**ICanServe Foundation**

**Silver Linings 2019**

**All in the Genes: DNA Testing for Breast Cancer Management**

**Location: PICC Room 5**

**Speaker: Dr. Agnes Galura-Famero**

**Moderator: Daphne Osena-Paez**

[02:49:10]

**Moderator:** The next talk will be very interesting and very informative. This is actually the highlight of today's talk. Are you ready to start? You've been here since this morning... thank you for staying and I'm very excited about our session today. My name is Daphne Oseña-Paez and I'm so happy to be here as a volunteer for iCanServe Foundation. They do so much good for so many people and it's so nice to see everyone together today. Before we start our session, maybe we can invite everyone to come a little closer so that our speaker won't feel so lonely up here. So if you want to come closer now at be a good time and before we begin with our session with the doctor, I'd like to call on the health coach at the Life Science Center, her name is Ms. DJ Llabres. She is going to be doing some exercises for us... with us.

**Ms. DJ:** Hello. Hello again, it's me again. Would you mind come closer please? So we'll be more... closer. Alright before we start our talk for this afternoon, this morning... before this I already led two breathing exercises which some of you probably have it done there but this one is the last since we're already towards end of the day, mid afternoon. I would like everybody to still be alert. This breathing exercise is what you call "Four Seven Eight", can you say it with me?

**Audience:** Four, seven, eight.

[02:51:24]

**Ms. DJ:** Okay. This was taught to me by my doctor back in school, by the doctor named... my teacher, his name is Dr. Raymond Wayle. This exercise is actually supposed to... if you do it in the morning, it supposed to fire up your internal organs and sets you out through the day but if you are going to do it at night, it supposed to make you... help you fall asleep. And aside from that it will also help you reduce your anxiety, manage your cravings and reduce anger. It is called Four, Seven, Eight. How it goes is that you will slowly inhale four counts... four seconds and then you will hold it for seven seconds and then you will slowly exhale for eight seconds. You do it in four cycles... so what we are gonna do now is I'm going to do the counting for you. All you have to do is just listen to my voice. Shall we start? Where is everybody? Shall we start?

[Audience Response]

[02:52:26]

**Ms. DJ:** Yes, okay. You're still here, good... good. Before we start, I would like you to put away your phones, your cellphones. If you can have it them on silent mode and all your swag bags, can you put it on your side please, first? Alright, let's begin with a comfortable position sitting down with feet, with your feet flat on the floor. Okay... Thank you. Okay, so I want to be closer to everybody. Okay, so feet flat on the floor... close your eyes, sway it in your spine, relax your pelvis... feel your feet on the floor... feel your souls, your calves... your legs... your pelvis... your abdomen... your chest... your face... feel as if a string is stagging pulling at the top of your head. I will start my counting, just follow my voice... inhale... 1, 2, 3, 4. Hold it... Slowly exhale... 8, 7, 6, 5, 4, 3, 2, 1. Inhale through your nose... 1, 2, 3... Hold it. Exhale... inhale through your nose slowly... still with your eyes closed. 3, 4... Hold it... 7, 6, 5, 4, 3, 2, 1. Exhale. 1, 2, 3, 4, 5, 6, 7, 8... Inhale... 1, 2... this is the last, 3, 4... Hold it, seven seconds... 5, 4, 3, 2, 1. Exhale. Slowly... still with your eyes closed, can you inhale through your nose? Hold it and exhale with a sigh through your mouth. One more inhale through your nose... one last, let it all go, inhale... exhale... let it all go, let it all go... still with your eyes closed. Feel your cheeks, feel your forehead, can you smile for me? Can you smile for yourself? You are happy. You've learned so much today... thank yourself for that. Smile bigger... smile bigger because you are blessed. Open your eyes... welcome back.

[Audience Applause]

[02:55:55]

**Ms. DJ:** Welcome back. So that is something that you can do in the morning for you to up generate your body and fire you up and set you throughout the day and at night you can do it also for you to sleep better, okay? And if you feel that there is a surge of anger in you, just take a step back and through the 4, 7, 8. Can you say it again? 4...7...8...

[Audience Response]

**Ms. DJ:** Okay, four cycles... four cycles. If you do more than four, you'll feel light headache, so it's not advisable. So four... or before you study or before you watch a telenovela, just do it. Alright, I'm DJ I'll be available, I'll be in the back if you have any questions and just say hello... thank you.

