## KAREN DAVISON

## "Bridging the Divide: Exploring research in nutrition, mental health and food security" Mental Health Symposium May 27<sup>th</sup> 2017

[01:29 PM] Polaris Grayson: Good afternoon and welcome to The Sojourner Auditorium and the sixth annual Virtual Ability Mental Health Symposium. Thank you Leandra for voicing. Over all these years, I still have voice issues with SL.

My name is Polaris Grayson.

I have been in SL for 13 years this week last Wednesday. I was diagnosed with Multiple Sclerosis a little over five years ago.

Before I introduce our next presentation, I'd just like to remind you that you can IM one of the VAI Greeters in the back of our auditorium if you need assistance.

Let's leave the chat stream open for the presentation.

You can find out more about Virtual Ability by clicking the poster up front and getting a notecard.

For information on this Symposium and our other projects and services, visit our blog http://blog.virtualability.org or our website http://www.virtualability.org Feel free to comment on the blog, and to use your Twitter or Facebook accounts to share information during today's presentations.

As you probably know, Virtual Ability presents in text and voice simultaneously..

When a presenter uses voice, we transcribe an interpretation or meaning-formeaning summary of what the presenter says.

This will be in chat stream, preceded by the transcriber's name and the presenter's initials.

So, please understand that it is the presenter's thoughts, not the transcriber's, which we are seeing.

Our next presentation is Karen Davison, on the topic of "Bridging the Divide: Exploring research in nutrition, mental health and food security".

Dr. Davison is a registered dietitian and certified health education specialist who consults on nutrition and psychiatry.

She is also a faculty member at Kwantlen Polytechnic University and research affiliate with the Social Justice Centre.

Currently, she is the principal investigator of the Bridging the Divide project.

Dr. Davison advocates for integrated approaches to nutrition and mental health care and participatory approaches to research.

A growing body of evidence indicates that food insecurity, diet quality, and mental health are interrelated.

As part of this discussion, Canada's Bridging the Divide project (http://nutritionandmentalhealth.ca) will be highlighted.

Please welcome Dr. Davison!

Please start whenever you are ready, Dr Davison.

(KD = Karen Davison)

[01:33 PM] Elektra Panthar: KD: thank you Polaris and Leandra for the wonderful introduction

My plan was to lull you into sleep with text heavy presentation! No, kidding I'll be asking questions throughout the presentation and of course there will be Q&A later

Today's presentation will be about exploring research in nutrition, mental health and food security

Getting a better sense about what research about food security is like I started as a dietician and worked with hospitals as well

I developed an interest in mental health and there's a lack in mental health therapies and food security

We looked at 4 groups of people

At a fundamental level we know a better diet helps with better mental health We saw specific nutrients and their correlation to mental health From a broader perspective there are intersecting pathways

We shifted to a diet with lots of highly processed foods - a high appetite for these foods

There have been studies on pregnant women and their children Some mental health conditions might be the result of poor nutrition long term At the bottom of the slide the major nutrients all work together to support healthy brain function

The unifying theory about mental health is that there are a high variety of factors that start within the womb

Genes, environment, interaction with various organs

In the last 10 years there have been several studies about food intake patterns

What is the nature of the relationship between diet and mental health, in several countries

A lot of these studies look at depression, at mental outcome, also anxiety I'd like your input in this

We look at this case...

[01:45 PM] Lyr Lobo: healthy breakfast

[01:45 PM] Mook Wheeler: Yikes, look at Sarah's diet

[01:46 PM] iSkye Silverweb: I just see sugar

[01:46 PM] Leandra Kohnke: high carb, high sugar, low protein

[01:46 PM] Elektra Panthar: KD: lots of fast food and caffeine, lots of flour and dairy

[01:46 PM] Jujue: Poor diet

No nutritional value

[01:47 PM] Mook Wheeler: lots of processed stuff

[01:47 PM] MatildaMoontree: wow, I've not consumed that much junk food in

5 years

[01:47 PM] Faust (faust.saenz): no green leafy veggies

[01:47 PM] Leandra Kohnke: carb carb carb

[01:47 PM] Alumnia Autumn (alumnia): Too much caffeine and where is the actual pure water?

