This 14-page Twitter summary from #ACEM19 keynote presentations by Professor Helen Berry and Dr Fiona Kerr was prepared for the Croakey Conference News Service in December 2019. It compiles a Twitter thread by Amy Coopes sent on 18 November, 2019.

Our first speakers for #ACEM19 will be Helen Berry - professor of climate change and mental health - and neuroscientist Fiona Kerr. Not your typical medical conference fodder. Live tweets at this thread, hope you can follow along.

8:42 AM · Nov 18, 2019 · Twitter Web App

24 Retweets 44 Likes

Amy Coopes @coopesdetat · Nov 18
Replying to @coopesdetat
Last summer Australia broke about 206 climate related records in 90 days says Berry. Sharing images from #QLDFires #NSWfires, and forecasts for the summer ahead #ACEM19
On systems thinking:

https://www.researchgate.net/publication/324146598_The_case_for_systems_thinking_about_climate_change_and_mental_health
Climate change aggravates the root causes of mental health problems, Berry says. Poverty, violence, war, migration, disasters #ACEM19
When you elevate risk in a population you increase levels of morbidity, including psychiatric morbidity, says Berry. Undermining social cohesion, systems #ACEM19. This diagram shows impacts from drought, via a systematic review.
Amy Coopes 🌐 @coopesDETat · Nov 18
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Berry says EDs occupy huge parts of this 'map' of climate change and mental health. Emergencies, mental health crises (particularly in the context where this sector is massively underfunded) #ACEM19

Amy Coopes 🌐 @coopesDETat · Nov 18
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EDs have their own ecosystems and they must be improved, and properly resources. With these systems already under strain we must find ways to keep people who don't need to be there out of EDs, and improve triage & pathways #ACEM19

Amy Coopes 🌐 @coopesDETat · Nov 18
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Disasters coming in thick and fast and this is only going to increase, says Berry. We need to start thinking about taking ED facilities out of hospitals and into the community - ++ primary care, walk in clinics, field hospitals #ACEM19

Amy Coopes 🌐 @coopesDETat · Nov 18
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We also need to help the community be better prepared and better educated on how to seek help in a way that doesn't unduly burden already stressed frontline services. Also focus on staff and how they are affected #ACEM19
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Berry stressing importance of politics and advocacy. Of all the medical colleges @acemonline is the one who can and should be loudest in this space. Actions must be thoughtful and considered #ACEM19

Amy Coopes @coopesdetat · Nov 18
Replying to @coopesdetat
Who you are and where you live greatly influences how you experience #ClimateEmergency, says Berry. Gives example of a farmer suiciiding so someone in the city can enjoy their BBQ #ACEM19
Find the opportunities in crisis, she says. And don't worry about the dinosaurs, they will die out. This is the time where we are at the height of our powers to challenge unethical acts of government, to find the pearl in the oyster #ACEM19

In Australia our climate may be a curse but it can also be the opportunity, she says, pointing to renewable technologies Also underscores the importance of small acts #ACEM19

Final thoughts from Helen Berry #ACEM19
Next up Fiona Kerr on changing how we think about how we think, and how we make complex decisions. How your brain works during this process and how it is it improved by human connectivity and interaction #ACEM19

In a clinical setting Kerr says there is a real difference in someone's bodies and brains if you touch their skin vs simply putting on an oxygen probe. Actually triggers chemical reactions. Eye gaze when talking to them also makes a huge difference #ACEM19

We build new brain all the time, especially up to the age of 3, due to BDNF. This drops off as we get older but you can boost brain-building through human interaction. Showing brains of children with lots of love and attention vs neglect - profound physical impacts #ACEM19

Mirror neurons fire within a sixth of a second of meeting someone - smiles and laughter speed this up further. Spindle neurons connect trust, task and emotion across the hemispheres #ACEM19
Even in this room we are 'resonating' with one another - endorphins, chemicals, hormones. 'We are electrochemical bags' says Kerr. Power of human voice - parts of the brain tuned to 3-8mHz. Resonance can trigger off neural connectivity, particularly familiar voices #ACEM19