[02:56:53]

**Moderator:** Thank you so much DJ, that was so nice and relaxing. 4-7-8 okay? So we're always gonna remember that now. Now we're gonna move on to why we are all here today. It's going to be a very interesting session, I personally I'm very interested in it especially since genetic testing became very popular when Angelina Jolie did what she did. I think we all know. So a lot of us are curious about who should be tested, should we be tested and what do we do with the information that we get once we are tested. I know may iba natatakot to know all of that but we are going to find out, it's not just test that are gonna be done. It comes with a lot of information on how we can manage our lives for the future. So let me introduce our speaker today, her name is Doctor Agnes Galura. Dr. Agnes Galura-Famero, she is an internist and a fellow of the Philippine College of Physicians. She works under Romlas Health Group as a functional medicine practitioner in LifeScience Center For Health and Wellness and as the product services and technology development manager for Global Medical Technologies Manila Incorporated. She is also a member of the Institute of Functional Medicine and Society of Integrative Oncology. Let us welcome Dr. Agnes Galura-Famero.

[Applause]

[02:58:40]

Speaker: Good afternoon. Again, I'm Agnes Galura-Famero. So I'm an internist, I'm a functional medicine practitioner for LifeScience, the Product Service Technology Development Manager for Global Medical Technologies. I'm not a nutritionist dietitian. I'm not a geneticist, I'm not an oncologist but I work with nutritionist dietitian in the clinic. I work with geneticist, with dun sa mga laboratory partners po namin and yung sa medical oncologist and even surgical oncologist, I co-manage with them. So I'll be speaking the lens about as a physician and as a cancer coach. All cancers are genetic. The global cancer burden is estimated to have risen to 18.1 million new cases and 9.6 million cancer deaths in 2018. One in five men, one in six women worldwide develop cancer during their lifetime. According to the International Agency for Research on Cancer, in 2018 breast is the top cancer type for Filipino women. Lung cancer is the top cancer type for our men. Our cancer risk can increase up to 20 times for people with genetic predisposition or for people with inherited risk.

[03:00:14]

**Speaker:** According to World Health Organization, early detection of cancer greatly increases the chances for successful treatment. When detected late, the five year survival of people with colorectal or endometrial cancer drastically lowers to less than 20% compared to 80 to 90% survival rates in people who are diagnosed early. That is why it's very important to give the right answers to people with familial and hereditary types of cancer so that they can take control of their health. Knowing our hereditary predisposition to develop cancer can help us create empowered health life plans. Angelina Jolie said yes to hereditary cancer screening and said it was right for her. Let's... kindly disect po yung case niya. So this is Angelina Jolie's family tree. So Angelina Jolie's mom, a grandmother died of ovarian cancer at the age of 45. Her maternal aunt died of breast cancer at age 61. Angelina's mother had previously battled breast cancer but then developed ovarian cancer at age 49, died of the disease at age 56. Angelina has her generic testing. She found out she is positive BRCA-1 mutation. She said, she had a faulty BRCA 1 gene which sharply increased her risk para sa breast cancer and ovarian cancer. She chose to have preventative bilateral mastectomy. After two years ng monitoring ng ovaries niya, yung CA125 at inflammatory markers, she decided to have her ovaries at saka yung fallopian tubes removed na rin. But even before Angelina Jolie's sensational decision, an actress also faced the same genetic dilemma as Angelina. In April 2008, Christina Applegate was diagnosed with early stage breast cancer. At age yun ng 36... she first underwent lumpectomy, yung mass lang yung tinanggal but after learning that she had BRCA-1 genetic mutation, she chose to undergo bilateral mastectomy din. In 2017, she also had her ovaries and fallopian tubes removed. Now, we are not here to analyze their choices for their management... if mastectomy ba, removal ba ng reproductive organs are the best choice. But we need to emphasize that when they did their preferred therapeutic options or choices, we should be empowered. Empowerment based on sufficient data. But when we consider hereditary cancer testing, there is a guideline that we follow. So aside from having a family history of cancer occuring in many generation kagaya ni Angelina, we have to consider kunyari rin yung mga family history ng cases ng same type of cancer, if cancers occur at younger age than the usual for example, for colon cancer... nagkaroon ng 20 years, eh yung screening natin 50 years and above para sa colonoscopy. If, kunyare mayroong more than one type of cancer in a single person, kunyare both breast and ovarian cancer... if cancers occur in both pair of organs, both eyes, both kidneys, both breasts... if there are more than one childhood cancer in siblings kunyare Sarcoma both sa kuya saka doon sa ate. If cancer occurs in the same sex, in the sex not usually affected like breast cancer sa lalaki or if you are worried about your hereditary risk of cancer example yung adopted individuals who wanted to know, no way to track their family history, but again..  they should be all empowered.

