bit many don't want that. They like the flexibility of being part time. There's an often-used quote in healthcare that our situation is like flying at 30,000 feet struggling to maintain altitude and correcting issues at the same time.

Question:

What are you exited about?

Answer:

I want to find solutions and start a trial to address the staffing issues. Our retention rates are terrible, and we need to find a way to provide our paramedics with a fair income and a reasonable lifestyle.

Question:

Do you have concerns?

Answer:

Yes. My biggest concern is that I might not have enough time to do the job the way I want to do it and in a way that I can get things done. I'm also concerned that I may not have enough support from above to initiate changes.

Question:

What is the most important thing that you can do to support your crews?

Answer:

I need to meet with the crews in my area once a week. They need to get to know me and be able to trust me, so I need to see them. I might only get to see one 10th of the workforce on any given visit and that's not enough. We need to change the mindset and make sure that these people feel supported.

It really is just about supporting people in the way that they deserve to be supported. It's really about a vison for the future. Identifying solutions and then deciding what steps we need to take to get there. I want to change the culture and discuss the issues instead of just sitting around complaining.

I want to really truly be present and listen to them and make sure they feel supported.

Question:

What's the most important thing that your crews can do to support you?

Answer:

Two things. First of all, I hope they can be patient. I have a lot to learn and many different pieces to wrap my head around. And secondly, I need to know what they need from me.

Some crews still see me as the bad guy, but we need to change that and that is a cultural shift.

CONCLUSION:

In the days following this interview I reached out to some of my friends and contacts in the industry and asked how this article would land for people.

I wondered about the potential impact on Managers.

One strong opinion was that things needed to be more employee focussed. Unbelievably, there are still too many examples of very bad decisions, and some organizations still follow outdated management practices. In fairness, Managers have had a very difficult time lately. Just as the crews on the street have had to adapt and overcome, Mangers in Canada have had the same challenges while being under supported, undersupplied, and underfunded.

EMS Management is a critical component in providing high quality patient care and I feel that managing our recovery from the recent series of events will inform Academic Curriculums for the next hundred years.

The drug catastrophe, the pandemic and the general volatility in the world have put all of us in positions of leadership. We have some difficult decisions moving forward.

Thank you for taking the time to read this and I hope we will all be judged well by those who come after us.

QUIZ
A PHARMACY QUIZ

RATIONALE

1. The correct answer is (d). This is often referred to as the 6 Rights of Medication Administration or the 7 Rights of Medication Administration. They are: right drug, right dose, right route, right time, right patient, right documentation, and the rights of the patient (autonomy). Another right that is often taught is "right reason."

2. The correct answer is (a).

3. The correct answer is (b).

4. The correct answer is (d).

5. The correct answer is (a). This is the amount of time it takes for 50% of the drug to be elim-inated from the body.

6. The correct answer is (c). A drug with a large (or wide) therapeutic index is safer than a drug with a small (or narrow) therapeutic index.

7. The correct answer is (c). The desired action is what the drug therapy is intended to do, to help achieve the overall therapeutic goal.

8. The correct answer is (d). Dosing can be very specific for the individual and may include ti-tration.

9. The correct answer is (a). This is an important consideration because the liver metabolizes many drugs. Some are rendered ineffective before they ever reach the intended receptor site.

10. The correct answer is (b).

11. The correct answer is (b). One good example of this is Atropine. If administered too slow it will have a paradoxical effect. Another example is morphine. If administered too fast it can cause nausea and vomiting.

12. The correct answer is (b). Ipratropium bromide belongs to the anticholinergic family. These drugs suppress the parasympathetic nervous system.

13. The correct answer is (a). Remember, the sympathetic and parasympathetic nervous system play tug-o-war with some bodily systems, such as the nervous control of the heart rate.

14. The correct answer is (b). This in turn blocks the formation of prostaglandins which initiate inflammation. Inflammation is one of the primary causes of pain.

15. The correct answer is (c). Drugs that block the nerve impulses are called local anesthetics, in contrast to analgesics which are administered systemically but act locally.

16. The correct answer is (b).

17. The correct answer is (a). Decreased inflammation means decreased swelling and reduction in bronchoconstriction.

18. The correct answer is (d). Magnesium has been shown to stabilize the cardiac membrane. However, it is unclear what the exact mechanism is. The magnesium ion is a divalent cation that is important for over 300 enzymatic actions. It is an important regulator in nerve and muscle activation. Magnesium indirectly blocks calcium channels, and blocks sodium potassium channels indirectly and directly. It is one of the most important regulatory components in the human body. Iatrogenic IV magnesium overdose has caused cardiac arrest. (Right dose includes right concentration).

19. The correct answer is (d). The patient will let you know when it starts to warm up. The wrong concentration can be fatal. Always check your drug calculations and have them verified independently if possible.

20. The correct answer is (c).

21. The correct answer is (a).

22. The correct answer is (d). This is ironic because Amanita muscaria poisoning does not affect the muscarinic receptors, however there are other mushrooms which are way more toxic that do affect these receptors.

23. The correct answer is (d). However, Benadryl is not used for this purpose. The effects/side effects of Benadryl are dose specific. Normal doses can cause mild sedation, while excessive doses can cause excitation/agitation.

24. The correct answer is (a). This patient probably has an advanced case of CHF. The syncope was likely caused by the combination of medications, even though these medications are very effective when used together for the treatment of this disease.

25. The correct answer is (c). Needle sticks are not likely to accidentally deliver any quantity of medication. Medications can sometimes be absorbed quite easily through the skin. Think about Nitroglycerine and Fentanyl.

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ABOUT THE AUTHOR

Ron Oswald works as an Advanced Care Paramedic for Alberta Health Services in Milk River, Alberta, and the Prairie EMS division of Medavie.

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