FIBRES

Connecting ADRI Friends to Research

ADRI Asbestos Diseases Research Institute

MARCH 2020

ADRI & COVID-19

Ken Takahashi, MD, PhD, MPH, Director
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In unprecedented times, it is important to hold up a mirror to ourselves. What should ADRI do at this time? How can ADRI contribute to the crisis? My position as Research Director is unchanged, that is, to respect and adhere to our Constitution. Obviously it is not business as usual but I see the need for an even fiercer commitment to our stated objectives.

I encourage every ADRI staff to revisit our Constitution at this time. I personally found the following clause to be worthy of contemplation: *"to promote awareness of the special circumstances experienced by those exposed to asbestos …"* Reflecting on myself, I have realised the vulnerability of mesothelioma patients amid the COVID-19 pandemic and the need for ADRI to act on it.

ADRI's mesothelioma support coordinators will continue to reach out to mesothelioma patients, survivors and their families. This noble activity is built on a robust base: the scientific pursuit by our research staff and the administrative support by management.

Together ADRI staff will carry on our endeavour.

Let us all stay healthy.

Masks to Prevent Infection—Absence of Evidence or Evidence of Absence?

Amid the COVID-19 crisis, there is abundant information on how to protect ourselves from being infected. Washing hands and avoiding touching one's face are among the top hygienic recommendations. We accept the rationality, believe the scientific evidence and practice it. But when it comes to wearing surgical masks in the community, there seems a disconnect.

Let's make sure what the Australian Government recommends: *"Surgical masks in the community are only helpful in preventing people who have coronavirus disease from spreading it to others. If you are well, you do not need to wear a surgical mask as there is little evidence supporting the widespread use of surgical masks in healthy people to prevent transmission in public."*

For sure I did not find any scientific evidence supporting the notion that the general public (i.e. non-health professionals) can reduce the risk of incurring infections by wearing surgical masks. The recommendation by the Australian Government is spot on! Why then, do we see many people wearing surgical masks in the community? Some people attribute it to cultural difference. I do not negate such possibility. Or is it because not wearing masks confers inaction?

I believe there is one more subtle reason which relates to the theme of this essay – absence of evidence *versus* evidence of absence. The effect of washing hands and avoiding touching one's face to prevent infection is supported by evidence (i.e. no absence of evidence). In contrast, the effect of wearing surgical masks to prevent infection is *not* supported by evidence. In other words, there is absence of evidence.

Importantly, absence of evidence is different from evidence of absence. As a member of the public, we should fully respect and heed government guidelines and recommendations, especially at a time of crisis like this. As an advocate of preventive medicine, I am also aware of the need for more and better research on the effect of masks.

ADRI FIBRES

Mesothelioma Support

Pam Logan, Support Coordinator

We are delighted that Pam Logan has joined our team as a Support Coordinator. Pam, along with Jocelyn, is already giving support to patients, their families and carers by providing guidance and advice. Like Jocelyn, Pam is a registered nurse who has worked for many years as a community nurse supporting people living at home. She is excited to get to know you and offer advice and help where it is needed, so please ring **02 9767 9854** or toll free on **1300 237 400** and introduce yourself, both she and Jocelyn would be delighted to talk to you.

RESEACH UPDATE

The main goal of research being conducted at ADRI is to improve methods of prevention, diagnostic, therapeutic procedures and treatment for asbestos-related diseases, such as mesothelioma. Our lab research focuses on three key areas:

1) Biomarker Discovery and Development
2) Disease Mechanism, and
3) Treatment.

We have successfully established in-house methods to detect biomarkers in less-invasive (blood) samples. These markers have the potential to detect mesothelioma more specifically than currently available diagnostic methods. We have also established a genetic testing lab to be NATA accredited, so that we can diagnose mesothelioma patients using less-invasive (blood) samples. Our scientists are also working hard on ulitising our in-house established novel 3D cell model to test drugs more accurately, which effectively reduces the need for animal experiments. This model is especially useful to test combinational chemotherapy drugs and immunotherapy approaches to predict their clinical potential for the treatment of mesothelioma.

ADRI'S BIOBANK—WHAT IS A BIOBANK & WHAT IS IT USED FOR?

ADRI's Biobank is critical to our translational research as the collection of high quality well-characterized samples allows for the specificity of a biomarker or cellular process to be determined, while the access to linked clinical data maximises the potential of the Biobank. The Biobank stores and preserve tissues, pleural effusion fluid from around the lung and blood samples. The biospecimens are collected, with a patient's consent, and stored in liquid nitrogen cylinders. They are kept under strict ethical guidelines in large liquid nitrogen cylinders or in a -80^{o}C freezer. Our aim is to continue to built on the Biobank's unique collection of biospecimens and linked clinical data to help us learn more about human diseases, particularly asbestos-related diseases, their effects and to develop better preventative measures, better diagnostic tests and better therapies.

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