[03:04:13]

**Speaker:**  But why did the two women chose to be very aggressive in their management? This is because BRCA-1 positive patients will have a 50 to 85% lifetime risk of developing breast cancer. 40-60% risk of developing a second primary of the other breast and 15-45% risk for ovarian cancer. So they also have an increased risk for other cancer like for example, your pancreas. Now this is a nice table because we have to identify kung nasaan siya so inemphasize doon yung... but BRCA is not limited to women. Men who inherited the faulty BRCA genes may be at risk for developing breast cancer as well. Studies have also shown that this BRCA mutations usually have more agressive na cancer for example, for men, prostate cancer and is associated with poor survival outcomes. However, we should go beyond BRCA. A gene mutation for breast cancer is not limited to a BRCA gene mutation. A negative BRCA gene mutation does not mean you are not at risk for the other hereditary types of cancer, so... checking just the BRCA leaves the other predisposed genetically at risk individual to the same dilemma. So one of the markers we can monitor is actually check 2. Okay, if you look at this table... so kapag yung babae may check 2 dahil may breast cancer, sometimes you really need to monitor din po yung risk niya for the colon at saka doon sa rectal cancer. So checking just the BRCA might not be enough. Now, paano naman yung mga genetic testing para doon sa mga mayroon nang cancer? Well for diagnosed individuals, how can genetic testing help? Each of us present with different environmental exposures and life circumstances that's why even if we are diagnosed with one disease, management should not be one size fits all. Some patients may have chemo-sensitivities to different types of anti-cancer drugs and targeted therapies. This patient is highly sensitive to cyclophosphamide and her attending doctor can look into using this first. As a cancer coach and as a functional medicine practitioner together with our nutritionist dietitian yung kanina nga, si Maddy. Together with the team, we support the patients by identifying the mode of action ng medication. The drugs that are being used and the possible interactions ng medications doon sa diet. For this patient, sabi natin cyclophosphamide... since she is sensitive to cyclophosphamide and if she is using cyclophosphamide, we have to guide the patient regarding the use of turmeric, luyang dilaw because yung luyang dilaw, may active component which is your curcumin so this inhibits actually yung mga ibang drugs na CYP 3A4 at saka CYP A12 so ibig sabihin, if you are using that tapos nagki-chemotherapy let's say ng cyclophosphamide, baka mamaya magkakaroon ng inhibition ng gamot. So ang target natin is to get kung ano yung mga ginagamit natin na mga medication and then we use it to maximize food as medicine.

[03:07:58]

**Speaker:** Some patients may have natural sensitivities to biologic substances that can help their cancer management. With the help of the nutritionist dietitian, we can incorporate food in the menu. For example, for this patient... lycopene can really help so dapat nakaincorporate siya doon sa food niya because sensitive. Another application ng genetic testing is when we determine our ability to detoxify substances. Yung nabanggit ko kanina yung CYPA 12, yun yung gene na parang naghe-help metabolize nung caffeine, aflatoxin, medications, paracetamol... for this patient, she is sensitive actually, AA ang type ng genotype niya. So that means pag uminom siya ng two or more cups of coffee per day, it delays... it may delay the appearance of breast cancer for approximately seven years. Now, it's not a blanket kasi for some patients na may ganitong genotype naman, kapag uminom naman siya ng greater than 3 cups of coffee in a day, increased ang risk niya for cardiovascular accidents, atake sa puso or even sudden cardiac death. So it is our task to identify saan applicable command kapag mayroon ka nang genetic testing. Now, for cancer warriors in the room... how can genetic testing help you? So more people are living with and surviving cancer than ever before. Globally in 2012, an estimated of 32.6 million people were living with cancer. Monitoring can be done, xray, ultrasound, CT Scan, MRI combination but they are subjected to the capacity to identify yung detection ng mass. Kapag masyado siyang maliit, hindi mo siya makikita. Otherwise, parang stable lang... ang target natin is to identify early on. This is where we use circulating tumor cells. Circulating tumor cells or yung CTC, ito yung mga cancer cells na nag de-detach doon sa primary na tumor. It circulates around doon sa buong body, doon sa blood, pwede rin sa lympathic tissues. CTC tests can help actually detect, manage and even monitor patients using platforms through the blood na kinukuha pagkatapos sasabihin niya, ano na yung status? Maligalig ba sila o hindi... kahit wala pang masyadong nakikita doon sa monitoring natin, structural monitoring. CTC test can give you the information, even the concentration and monitor you before the intervention and 3 to 6 months after the intervention to assess how effective is the cancer management. Now, once you have all these tests, anong gagawin natin diyan? For genetic test, we start always with pre-consultation. Even if a patient wanted to have it done pero hindi siya ready, then it is our task to make sure to guide the patient, hindi ka pa pwede. Dapat mayroong counselling muna tayo. You need to see these genetic counsellors first for you to be empowered. We extract your specimen once okay ka pala, pwede siya... we extract your specimen, we check you kung sakaling ano yung pinaka-risk natin through the functional medicine approach and we do yung actionable plan. What is important here is what you do with the information. You have to turn your information into action.

