ANTI-POVERTY WEEK SYMPOSIUM 17 OCT 2022

LET'S WORK TOGETHER TO HALVE CHILD POVERTY BY 2030

Government House, Western Australia

TALK: THE ROLE OF EVIDENCE TO REDUCE THE IMPACT OF POVERTY ON CHILD DEVELOPMENT SPEAKER: ASSOCIATE PROFESSOR FRANCIS MITROU

Program Head, Population Health, Telethon Kids Institute UWA Node Director, ARC Life Course Centre

Acknowledgment of Country

Thank you to **Robyn Collard** for her lovely welcome to country.

I acknowledge that we are meeting on Noongar Wadjuk Boodjya and pay my respects to elders past, present, and emerging, and thank them for their support and guidance in the work we do. I also wish to acknowledge any traditional custodians who may be here in the audience today. Thank you.

I also thank Tony for his invitation to speak today and acknowledge His Excellency The Governor and Mrs Dawson, Minister Aly, my fellow speakers, and distinguished guests.

Short Bio

I am Francis Mitrou, Research Program Head–Population Health, and Team Head, Human Capability at Telethon Kids Institute (TKI), and Principal Research Fellow, Centre for Child Health Research, at The University of Western Australia.

<u>Telethon Kids Institute</u> – WA's largest MRI. We're all about happy, healthy kids, with a focus on researching and supporting optimal child development pathways across our society. We oversee large programs of work in the health and wellbeing of disadvantaged children, and particularly for Indigenous children.

I am Chief Investigator and UWA Node Director for the prestigious Australian Research Council Centre of Excellence for Children and Families over the Life Course (The ARC Life Course Centre CE200100025) – A multi-site research centre spanning The University of Queensland (Administering Node), The University of Sydney, The University of Melbourne, and The University of Western Australia.

Key focus for the Life Course Centre – the intergenerational transmission of deep and persistent disadvantage, characterised by the spread of social and economic poverty across generations.

Talk Overview

Growing up in poverty can significantly harm children's development, health, and educational success. This presentation will start by defining poverty in the Australian setting and how the current measures are masking some important facts. I'll then go on to highlight the importance of reliable evidence for understanding the impact of child poverty. I'll let you know about important studies that have used Australian and International data. The results highlight the transfer of multiple disadvantages across

generations, with a particular focus on how these transfers relate to children's education outcomes. The use of new and more sophisticated data collections in the future will help us design interventions and evaluate services that are more effective in supporting children and families away from poverty and deliver better health and social outcomes across the life course.

Poverty in Australia

<u>Poverty can be defined in many ways</u>, but definitions of poverty are typically centred around concepts related to wealth and income.

Wealth and social gradients are a feature of capitalist democratic societies. In Australia, as in similar representative and liberal democracies, we have a small number of extremely wealthy families, a larger number of very comfortable families, a great number of working families holding down jobs and careers, raising children, paying mortgages etc... but we also have a significant number of people and families who struggle to pay bills, to maintain stable and affordable housing in a tight market, and to feed themselves, even if they have a job.

Alongside this social gradient, another feature of modern democratic society is the welfare safety net. In Australia, this broadly refers to things like social security, public education, public health care...taxpayer funded supports designed to provide a foundation for all people to build from and to catch people before they fall too far. These universal safety nets can be accompanied by targeted programs that aim to further reduce and prevent poverty.

There are various scales of material deprivation and definitions of the "poverty line" available in the Australian context.

<u>An emerging global standard definition of poverty</u> is from the Organisation for Economic Cooperation and Development (OECD), The OECD definition is based on having a *disposable income below half that of the median (middle) household*. Using this definition, in their report *Poverty in Australia 2020*, the Australian Council of Social Services (ACOSS) found that, in 2017/18 poverty in Australia was just above the OECD average level, placing us among a group of wealthy nations with above–average poverty.

However, they also found that almost 18% or around 774,000 children under the age of 15 were living below the poverty line (Davidson et al 2020).

<u>Poverty can be experienced via multiple pathways</u>, not just income and wealth. It can be via health, longevity, education and literacy, access to housing and key utilities including the internet, safety from harm, environmental neglect and destruction, impacts of colonisation on cultural practices and ability to engage in the economy.

