



Public Health Policy in The Bahamas: An Overview

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Introduction

When Zhivargo Laing asked me to give this lecture, I had some mixed feelings, and I said I would go ahead and talk about something that is near and dear to me, and that is the health of Bahamians but from a policy position.

Tonight, we are going to talk about what is public health, I am going to take you on a little historical journey. We are going to talk about the objectives of public health policy and then bring it home to The Bahamas and talk about some of our pressing current priorities, how we design public policy, look at our outcomes, successes, failures and then take a brief look into the future.

What is Public Health?

What is public health? Public health is certainly not only a hospital or a clinic. Public health is basically that policy that promotes and protects the health of a population: where they work, where they live, where they play, where they learn. There's this separation between the doctor that cares for the patient and the public practitioner that prevents

people from getting sick. There are basic principles of public health: prevention and control, surveillance, water and sanitation interventions, epidemiology, risk factors and disease burden, hygiene and social mobilization. When we look at the historical backdrop, public health has evolved over a period of time. This quote from Tulchinsky and Varavikova, *The New Public Health* says, "Public health evolved through trial and error and with expanding scientific medical knowledge, at times controversial, often stimulated by war and natural disaster" (2014, p. 1), aptly describes how we got here.

History Matters

In the olden days, a few hundred years ago or even a few thousand years ago, there wasn't a lot of separation between the medical practitioner and the religious figure, so most illness was considered to be a consequence of sin (Andrews, 2011). "You get your spirit right, and you can fix your diabetes." We then evolved into the belief that illness came from the air or miasma (Halliday, 2001), that policy was ultimately discarded when we discovered the issues of sanitation. I'll go into this a little more. As we move forward,

we went through that period where it was all about the drugs and identifying organisms. And now we “get rich and switch.” We have this more integrated approach to medicine where we talk about the interaction of the individual and their environment. One of the oldest and most significant public health concepts was the idea of quarantine for persons with contagious diseases. The leprosarias or leper colonies, one of which existed in New Providence, is something that existed in the medieval times, but perhaps the most significant public health discovery took place in the mid-14th century with the Great Plague (also known as the Black Death). The Great Plague started in China, travelled through Istanbul (which was then known as Constantinople), and wiped out roughly between 30 and 60% of the entire population of Europe (Frith, 2012; Lord, 2014). A consequence was recognizing that things had to be done differently, and humanity learned that hygiene—getting rid of litter and cleaning up the streets—was a good way to keep people healthy.

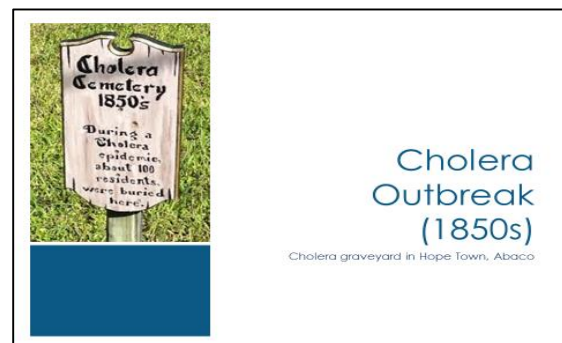
Another significant event historically was the discovery by a gentleman named John Snow, who is considered the father of epidemiology. He did a very elegant study where he proved that water from a pump in a particular neighborhood in London seemed to be the cause of a cholera outbreak (Snow, 1856). What he suggested was to take the handle off the pump and see if people would stop getting sick. He realized that there were other places in the vicinity where people were not getting sick because they were not drinking water from the same pump. He took the handle off the pump, people stopped getting sick, people stopped dying and so he realized that it was contaminated water causing the problem.

Public health hasn't always had its high points. The Tuskegee Experiment of 1932 [Tuskegee Study of Untreated Syphilis in the Negro Male, 1932-1972] forced the world to

understand that sometimes, public health policy can go horribly wrong. What Tuskegee taught us was the issue of appropriate ethics and best practices to make sure that we protect the subjects who we were studying (Gamble, 1997).

Beginnings of Public Health Policy in the Bahamas

Now, let's bring this home to The Bahamas. Certainly, if you look at the history of public policy in the late 19th century and early 20th century, there was probably no public health policy. Dr. Harold Munnings aptly describes the way things were in the early years of the 20th century, “Public health held a position of low priority on the government agenda” (2015, p. 48) and “the most populous areas of New Providence were like a great big cesspit” (2015, p. 50). The poor sanitary conditions meant typhoid fever and similar illnesses were endemic, and we suffered as a result of a lack of a public health policy.