[03:11:44]

**Speaker:** Now I go back to my first slide... all cancers are genetic but not all cancers are inherited. In cancer, only 10 to 15% of cancer are hereditary or due to inherited genetic mutations. So the majority which is your 70 to 80% are sporadic or a.k.a. acquired that occurs due to spontaneous mutation... so because of your environment, pwede ring age, yung mga lifestyle natin that contribute to this development. Because of the advancement in technology, we actually dissect diseases and even conditions from genomics to even metabolomics. But it is important again to understand that the gene that make us up, dapat ipa-partner mo rin doon sa lifestyle and environment that we are in because our phenotype is determined by both. Because our genes impel, they don't compel. 30 to 50% of cancers are estimated to be preventable through maintaining a healthy weight, consuming a healthy diet, being physically active and avoiding exposure to occupational carcinogens, environmental pollution and certain long term infections. The epigonetic factors namely yung kinakain mo, yung nutrition, yung movement, yung stress, yung sleep, yung toxins, yung infection, social connections, even the philosophies in life all contribute to the activation and deactivation of your genes. Last year, the World Cancer Research fund at saka yung American Institute ng Cancer Research, nag publish ng landmark na report. Title ng report, "The Third Expert Report on the Topic: Diet, Nutrition, Physical Activity and Cancer". So it supports the concept na if we can change the environment, we can change the trajectory of the disease. According to Merrill Winningham, an acclaimed clinician and educator who had her own battle with cancer, while diagnosis, treatment and even cure oriented research continues, it is imperative that there be a parallel commitment to the improvement of the status of everyday living for cancer survivors. This commitment to the quality of care across the cancer continuum is the bed rock for a successful treatment. In functional medicine model, it is always an inter-connection of the five roots. Mula kaninang umaga yan yung ineemphasize namin...sleep and relaxation, movement, nutrition, stress, relationship. These roots affect your genetic predisposition. Just like the interconnectedness of the roots, the 2018 Cancer Prevention Recommendations by the WCRF and AICR last year also emphasizes that although the ten recommendations have individual benefits, the most benefit is gained by taking the factors and compiling them into a package to become your way of life. So hindi ka pi-pwedeng okay ka sa nutrition, pangit ka sa iba.

[03:15:11]

**Speaker:** The first of the ten recommendation is to maintain a healthy weight but aside from maintaining a good body mass index, knowing your muscle mass and your fat mass and identifying your viceral fat rating or VFR are also important. Evidence showed that a higher percentage ng body fat is associated with the development of twelve different cancers. These includes thyroid and even meninggoma. So if you haven't had your fat mass check, mayroon po sa labas pwede niyo ring gawin yun. Now, several studies showed that even ten minutes of exercise results in less fatigue for people with cancer but the same is true for people who exercise every other day. So in other words, even after a cancer diagnosis, one should be active and exercise regularly. That is as long as yung exercise does not worsen your symptoms or the side effects, then exercise prescription can greatly help. Now third, eating a diet rich in whole grains, vegetables, fruit, specific sila dun, and beans, whole grains, non-starchy vegetables, fruit and beans are consistent features of diets associated with lower risk for cancer and other non-communicable diseases as well as obesity. So greater consumption ng non-starchy vegetables and fruit help protect against a number of aero-digestive cancer like your nasapharynx, esophagus, stomach, lung, colorectal. The goal natin for fiber is at least 30 grams per day from food sources. So at least five portions yun or servings that is around 400 grams or ounces in total of a variety of non-starchy vegetables and fruit everyday. Now, for nutrition, the relationship between yung mga dietary habits and non-communicable diseases has been extensively investigated but sub-optimal diet is important preventable risk factor para sa mga non-communicable diseases. So a study published ngayong 2019 in Lansett evaluated the consumption of major foods and nutrients using 15 dietary risk across 195 countries and quantified yung impact niya sa morbidity and mortality. So ang sabi nila, in 2017... 11 million deaths were attributable to dietary risk factors. So the leading dietary risk factor for deaths in many countries are diet na mataas ang sodium, low ang whole grains tapos low ang intake ng fruits. Tapos through diseases, when they use yung mga dietary measures, ang sabi cardiovascular disease was the leading cause of diet related deaths followed by cancer then Type 2 diabetes... so magkakasama. So next natin, we really need to make sure that you limit the consumption of red meat and processed meat. Limit to no more than 3 portions per week which is equivalent to 350 or 500 grams or about 12 to 18 ounces cooked red meat but again there are also studies saying ano yung mga benefits nung ibang types of meat like for example, or proteins... kung ano yung gagamitin. Processed meat refers to meat that has been transformed through salting, curing, fermentation, cooking, smoking and enhancing yung flavor. So there is a strong evidence that consuming red meat and yung processed meat is a cause of colorectal cancer. Now, alcohol consumption... taking red wine, usually kasi sinasabi it's good for your heart but for cancer prevention, it is best not to drink alcohol. Not just limit, not to drink siya. Drinking alcohol is a cause of many cancers, there is a convincing evidence that consumption of alcoholic drinks can cause cancers of the mouth, pharynx, larynx, esophagus, liver, colorectal and breast. Now, although drinking alcohol around mga 30 grams or 2 drinks per day can protect you against kidney cancer, well the risk for other cancers far outweigh yung benefit nung protection doon sa kidney cancer. Controversial... do not use supplements for cancer prevention. We believe in food as medicine first, supplements can never replace a varied healthy balanced meal but you need to measure. Measuring can help but if with documented deficiencies with the help of the nutritionists, dietitians, and the physicians, we can correct it using food as medicine first but just like what the guidelines, the same guideline states, there are people who benefit with the use of supplements. Example, people who are frail, may poor appetite, people who might not be absorbing enough nutrients from their diet, kung sakali may mga individuals tayo na ang pinaka main nila na shift sa job ay gabi, wala talagang araw na nakikita... when you take their Vitamin D most of them masyadong mababa. Even if they want to get exposed doon sa sun or yung iba nagpapa-expose, mababa pa din, that is a trigger na kailangan pu-pwede ka magkaroon ng Vitamin D supplementation. Ganoon din yung anemic, mababa ang hemoglobin, for you to identify you need to measure. Once you measured, then we correct. Once we have corrected the deficiency or the problem or the imbalance, we should stop the supplementation but continue to make sure lifestyle motifications are implemented and sustained. That is why yung kaninang topic natin nina Madie, nina Pam, nutritional P.E. Titingnan natin ano ang deficiency mo, yun kasi ang best way for all the doctors to identify not just be measurement, ano ang pinakarisk nung isang pasyente.