Eye gaze releases a rush of oxytocin, dopamine, serotonin, vasopressin, says Kerr. Shows how much technology can get in the way of connection - particularly in the clinical context #ACEM19

These chemicals help our brains to become more nimble, absorb more information, free us to think and contribute creatively - feeling of safety and trust #ACEM19

One of the things about 'dumb people who don't know they're dumb' is that they massively overestimate their ability; conversely people who are very skilled and experienced underestimate their capability #ACEM19

The more you deal with complex problems and the more you have agency to act, the better you get at complex problem-solving. And the more you change not only your own brain but the brains of those around you #ACEM19

Different problems involve different thinking #ACEM19. You can get good at solving simple problems in 10 hours, complicated 10 years, complex up to 20 years, chaos is pure instinct. But this is speeded up by working in diverse teams #ACEM19
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Of course gut feeling can be wrong if you take in the wrong or incomplete information, Kerr says. We always have to be pushing ourselves and others to look at extra information #ACEM19

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Why are people who are good connectors also often good complex thinkers? It turns out when you show empathy, you have that capability - and it's partly electrochemical - takes in information but changes it. Uses long lens, consequential thinking #ACEM19

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This is really important when thinking about complex issues like climate change, says Kerr. If we can become more empathic about it we can also think more long-term and strategically about it #ACEM19

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How empathy works in a clinical context #ACEM19. Kerr stresses that empathy and compassion are different. You can't just feel, you also have to step back and think about how to act
Empathy and Compassion

Two groups mediated:
- one on empathy, empathy fatigue
- other included love and compassion (how to help)

- strengthened cognitive areas linked to compassion and emotional resilience (reflection, acceptance, & power)
- increased diuresis and emotional arousal
- also own tools and tables

Clinicians with Empathy and Compassion

- increases radar for advanced info
- better decision making
- improved discernment
- weighing vs. other information bias
- synchronised chemical cycle
Kerr says you can also change how patients think, by engaging empathically and genuinely. Increases their likelihood to do things like take medications. Decreases avoidance and increases ability to open up #ACEM19

Touch drops cortisol, adrenaline, increases robustness of immune cells. And this goes both ways - for patient and clinician too #ACEM19. Healing, coping and hope

Final thoughts from Kerr. Questions for the panel now #ACEM19
Someone asks about cultural issues around direct eye gaze and touch. Not always appropriate. Really important to consider, especially in Indigenous, migrant communities. Kerr says even recognising impact of voice, speaking gently and low, has resonance in the brain #ACEM19

Touch doesn't have to be effusive, even a brief pat. It's more about thinking about how physically you can convey empathic connectedness #ACEM19

What about impacts of meat consumption and agricultural contributions to #climatechange asks @trainhettrainer. Berry says reducing red meat consumption, particularly from ruminant animals, is something we need to do urgently #ACEM19

Berry also notes that any basic thing you personally can do for climate change is likely to benefit mental health, and improving diet also has sustainable impacts on your mental wellbeing. #ACEM19 is fully vegetarian in line with Lancet guidelines

Someone notes that regardless of cultural background, it's always acceptable to take someone's pulse as a brief form of touch #ACEM19. Asking about #heatwavehealth and particular vulnerability of people of mental health disorders

Essentially heat increases stress, cortisol levels, ^ losing emotional control, surge of violent incidents during heatwaves usually around Day 3. Suicides also surge in heatwaves, post heatwaves and in hot years says Berry #ACEM19. Some medications lose effectiveness (lithium)
Amy Coopes @coopesdetat · Nov 18
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Kerr talking about decision-making in the desert, heat, among soldiers. When it gets very hot they stop looking at all the high-tech gadgetry and pick up the radio because they need to hear a human voice #ACEM19

Amy Coopes @coopesdetat · Nov 18
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Berry asked about confounders such as drug use and social media on impacts to mental health. She says this underscores the importance of systems thinking - climate change interacts with all those things, making things worse #ACEM19

Amy Coopes @coopesdetat · Nov 18
Replying to @coopesdetat
Berry says Kerr's talk shows how important face to face contact is for mental health, connectedness, social capital, and that social media and technology has a place but it can't be a substitute #ACEM19