This is in Hope Town, Abaco, where great numbers of people died from poor public health policies.

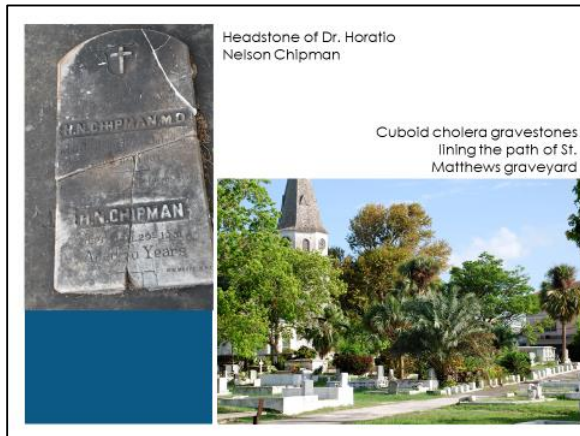
We're going to speak about some of the important figures who would have noticed the challenges that led to the cholera outbreaks in The Bahamas (Munnings, 2015, p. 35) and forced us to now consider things to reduce spread of disease, provide disinfected water which is safe for consumption. Some of these individuals include Dr. Thomas

Johnson (1837-1895), who lived and practiced in The Bahamas. His work as it relates to cholera is nothing short of remarkable (Dahl-Regis, 2009, p. 1)

Infectious disease outbreaks: Cholera and Typhoid Fever

I'll get back to Dr. C. R. Walker. Dr. Horatio Nelson Chipman who was the great-great-great-great grandfather of the current Member of Parliament. Dr. Chipman was actually born in Scotland, but he was instrumental in establishing public health policy in The Bahamas during the cholera outbreak (Chipman, 1853).

For those of you who might go into St. Matthew's graveyard, you may notice right along the edge of the pathway a number of these cuboid stones. During the cholera outbreak people were dying so rapidly that there was no time to dig regular graves. These were the headstones from the cholera outbreak of the mid-1800s.



We did not have piped or running water, so even if you were in a hotel water would be ladled up from a receptacle collected off the roof, drawn from wells (Beveridge, 1927). People would collect their excrement or urine in a pail. In the mid-1920s as the Fort Montagu Beach Hotel was being built, the lack of modern sanitation resulted in many

people getting sick with typhoid, including at least 10 tourists, one of whom died. This caused the government at the time to insist on piped water supplies and the initiation of sewerage in The Bahamas in the late-1920s (Munnings, 2015, p. 63). Soon to follow was the creation of indoor toilets and proper plumbing. By 1953 30% of the population was on well water and 71% were using what we call standpipes. By 1973, 80% of homes had piped water (Munnings, 2015, p. 64), by 2000, 84% and by 2015 almost 95% (Bahamas Ministry of Health, 2013, Pan American Health Organization, 2014). Again, public health-driven policies intended to keep people safe.

Objectives of Public Health Policy

What are the objectives of public health policy? It encourages us to move towards the right health goals and set certain safety standards. It tracks disease outbreaks, it investigates why some people suffer poor health outcomes and others don't, and finally it secures the greatest good for the population as a whole. The value proposition that a good public health policy would be that it ought to save money, improve the quality of life, help people (in particular children) thrive and reduce human suffering.

As an example, I'm going to move forward to the current day. If you look at what has happened with the new measles outbreak where New York said if you're not immunized, you cannot come to our city (Goldschmidt, 2019). They were serious about that. Bear in mind that The Bahamas has seen a 300% increase in measles year over year from 2018 to 2019 and measles is one of those diseases that is preventable by a very low-cost intervention (Pan American Health Organization, 2019). When you bring this to The Bahamas, we have some fairly unique Bahamianisms to deal with such "I ain't playing with this" or, if you have a

disease outbreak they say “I ga bind that with the blood of Jesus.” Now, I don’t know how you incorporate that outlook into public health policy but we certainly try.

Bahamian Public Health Policy Considerations

Talking about local health public policy, we’ve recognized that as we craft policy, there are a number of things we have to consider: where people live, how well they are educated, what type of support they have in their lives, whether they are wealthy or not, whether they are employed, what type of community they live in and their access to health. We call those the social determinants of health (World Health Organization, 2021). There are also the commercial determinants of health (Mialon, 2020). The big money that is able to influence public health in incredible ways. Their marketing strategies lead to unhealthy persons—what we call the industrial epidemics. We recognize that these multinational brands and million-dollar entities have completely changed the face of public health over the last 40–50 years. Bear in mind that the public health policy maker will never have the kind of money that the commercial policy makers have.