[03:21:34]

**Speaker:** Whether you have hereditary risk for cancer, let your food feed your genes. Again, food is medicine. Variety is the key... the nutritionist, dietitian, the team can start with lycopene for the sources ng red, citrus for orange, citrus and ginger for the yellow, [Indiscernible 03:21:52] to support the liver and detoxification pathways para sa green ninyo and lastly pwedeng berries or even medicinal mushrooms like Shitake. Now, this is a copyrighted table by the Institute of Functional Medicine that shows vegetable list that support detoxification para makapag compensate yung body natin. Examples niya, cruciferous vegetables that are good sources ng compounds to metabolize hormones natin para magbalance kunwari Arugula, broccoli, cabbage, cauliflower. Next we have the detoxifying leafy greens... they are the anti-inflammatory bitter therapeutic greens kunwari bok choy, kale, parsley. Thiols provide nutrient like sulfur that aid in the liver detoxification like kunyare garlic, chives, onions. Next, vegetables for liver and kidney support. These vegetables actually help liver produce bile and the kidneys to excrete toxins more efficiently through the urine kunware artichokes, celery natin. Other non-starchy vegetables are sources ng fiber, foundational nutrition natin and even phytonutrients like for example bamboo shoots, bean sprouts, carrots, cucumber, eggplant, okra, tomato, turnip and even yung water crest. Because of the detoxification ability o yung parang panlinis na ability ng most greens, most people nowadays actually consume green smoothies. In an effort to eat clean and get healthy, some actually might be sabotaging their health by using that. The most common component of green smoothies are actually spinach, yung iba kale, arugula, all of which are actually loaded with oxalates. Now these smoothies often contain din berries or almonds, eh yun din mataas din yun sa oxalates. Ang daily oxalate intake should only be between 80 to 120 milligrams per day. A signal green smoothie na may dalawang cups ng spinach may contain up to 1,500 milligram na oxalate. Eh ang gusto natin 80 to 120 lang. In addition to kidney disease, some patients might have generic... general na joint pains, fibromyalgia, mga yung iba bone pains... can also be stored doon sa lungs, blood vessels, sa thyroid, even the brain possibly impeding their function. So that is why even with the guidelines, it is still best that we get personalized dietary management or intervention.

[03:24:33]

**Speaker:** In the end, we must always remember that whatever therapy one considers, we need to also deal with cancer in the kitchen. It is always good to start where we are ready and to support each other in just journey of living well. Genes impel but they don't compel... said more simply, bad genes may load the gun but poor lifestyle habits can pull the trigger. We need to turn the information into action. The management care should extend beyond the walls of the clinic and the support should be given by a team. Life comes with many challenges, the ones that should not scare us are the ones we can take on and take control of.  Be proactive. Remember, be a previvor and survivor and stay as one. Thank you.

[Applause]

**Moderator:** Thank you Doctor Agnes, what a very informative and empowering talk. My goodness, I'm sure we have a lot of questions, anyone who want to ask first? Because I have a few questions. Since... who would you recommend that test to, I mean... I think, because we are all here, we all somehow touched by cancer... if not ourselves but somebody we love and we care about. So who should be going in for these kinds of screening tests?

