BNR CME Presentation
Sunday 15th September.
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SLIDE 1

Evening everyone.

I'm Ian Hambleton – Prof of Statistics at UWI, and I'm going to give you some demographic background to the trend of rising chronic and cardiovascular disease that we're seeing in Barbados and pretty much everywhere else.

SLIDE 2

So this work comes from two recent analyses that we've completed with PAHO.

The first is a Lancet article on the effect of aging on chronic disease, which itself comes from a larger piece of work reviewing 20-year change in over 50 chronic diseases.

And both these reports are available for free online… and I'll share the weblinks at the end of this presentation.

Both reports came about thanks to a new project with IDB which is helping to expand access to data across the Caribbean – and I'll mention that at the end of this talk.

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So let's first look at the whole region.

And the good news is that life expectancy almost everywhere continues to increase.

This is a chart of LE in the Americas and Globally, for women in orange and for men in green.

For each colored block, the top line is LE and the bottom line is HALE, so the number of years we're expected to live with good health. HALE is about 10 years less than LE – so in our lives 10-years or so on average are spent living with one or more health condition.

[SLIDE] In the Americas LE is well above the global average. And in Barbados the LE roughly mimics the average for the Americas.

[SLIDE] Women 80 years, men 75 years.

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Life expectancy for older-adults looks good right now. The years of remaining life for a 60-year old living in the Americas has increased from 21 to almost 23 years – higher than any other world region.

But here is where things start to unravel a little bit. The Americas is a big place, and the Caribbean gets lost when we produce averages.

[SLIDE] So let us look at life expectancy for Barbados against the average for the Americas. LE for older-adults in Barbados is starting to fall – and remember this is pre-COVID. So this is a potential problem emerging, and we need to understand what is happening.

And just in case you think this is a Barbados specific problem. **[SLIDE]** Here is JAM. **[SLIDE]** And Antigua. **[SLIDE]** And Bahamas.

This emerging LE stagnation among older adults is Caribbean-wide.

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So we've completed some work to better understand reasons for this emerging situation.

We've used two openly-available datasets from the WHO and the UN.

And we've looked at the change in deaths and in illness between 2000 and 2019 in 33 countries of the Americas, one country at a time.

And we've split the reason for the change into three causes:

- Changes due to advances in public health
- Changes due to population growth
- And changes due to population aging

SLIDE 6

So I'm presenting the data for Barbados today.

And let's take a step back for a moment

In Barbados, death rates from NCDs are dropping. For women and for men. That's thanks to public health advances. Health system improvements. And more generally thanks to social improvements.

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Lower death rates lead to aging

And in Barbados the number of people aged 70 and older is growing fast.

Almost 5,000 extra older women and another 5,000 extra older men.

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And we expected this growth to continue.

By 2060:

- The proportion of Barbados women over 70 is expected to more than double → to ¼ of the entire population

- And the proportion of Barbados men over 70 is expected to triple → also to ¼ of the entire population

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So now we're going to look at how levels of illness from NCDs has changed between 2000 and 2019.

We're using a summary of illness known as the DALY. One DALY = 1 year lived in less than good health. Or 1 year lived with illness.

[SLIDE] Those public health advances I mentioned - on their own - would have led to a 5% drop in illness.

[SLIDE] But – the aging population led to a 27% increase in illness

[SLIDE] And population growth led to a 6% increase in illness

[SLIDE] So – overall – we saw a 28% increase in illness

[SLIDE] And we see even larger increases in illness in JAM, ATG, BAH.

We're fighting a tide of aging, and our public health actions must generate greater health improvement if we're to offset this tide.

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Let's recap.

National levels of illness are increasing.

And this is driven primarily by our aging population.

[SLIDE] The effect on the number of deaths is similar.

[SLIDE] Our public health gains have been considerable, but not enough to offset aging.

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So let's think a bit about this – and this is all for discussion…

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The successes:

We've lowered rates of illness and death.

And this has led to higher LE

And these successes are due to a mix of good things

- Public health improvements
- Healthcare improvements
- And wider social improvements

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These successes lead us towards more challenges.

We ideally want older adults to be leading illness-free lives.

But **on average** our data suggests that this is probably not the case

Our estimates suggest that between 2000 and 2019, the number of years living with illness has increased from 43k to 55k.

Now, UHC is being touted globally as one weapon as we cope with age-related illness.

But – and this is a big but – any government's ability to pay for UHC will be hampered by demographics. Longer lives and fewer births (we have lower fertility rates now in Barbados) mean less people in the working population paying taxes, and less money for the government to pay for healthcare.

Lastly – what we know very little about – is the extent of multimorbidity in Barbados. But what we already know from elsewhere is that this is likely to become the big healthcare challenge of our time… And we could have another entire session on multimorbidity.

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So this is more than a healthcare problem.

It's a challenge for all of society. That's so easy to say – but very challenging to effect change.

More practically, and in the short term, what we could do now is to borrow a technique from climate change – and imagine what life might look like in 30, in 40, in 50 years' time under certain different conditions. If we cope well. If we do nothing. And so on. This analysis has given some early detail on a problem that every clinician already knew existed. Foresight scenarios are very good to begin a wider public conversation about the challenges we face.

And the second practical thing we can do is to monitor our healthcare actions much more closely. We need more data on the problem itself, and on the actions we're taking to tackle the problem.

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I mentioned a project called CaribData, which is all about making greater use of available Caribbean data / Caribbean evidence.

And I just want to show you 1 graph from recent work

This shows the availability of gender-stratified data around the world. And data availability in the SIDS – small island developing states including Barbados – has less available data than anywhere else in the world. A lot less.

If we're to have any successes with this challenge, we need to collect the data that monitors our progress.

And we're not currently doing that.

And that – good people – is where I'm going to stop.