However, there is a tool that public health policy makers can use and that is to use fiscal strategies or taxation in order to make it less easy to consume certain things. An example would be taxation of cigarettes, taxation of alcohol, and taxation of sugar and there have been some very sophisticated studies to demonstrate that these types of strategies can reduce consumption and improve patient outcomes (e.g., Franck et al., 2013; Caro et al., 2020). But when you start talking this way you’ve got a big fight in Bain Town because people don’t want you to tax them on their sugar-sweetened beverages or their preferred meal.

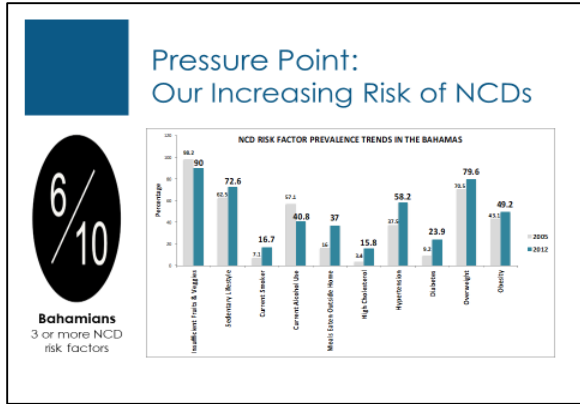
As we craft health care policy, we also have to recognize that The Bahamas does not have a homogeneous population. When you look at health behaviors on Abaco, they may be different than what’s happening on Grand Bahama, or more people smoke on Cat Island than they do on Inagua, or that the level of hypertension is different in different communities and that while most of us are obese, some will be more obese than others. Since we don’t craft island-specific or community-specific policies, our public health policy still has to take into account all of these inequities.

Health policy making involves more than just the Ministry of Health. And so, as we start talking, we think about what is Road Traffic doing or what is Attorney General’s office doing or what is the Department of Agriculture doing? We recognize that health has to be incorporated into all policies of government. There are some concerns that are now reaching the forefront such as being more sensitive to gender issues and more sensitive to human and patient rights, certainly much more than we have been historically. We also have to be aware of the press, which may not even be on our shore. Even though there was never a case of Ebola or SARS in The Bahamas, it certainly impacted what we did and what happened to our economy and that is true about some of these other issues.

Public Health Priorities and Trends

What are some of the pressing priorities that guide our public health policy making?

Now we look at the top 10 causes of disability-adjusted life years from 2017 and 2007, over a 10-year period (Global Burden of Disease 2017 Study, 2018). What does it look at? What type of change have we had over that period?



We can see a 30% increase over 10 years with ischemic heart disease, the same with interpersonal violence, and with diabetes, again about the same thing. Simultaneously we've seen about a 20% reduction in communicable disease disability-adjusted life years and neo-natal disorders but seen an explosion in chronic kidney disease. As you're making policies, what may have obtained in 2007 doesn't obtain in 2017, so you keep your eye on a moving target—we're looking at man who's evolving and what he's evolved to. There's your typical Bahamian man, and most of us now suffer from non-communicable diseases (NCDs), obesity and the associated problems. I want you to imagine trying to operate on a patient this size.

As we craft policies, and we look at what's happening in terms of the trends, bear in mind that 60% of Bahamians have three or more risk factors for NCDs (Dahl-Regis & Symonette, 2007). Whether you're talking about the fact that they don't eat enough fruits and vegetables, that they don't exercise, even though we don't smoke, look at the change from 2005–2012 with more than double the number of smokers in The Bahamas. Alcohol use has gone down a little bit and meals eaten outside the home has increased. Look at the number of Bahamians who have high blood pressure: almost six out of 10 Bahamians have high blood pressure. Eighty percent of us are overweight or obese: 50% just

overweight and 30% obese. Try crafting policy with those numbers and then this is what happens: Bahamians are showing up with gangrene in their extremities and winding up having to have an amputation.

My point is that despite the fact that we have moved into the 21st century and we have seen an increase in our life expectancy, Bahamians are dying horribly young: 74% of our deaths, which is a record in the world, is due to a non-communicable disease (World Health Organization, 2018). Most of those deaths are premature, so Bahamians have a significant chance of dying far too young.

I have a particular interest in terms of public health policy as it relates to the issue of violence in the Commonwealth of The Bahamas. It's very common for us to have these kinds of headlines and the vector (agent) of this public health spurge is this thing called a gun.