[01:47 PM] Jujue: Good one! on the water!

[01:47 PM] Dowager Jess Clarkson (jessie.skeldergate): poor protein

[01:47 PM] Elektra Panthar: KD: That's what I'd look at as well

She looks ready to change, so yes, she should introduce fruit and vegetables [01:48 PM] Leandra Kohnke: not too much more fruit, fruit is high sugar, especially fruit juice.

[01:48 PM] Alumnia Autumn (alumnia): How can she even sleep with this much sugar and caffeine

I actually didn't really see good fats that could work against inflammation [01:49 PM] Leandra Kohnke: Good point Alumnia

[01:48 PM] Elektra Panthar: KD: Lower fast food - packing lunch instead of eating out

Maybe prepare something the night before since she's very busy

More water of course and less caffeine

Whole foods, whole grains, healthy fat like Omega 3

Other sources of proteins, like legumes

Other than diet, critical nutrients are important for mental health that people don't get enough of in their diet

1- omega 3 and 6 fatty acids

Omega 6 comes from many sources

Omega 3 is more difficult to obtain - We get too much Omega 6 and not enough Omega 3 so this imbalance is a problem

EPA and DHA are fatty acids you can get from fish

chia seeds. flax seed as well

If you use the seeds it's best to grind them up to absorb more fatty acids To avoid inflammation it's best to keep homosysteine low, increase folate intake

Iron is also important for mental health

Chromium and zinc are also important, as well as antioxidants

Tomatoes for example are rich in antioxidants

We looked at people with depression and bipolar disorder in another study We collected data about brand names, natural health products, their dosage etc

There is a very high frequency of NHP intake

Mostly minerals, glucosamine

Looking at the correlation of NHP intake and overall functioning

(Global assessment of functioning)

Those who had nutrients intake with supplements there's no added benefit when it comes to vitamins

Regardless of food or supplement there's positive correlations with minerals intake

In this population taking supplements helps with overall nutrients intake In our particular example though she is taking many kinds of supplements Multivitamin, green coffee beans, St john's wort, etc

Does she need ALL these supplements?

[02:01 PM] XavierForte: perhaps spectrum

[02:01 PM] Leandra Kohnke: If you have a genetic variant (or are in an ethnic group with a high frequency of such variants) that reduces your ability to metabolize a specific vitamin supplements are a good idea. But not this kind of shotgun approach.

[02:01 PM] Lyr Lobo: some are useful, but in conjunction with the natural sources and food

[02:01 PM] Jujue: I would advise natural

[02:01 PM] Alumnia Autumn (alumnia): I think she could just get better nutrition from actual foods instead of taking all of these.

[02:01 PM] Dowager Jess Clarkson (jessie.skeldergate): seems a bit of overkill

[02:02 PM] MatildaMoontree: brand quality is a big issue, not sure these would meet that criteria

[02:02 PM] Elektra Panthar: KD: We are on the same page, she doesn't need all these

She doesn't need stress tabs because she takes those vitamins from the Spectrum multivitamins already

The fish oil supplement would be better instead of gummies

No coffee beans, just try to lose weight

St John's wort can be problematic for its interaction with other medications Canadians can check the Medeffect website to check for adverse effects And probiotics was mostly from bad info provided by advertisements

You can see the imbalance in digestive tract microbes

This imbalance has been correlated also with poor health and mental health problems

There's research to ascertain this

We do know however that the post prandial dysmetabolism helps to improve health

Low processed foods. F&V etc

The NHP are most effective if one needs them

So we need to look at genomic markers and blood analysis

For example a group has polymorphisms. Not able to use folic acid effectively Natural health products can be more effective if we look at tailored advice - blood, diet

Research is trying to look at pre-natal nutrition to target better mental health in children, and first few years