[03:26:22]

**Speaker:** So number 1, maganda pa rin po na malaman natin through pre-counselling ano ang risk natin. So these are the guideline set by the American Cancer Society kung sino dapat ang pinaka identified na individuals who kung saan pinakamaganda yung genetic cancer testing pero kailangan din doon may readiness. Why? If nag fulfill siya sa criteria pero 17, 16 year old yung tetestan natin, hindi sila ready. Paano kung nag BRCA positive sila? Paano kung sakali ang pinakarisk pala sa family nila is mabilis silang magkaroon ng anxiety, baka less than 18 palang yung bata lagi niyang iniisip. Nako magkaka-cancer ako, magkaka-cancer ako, magkaka-cancer ako. Instead na magiging proactive tayo, na-okay yung... wala tayong stress, baka mamaya magkaroon pa ng shift doon sa genes. So readiness is very very important.

Moderator: Doc, how about, kasi culturally no we are a little bit more conservative in the Philippines. Hindi naman tayo lahat as courageous as Angelina Jolie. Pero papaano kung na diagnose ka, when you find out that you are positive for certain genes, what are the other ways that a person can handle it other than doing the aggressive thing that Angelina Jolie did?

[03:27:55]

**Speaker:** Again, although 50 to 20% kasi yung mayroong risk for hereditary type of cancer, the rest ng cancer types natin are acquired or sporadic. A positive or even a negative test naman, it does not... lalo na sa hereditary cancer testing, hindi naman ibig sabihin doon hindi ka na magkakaroon ng cancer ng predisposition para magka-cancer. What if nag negative ka doon sa test pero smoker ka, drinker ka, pangit ang lifestyle, hindi ka man lang naaarawan, then increased ang risk natin parin for the sporadic type of cancer. For hereditary type of cancer, our target is to make sure that you are empowered and that, yung health plan natin laid out. Ayaw kasi natin na magkaroon ka ng cancer testing, hereditary cancer testing pagkatapos wala kang gagawin. So generally our target is once mayroon kang positive or negative, dapat mayroon tayong goal. Ano ang ginagawa natin to monitor, to make sure na mas mababa yung translation ng mga genes natin para hindi sila mag upreculate.

**Moderator:** Any questions? Who among us here have daughters, raise your hand? Oh madami... Papaano yun doc if a woman has had breast cancer, does that mean that her doctor automatically has the gene. So can she skip all of these na or kailangan ba siyang mag... one of the candidates for this test?

[03:29:29]

**Speaker:** They are candidates pero doon natin titingnan, do they fit the criteria? Readiness is very important because kung hindi ready yung mga bata na magkaroon ng testing, they might... you might provoke harm. Pero doon kasi natin kailangang i-change din yung culture when we look at health management. A positive BRCA does not, is not... parang yan na yung sentence mo, magkakaroon ka na. That's why you have to be proactive lalo na doon sa screening. Circulating tumor cells can help kaya nga para siyang akala mo parang liquid biopsy, it helps measure. Wala pang nakikita doon sa ultrasound, pwede natin tingnan ano ang risk. So patients with a positive BRCA or patients na mayroong strong family history, they can help atleast prepare yung mga individuals na may predisposition, ano dapat na ang ginagawa ko to make sure kung hereditary ang risk ko... ano ang gagawin na ng future generations namin sa family.

**Moderator:** But doc it's not automatic that if you have breast cancer, your daughter carries the gene right?

[03:30:39]

**Speaker:** Hindi kasi 70 to 80% pa rin kasi pwedeng sporadic type. Ang naipapasa lang natin around 15 to 20%.

**Moderator:** Good. Okay, we have a question from the audience. Ma'am I don't know if I can reach you there.

**Question #1:** Magandang hapon po dok. Tanong ko lang po dok yung... anong klase na doctor or sino na doctor ang pwede nating mapagtanungan about sa ating deficiency sa katawan para mapa-check po natin kagaya naming mga survivors, ayaw namin na mag recur. So ang tanong ko po diyan, kung kanino po kami dapat na pumunta na doctor, right doctor na mapagtanungan?

[03:31:37]

**Speaker:** Okay, when it comes to managing po sa nutrition, may mga clinical nutritionist tayo, may mga medical nutritionist, may nutritionist dietitians, mayroon din po yung mga integrative individuals, functional medicine po ako... so doon sa amin, ginagawa namin... I'm an internist po by practice, pero nagrerefer pa rin ako doon sa mga sub-specialist na kakilala ko pero by management po pwede po yung kunwari functional medicine practitioner na magsasabi sa inyo ano ang kakailanganin natin para doon sa kumbaga basic backbone, yung backbone para doon sa monitoring natin. So yung kagaya ng sinabi ni Made, hindi naman kailangan lahat mag test. It's good that you measure kasi kung ang tagal na pala nating nag a avoid ng isang bagay let's say kunware antagal niyo na palang hindi kumakain ng rice dahil takot kayo doon sa risk ng diabetes, o hindi kayo kumakain ng meat for a long time increased na pala ang risk natin for amino acid na problem or protein, doon pwede nating i analyze yan doon sa approach na ginagawa namin, yun po pwede nating gawin yun.