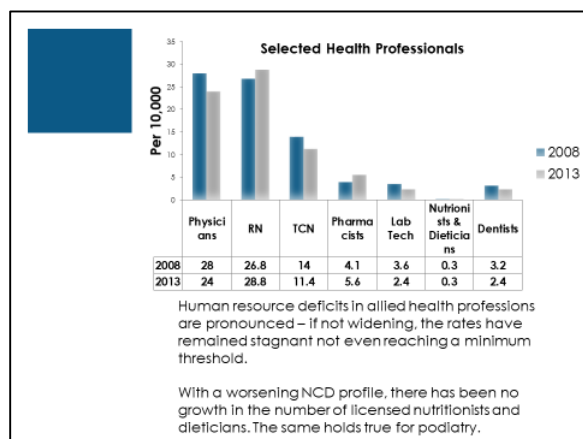


When we look at murders, if I had presented a slide of gunshot wound statistics, the figures would be higher, and certainly this makes us one of the most violent countries in the world. As you create public health policies, you have to plan for the reality of gunshot wound victims. You have to plan for the reality of treating patients strapped with GPS ankle bracelets, realizing that many times, these are repeat offenders. This fella

was stabbed to his heart, or this person has a gunshot to the abdomen, you recognize that they will consume our intensive care resources and provide the opportunity for training our young house officers with skills in resuscitating a young man or woman who has been shot (Koretsky, 2018).

Public health policy demands that you account to your public reality. Yes, we are living longer but in bad health. The average Bahamian will live until they're 74 years old but their last 10 years? I'm not sure they're going to enjoy it.

How do we craft public health policy better to take into account for this public reality? How do we craft public health policy when we are seeing a dramatic brain drain in nursing. In The Bahamas we recorded a deficit in 2018 of 528 registered nurses, 528 fewer nurses than we need to provide adequate health services across the archipelago (Scott, 2021). And that's just in nursing. If we look at some of the other professions, we need a lot of positions. We need quite a few nurses but also look at pharmacists, lab technicians, nutritionists. Given that we have an NCD crisis on our hand, look at how few nutritionists that we have. Then for oral health: these comparisons are between 2008 and 2013 and what we see is that as we are crafting policy, our human resource development is not kept up to pace.



Even as our NCD profile worsens, then they throw in something else, and that is climate change. Climate change disproportionately affects small island development states, low-lying archipelagic nations. We recognize that there are direct human health effects. That we haven't really figured out how we're going to handle them—death and injury during floods, storms, changes in the agricultural system and reduced food production add to the development of new pathogens because of this change in climate.

I've given you the "what", now let's go and create this health care policy. What do we do? We first look at the problem. We recognize the problem. We've been talking about the problem. We document the problem and then we throw a rope and say, "okay this is what we're going to do to", and make sure that you can consult with the appropriate person. You make a decision, then you implement it to see what kind of results you get, what impact is has, and then you have to evaluate rather than improve on it or terminate it. This cycle is pretty much continuous.

Consider a problem such as obesity. What causes obesity? You eat too much and you don't exercise enough, right? Now, if you look at the root causes of it, well, maybe it's because kids can't get in school or they don't have enough luxury time or they took PE out of the curriculum or their families don't really understand nutrition so they give them bad food or the only food they can afford which is a calorie-dense nutritionally-poor food or they really can't even get healthy food. And then if we look closely at this, why can't kids walk to school? Because they're afraid they might get hurt or because there are bad traffic conditions. When we talk about access to calorie-dense nutritionally-poor food, maybe it's because there are too many fast food outlets or maybe our zoning rules are bad, or maybe consumer demand has brought that kind of stuff. Looking closely at

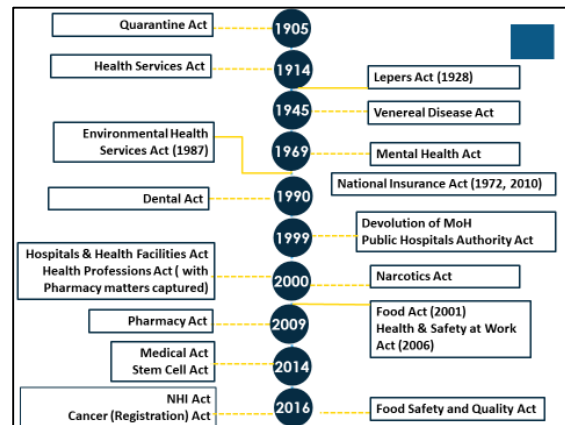
something as simple as obesity with a public health policy or policy in general lens now has to take into account all of these other factors. To move this mountain, it requires an involved public, an understanding of the issues and real political leadership in order to get this done.