Brain plasticity as well

Very exploratory for now

It's more complicated than just food intake, we need to look at eating behaviors as well

Eating disturbances like mindless eating, food insecurity

Eating disorders present a correlation between these factors

There can be several approaches to help

According to the problem and the case there are different approaches and therapies

Food insecurity is linked to their (perceived) ability to consume or obtain a certain food and nutrients levels

We also look at substance abuse

People with lifetime substance abuse was associated with food insecurity - cross sectional studies confirmed the correlation

There's also correlation with suicidal ideation and moderate food insecurity It increases as food insecurity worsens

People consuming nutrients below recommended level and perceived mental health shows that food insecurity also contributes to poor mental health We looked at healthy eating index as well

We looked at vitamins and nutrients intake with factors like age, financial stability etc. We need to look at both physical and mental health, to increase their intake of also iron and folate

We need to look at their medications as well, to check the effectiveness of the treatment

Our goal with another study was to put together many organizations and come up with a program to improve treatment and prevention overall Several surveys to look to prioritize treatments, also 9 key people/experts to get their feedback about their priorities

Policies, research, people working in the field together to get priorities at a national level

Four priority areas in the end

Mental health services community wise

What can we improve?

Health services personnel can promote better diets

Improvements that can be done in society as far as poverty and stability goes. The information to improve doesn't arrive to people who need it

So finding ways to promote and get people more engaged

Webinars, stakeholders workshops

Online hub http://nutritionandmentalhealth.ca

I invite you to check the website and feel free to get in touch if you'd like to talk more about this

Thank you everyone, any questions?

[02:30 PM] Gentle Heron: Thank you Dr. Davison. You sure gave us a lot of good information about nutrition. Several audience questions already. Let me post the one at a time for you to address: [13:50] Alumnia: Omega 3 is supposed to help with ADHD

[02:31 PM] Carolyn Carillon: KD (responding to Alumnia):

When we think about Omega-3s

It's been linked with depression but also ADHD & bipolar

Alzheimer's

There haven't been as many studies

But at the clinical level, it's one thing that we'd look at if we see someone with ADHD

We look at their diet & medications

We might recommend Omega-3 fatty acids if they weren't getting enough We'd want to look at blood levels but that's not always possible so we'd look at diet

The 1-4 grams I mentioned earlier would be the recommended level [02:32 PM] Mook Wheeler: Some sources of Omega-3: fresh basil, cold liver oil, spinach, broccoli, brussel sprouts, chives, garden cress, kale, nettles, swiss chard, cauliflower, chinese cabbage

[02:33 PM] Carolyn Carillon: KD: different seeds and nuts & marine sources are good sources of Omega-3s

[02:33 PM] Gentle Heron: Regarding grinding the seeds: [13:53] Alumnia: I heard soaking can help too

[02:33 PM] Carolyn Carillon: KD (about soaking seeds): that's a good question

With flax seeds, they have a hard shell

So if you soak them overnight you might release the fatty acids

You might try crushing them

Some people recommend putting them in yogurt overnight & having them for breakfast

If you want the most benefit, at least try crushing them

[02:34 PM] Alumnia Autumn (alumnia): You can already buy flax seeds that have been ground slightly.

Or maybe replace one egg in a recipe with two tablespoons of flax seeds?

[02:34 PM] Gentle Heron: [14:32] Jujue: This question may be too focused on the individual: Is there information on the amount of time it takes for the patient to see a change in depression after a change in diet? I ask because the amount of time for medication to take effect for the depressed is a month or more. Is it comparable to the change in diet and the positive effects? [02:35 PM] Carolyn Carillon: KD (responding to jujue):

You're not going to see changes right away

With improvements in diet, you start to see improvements

But it takes time

It's similar to medication

Give it at least a month

Sometimes up to 3 months

But you won't see changes right away

[02:35 PM] Princess Claire (clairedeair): I'd give it more than 90 days.