**Question #2:** Good afternoon doktora. Kasi may mga pasyente ako na walang symptoms yung breast cancer. Magugulat ka nalang bone cancer pala. Now, correct me if I'm wrong but tumatawid kasi yung breast cancer diba... it's either sa lungs, tatawid siya wala namang pedestrian pero tumatawid siya. Wala namang pulis, nahuhuli siya. What I mean is tatawid siya sa lungs, sa bones tapos sa kidney, like yung kausap ko ngayon... wala siyang symptoms. Nung nagpa mammogram siya wala naman daw nakakapa yung OB niya so nakita na lang sa mammo. I have a patient na wala, as in wala siyang nararamdaman, walang redness, walang swelling, bigla nalang Stage 3. Shocking eh... walang history, walang family na ano... first time. Ang tanong niya sakin, doktora why me? Ang hirap sagutin nun. Sabi ko tanong mo sa kapitbahay mo baka siya mayroon din para dalawa na kayo, friendship kayo. What I mean is nobody can detect eh, agad agad na minsan sasabihin pa ng pasyente ko doc baka due naman sa pagtatanggal ng balahibo sa kili kili, sa kilay ganun... it can... ako, being a doctor, iba iba eh. Hindi ko siya linya pero I try to recommend them, hindi naman agad oncologist eh... family med, internal. So sa akin napakahalaga na mayroon kang pagtatanungan na totoo. Huwag ka lang magtanong sa parehong babae, minsan nakakadiscourage. Alam mo ito masakit yung ganito ko, ay nako baka ako mayroon na din. So the question is, to avoid... yun ang laging tanong. Doktora, ano po yung... how to avoid? That is my also questions to you na how can we prevent... hindi mo mapi-prevent, but you can avoid.

[03:35:42]

**Speaker:** Okay, thank you doktora. Ibabalik ko po sa dalawang particular na guidelines. Yung first natin is yung functional tree, medicine tree natin. So bago magkaroon ng genetic predisposition saka yung symptoms, yung nasa ilalim importante because the moment na may genetic risk ka pero mayroon pang trigger sa ilalim, alam mo pataas yan yung symptoms papunta doon sa ibang diseases. Doon din ako papasok ulit po doon sa binigay na guidelines. You cannot take one piece tapos ang sasabihin mo, ay okay ako sa nutrition, okay ako nag eexercise ako araw araw pero stressed ako. Then you have to make sure, kumbaga sa over all package natin when it comes to monitoring and even yung cancer prevention, this is a guideline set by the World Cancer Research and American Institute of Cancer Research. So they are saying, if you wan't to avoid it or even make sure you lower down your risk, make sure wholistic yung approach, functional yung approach. Hindi ka pwede na iisa lang ang gagawin natin that's why it's very important that we understand kung ano yung nangyari doon sa pasyente, yung exposures niya kaya nabanggit din po kanina yung doon sa paano namin kinukuha yung history. When we get the history, we start paano ka naconceive. Ikaw ba ay normal delivery, Caesarian section ka ba, kamusta ka noong ano ka noong ikaw ay elementary, may exposures ka ba because that's the time we can manage all the exposures or even yung mga environmental factors because kung isang araw wala kang family history... met people po dito walang family history ng cancer, first sila sa family nila, then you have to look into... ano ang risk natin doon sa environment, baka malaki ang contribution. Malaki talaga ang contribution ng environment, then that's where we need to focus po. The supplements again... they are there, or even the other management, they are there the purpose natin is to make sure yung backbone po natin, yung nandito... stable.

**Follow Up:** Doktora pasensya ka na kasi marami akong pasyente na nasa bucketlist. I have a patient na nasa cellphone ko, ang bilis nag active. May lang then after that, Stage 4. Ang babae is 70... medyo, knock knock lang ako ah, medyo may censor ha... okay, severe na eh but sorry ha, to use this word... ang sexual activities niya, active pa. Now yung lalaki ayaw na, siyempre iba na yung porma pero yung babae ang tanong, dok bakit ayaw matanggal yung sexual urge ko. Eh hindi naman ako ang may katawan niyan diba? Now, doktora sorry no pero being also a doktor, ang hirap tanungin bakit sa Stage 4, ang sexual activities niya gusto niya... boys sorry ha, everyday or every other day. Oh kaya niyo yun? Ako nga di ko kaya eh. 58 na nga ako wala na 3 years na, graduate na. Hindi what I mean dok, is this very rare na Stage 4 pero sexual activities hindi siya pumapayag na hindi everyday or every other day?