Obviously, there are some unique realities to Bahamian policy creation, implementation, and enforcement that Mr. Laing and I were talking earlier, about political realities and your changing realities. It can be social or commercial, but change can only happen when the political environment is right and you seize the moment and make the right decision at the right time to get done what you need to get done.

There have been some successes and we've managed to create a health strategic plan. There's the second strategic plan if I remember correctly, from 2010 to 2020 (Bahamas Ministry of Health, 2010), and I guess it's time for the third plan. This is a wonderful plan, and I think it shows what we're able to do. We have the input of our international organizations that address the Sustainable Development Agenda for 2030 of which Goal 3 is Good Health and Well-being (United Nations, 2018). We also have a number of targets that help us to drive our policy: reduce tobacco and alcohol use, control hypertension and diabetes and so on and so forth. Then there are other specifics that you may hear me talk about sometimes: the 90-90-90 goals for HIV, the mental health action plan, the plan to end tuberculosis, etc.

We talked about quarantine, the importance of environmental health legislation, then all the way down to the National Health Insurance Act and the Bahamas National Cancer Registry which is now finally going into effect. I don't want to spend too much time on this slide. Some of the policy outcomes rely on basic public health,

evaluation and monitoring, such as the occurrence of conch poisoning in the early 1970s lead to the creation of what we call the Food Handlers Program. Tonight is the first broadcast of a new show called "What Ya Cookin?" to show people how to prepare healthy food and avoid some nutrition problems. We have the Healthy Bahamas Coalition, and pretty soon we're going to complete the breadbasket revision for the first time in 40 years.



We've had good results, for example, look at what's happened with HIV from the beginning of the epidemic until now we have very few deaths (Bahamas Ministry of Health, 2018). We had increasing rates of infant mortality after a very good rate of 12.7 deaths per 1000 live births in 2001 and it started to climb up so we've had to make some changes and we've mandated that all women had to come to Nassau from the Family Islands once they reached a certain point in gestation so we wouldn't have this right rate of infant mortality. That has caused some issues with expectant mothers being away from their families.

We've had positive successes with our immunization programmes even with the re-emergence of vaccine-preventable illnesses. We've had new antigens that have been added to the regimen. We've also done pretty well with our manpower at least in medicine

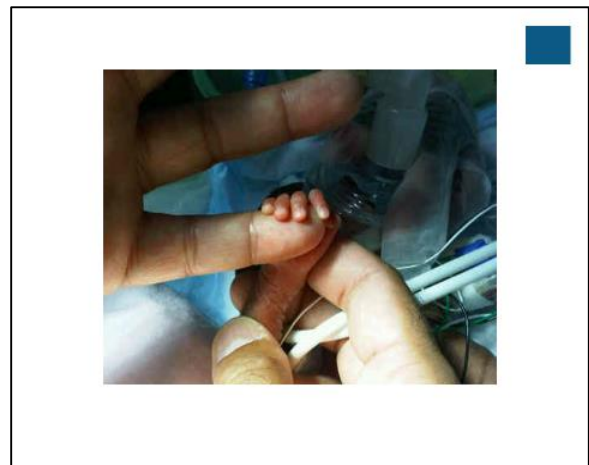
and nursing but not so well in some of the other professions. This has forced us now to reduce the number of doctors that we're going to train and focus now on pharmacists, lab technicians, x-ray technicians etc. (Bahamas Ministry of Health Planning Unit & Moxey, 2015). We're focusing quite a bit on infrastructure development and on the critical care block (commissioned in January 2015) which is the best in the region. We're about to build out a maternal child health building and new emergency room.

In conclusion, we've had some real successes. We've had the input of a giant in public health, who is trying to help us reach near the top of influence in the world. Dr. Phillip Swann is one of the public health trained physicians in The Bahamas, Dr. Indira Grimes who is making her mark, as is Professor Desirée Cox.

We still need to talk about how we deal with junk food—sugar-sweetened beverages and I suspect that the conversation is going to get loud when we start talking about sin taxes. We've got to talk about embracing native Bahamian health remedies: cerasse, aloe, etc.

In the last couple of days all we've heard about has been CBDs (cannabidiol) and I'm going to not say a whole lot about it but if you ask me some questions, I can tell you how I really feel about it. Public health policy gives us “something to look up to, something to look forward to and something to chase” (McConaughy, 2014, para. 2)

This is one of my patients on whom we were about to do a cardiac procedure. The entire hand of this premature infant is on my pinky finger. This image talks about trust and hope that we're going to do the right thing.



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Audio recording of the lecture:

<https://www.facebook.com/UniversityofTheBah/videos/436393473827811/>

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