[02:35 PM] Zip Zlatkis: same for other mental health issues

[02:35 PM] Jujue: I want to thank the doctor for this important information. I am inspired to include a dietary class in my pursuit of information and a degree in psychology.

[02:35 PM] Gentle Heron: [14:33] Faust Saenz: Was the two-continua model of complete mental health embraced as a framework through which to develop evidence-based policymaking by both the researchers and the policymaking community?

[02:36 PM] Carolyn Carillon: KD (responding to Faust): the model has been around for a number of years

And it's widely used

Especially in Canada

As a framework for mental health

As we think of food & nutrition, we'd want to use the model to look at what we can do to improve nutrition

In the study I mentioned about self-perceived mental health

There are differences in terms of nutrition

With the model we can look at it from a population and an individual level

It's a widely accepted model

And a great framework for policy in nutrition, mental health & food insecurity

[02:37 PM] Śčorpïùš Łûrčôtt (scorpiuslurcott): I have just discovered my uncle has been diagnosed with Parkinson's disease and I don't know much about this disability. Please could you briefly explain this to me?

[02:38 PM] Carolyn Carillon: KD (responding to Scorpius):

I'm not an expert in Parkinsons

But certainly when we talk about nutrition & mental health in general

Regardless of the condition they have

Better quality of diet will help

With Parkinsons, the ability to eat can be an issue

ie swallowing

You might need to look at the texture of foods

Things that are easier to chew & swallow

I'm not much of an expert but that would be key

They would need to see a registered dietician to get a personal approach

[02:40 PM] Śčorpïùš Łûrčôtt (scorpiuslurcott): Thank you so much

[02:40 PM] John Howard Cassio (sticaatsi): I have a question

When I suffered from depression I noticed that fresh cheese caused me to

feel worse. How can that be?

[02:41 PM] Carolyn Carillon: KD (responding to sticaatsi):

Could be a couple of different things

We were talking about the microbiome

Some people have trouble digesting lactose

That might be the link

Cheese doesn't have a lot of lactose but for some people

They can't tolerate any

So when we think about the brain connection

That could be a possible underlying factor

[02:42 PM] John Howard Cassio (sticaatsi): thank you

[02:42 PM] Leandra Kohnke: Fresh cheese can trigger migraines.

[02:42 PM] MatildaMoontree: and some cheeses have chemicals such as

preservatives, colors, etc that many are sensitive to

[02:43 PM] Carolyn Carillon: KD: someone else mentioned there may be

certain chemicals there that some would be sensitive to

There could be different explanations

It's important to sit down and look at diet & symptoms

You can do food records

There are apps

That help you track food and symptoms

[02:43 PM] Gentle Heron: I'm afraid we need to stop asking questions and

thank Dr. Davison. Maybe we should invite her back?

[02:44 PM] Carolyn Carillon: KD: thank you for having me

I'm more than willing to come back

Feel free to connect with me after

[02:44 PM] Fidget (fidgetswidgets) cheers and applauds!

- [02:44 PM] Draxtor™ (draxtor.despres): YES!
- [02:44 PM] Lyr Lobo: Wonderful session! \*cheers\*
- [02:44 PM] Ty Lomes: ~~~ APPLAUSE~~~
- [02:44 PM] Sister (sister.abeyante): Great presentation- good "food for thought!"
- [02:44 PM] Mook Wheeler: thank you so much!!
- [02:44 PM] MatildaMoontree: ty!
- [02:44 PM] Zip Zlatkis: YS!
- [02:44 PM] Elektra Panthar: thank you Dr. Davison!
- [02:44 PM] Jujue: Thank you Dr. Davison, wonderful presentation!
- [02:44 PM] Namaara MacMoragh: Thank you! Terrific presentation!
- [02:44 PM] Zip Zlatkis: Thank you!
- [02:44 PM] Slatan Dryke: excellent Karen thank you
- [02:44 PM] Draxtor™ (draxtor.despres): the sessions on stream will be
- archived at http://bit.ly/virtualability
- [02:44 PM] Carolyn Carillon: <<transcription ends>>