[03:39:52]

**Speaker:** Kasi babalik tayo po doon sa... it will always go back doon sa hormones po. So kung sakaling ang hormones ang main problem kasi kunyare breast cancer yun, nagkaroon ng imbalance doon sa hormones... then ineexpect natin, libido, sexual urges, magkakadamay po kasi yan. So it's not just confined na dahil may breast ka eh baka yun lang yung naapektuhan ng hormones na imbalance, hindi. Pwede rin pati yung thyroid niyo, pwede rin yung adrenals yung para doon sa stress hormone natin. Pwede rin po kasi pati yung doon sa sleep pattern natin. So it is not confined, dahil breast lang yan na cancer na baka dapat ba wala nang urges, of course hindi. Since this is hormones, lahat ng mga may relationship doon sa particular hormone na yun dapat po pina-plot natin lalo na yung sa symptoms.

**Moderator:** One last question I think because we have another event, accomodating activity soon, okay.

**Question #3:** Just an important question. So how much is the... how much will it cost to do the testing and how long will it take to get the results?

[03:41:16]

**Speaker:** Pag sinabi kasing cost yung iba kasi ang una... ay ang mahal naman yan but cost is relative. Kapag ang sinabi nating cost is relative, that means if yung importance niyan dahil gusto ko nang malaman, anxious ako gusto kong malaman anong risk ko for the cancer... since this is a genetic test, it's one test na pwede mong sabihin na hindi mo na kailangan irepeat yung iba. So kung sakaling isusulit, kung malalaman mo yung information mo... kunyare 40 years old, ang plano mo eh yung mga anak ng anak ng anak ng anak mo ay makikita mo pa, wouldn't yung price na yun mas makikita natin na mas magiging "sulit"? I won't lie kasi generally po kapag sinabing genetic cancer, ano yan hindi yan mababa sa sampung libo... kunyare ganun. But you have to understand since the benefit ng genetic testing po natin, maraming marami... so doon po natin kakailanganin magkaroon ng parang cost benefit analysis. Mas marami bang benefit ito kapag ginawa natin yung test versus hanging fruit lang siya diyan na di mo alam kung talagang ikaw ba ay may risk o hindi. Sa prices po... you can visit po yung Global Medical Technologies Manila saka yung LifeScience Center mayroon naman pong mga discounts and packages that can help naman po para doon sa mga kakailanganin. Kunyare yung sa hereditary cancer type natin, nasa 40s po yung test natin.

**Moderator:** Pero marami yun diba dok? Iba iba?

**Speaker:** Yes, kunyare yung testing natin na yun yung dati ang nati-test lang natin BRCA 1 and 2. Nasa 150 na yan but this time yung sa 40 plus natin, 98 genes, 25 cancer types... pag biniyak mo yan, kung bawat isa niyan yung 98 genes ninyo... chineck natin noon, mura lang... hindi mura, relative nga yung presyo, parang mas sulit na for you especially if you are talking about yung doon sa monitoring. Yung long term management per organ.

**Moderator:** Doc 98 genes including BRCA?

**Speaker:** Yes, BRCA 1 and 2.

**Moderator:** So that is something worth considering. Thank you so much doktora Agnes Galura-- ay sorry, sorry... how long po, sorry po.

**Speaker:** 2 to 3 weeks po at yung sa hereditary cancer testing natin, saliva lang po yun.

**Moderator:** Hindi blood?

**Speaker:** Hindi po. So in 2 to 3 weeks mailalabas po sa inyo. So lahat ng organs na pwedeng affected nung isang gene na yun kung magkakaroon ng positive or negative po ng mutation.

**Moderator:** So that's something to consider. I think a lot of information was shared by Doktora Agnes, thank you. A lot of questions pa, what are we gonna do? Sorry? You please proceed to the booth. Mayroon ba kayo sa Davao?

**Speaker:** Right now nasa ano po, more on Luzon but we can coordinate po yung... kausapin namin po si, ang SBU Head namin Sir Allen Domingo.

**Moderator:** Pakibigay nalang yung mga information niyo doon, baka they can contact you maybe, nationwide. I'm sure something our sponsors can look at. So thank you very much doktora Agnes, we are under a tight schedule, really really empowering information and I hope we use it to our benefit and maybe instead of being scared, maybe we should look at it as a wholistic growth for all of us. Anyway it's very nice to sleep well, to eat well, to have good healthy relationships and have a good life. So thank you and I wish you all the best, thank you for having me. See you again next year!

[Applause]

[03:49:03]

[END OF TRANSCRIPTION]