<u>Poverty is both absolute and relative</u>. From a global perspective Australia is a wealthy nation with high GDP per capita and high levels of overall human development, as defined by the

United Nations' Human Development Index, a metric compiled by the United Nations to quantify a country's "average achievement in three basic dimensions of human

development: a long and healthy life, knowledge and a decent standard of living."

Since inception of the Human Development Index in 1990, Australia has consistently registered among those nations with the highest human development and was ranked 8th in the latest HDI, between Sweden #7 and The Netherlands #9. Norway were Number 1.

However, Australia's high ranking masks significant inequality across our society, with an increasingly uneven distribution of wealth, and entrenchment of disadvantage among pockets of our society. For example, research by my team in collaboration with Canadian colleagues showed that the United Nations Human Development Index rankings for Canada, United States, New Zealand, and Australia, whereby Australia ranked highest of these nations on standard HDI, were dramatically different when HDI was calculated to represent <u>only</u> the First Nations populations of each country. When viewed this way, Australia ranked last out of these four nations, and by a long way, indicating the difference in overall HDI ranking between our Indigenous and non-Indigenous populations was significantly wider for Australia than for other nations with similar British colonial histories (Cooke et al, 2007).

Further work on this theme by my team, this time looking through the lens of social determinants of health, showed Australia ranked lowest behind Canada and New Zealand in educational attainment, labour force outcomes, and income equality, for our Indigenous populations (Mitrou et al, 2014).

According to the Australian Productivity Commission, those most likely to experience protracted income poverty were people living in single parent families, Indigenous Australians, people with low educational attainment, the long-term unemployed, and people with disabilities or other long-term health conditions. They suggest that "...sustained economic growth and access to reliable employment will provide opportunities for most people. But for a smaller group, the challenges are more complex. We know that factors such as chronic disease, mental illness, addictions, long-term unemployment and poor educational outcomes, drive inequality. We also know that policy design needs to be more adaptable and targeted to

individual disadvantage." (Productivity Commission 2019)

What none of these measures - OEDC, United Nations or Australian Government - reveal is how these issues become more complex and more urgent to solve when there are <u>children</u> present in families experiencing deep and persistent disadvantage.

There are lifelong consequences for prolonged exposure to poverty and related issues. Children in these families are at higher risk of poor school performance and attendance, and of exposure to household chaos, adverse, and stressful life events.

Children cannot choose the circumstances they are born into, and it is our responsibility as a civil and wealthy society to ensure that these children are given the best opportunity to succeed despite their challenging start. Growing up in poverty is simply bad for children.

Children who grow up in poverty have more than three times the risk of living in poverty

as an adult and the health impacts can be life-long.

How do we know that living in poverty has life-long impacts on children?

Primarily through access to high quality data collections

Over the past 20 years Australia has made a substantial investment in the capture of data about **people over the life course** which allows us to better measure the impact of poverty. Three key collections funded by Department of Social Services are:

- The Longitudinal Study of Australian Children with an initial sample 10,000 children in 2004.
- The Longitudinal Study of Indigenous Children with an initial sample 1,671 children in 2008.
- Household Income and Labour Dynamics Australia (Annual collection of 17,000 families from 2001)

Others include:

- ABS surveys Household Expenditure Survey (HES) and Survey of Income and Housing (SIH), General Social Survey (GSS), and 5-yearly Census of Population and Housing
- Telethon Kids Institute Surveys Like the WA Child Health Survey (1993) and WA Aboriginal Child Health Survey (2000-01)

Under certain circumstances, these surveys can be linked with longitudinal register data routinely collected by governments for departmental and government program planning. Examples include hospital records, justice records, electoral rolls, social security information, taxation data and so forth. They are not collected with public research in mind but can be used effectively for this purpose with appropriate permissions and safeguards, and secure systems have existed for over 20 years to make this possible. See <u>Multi-Agency Data Integration Project (MADIP) | Australian Bureau of Statistics (abs.gov.au)</u> and <u>PHRN - Home</u> for more information.

So, what are the impacts of poverty on child health and development? Child Health

Globally, a child born into poverty can be at higher risk of:

- Low Birth Weight (De Mola et al., 2014; Mi et al., 2017; Mu et al., 2012; Reyes & Manalich, 2005; Silveira & Horta, 2008)
 - Associated with poor maternal nutrition and smoking during pregnancy.
 - Low birth weight is associated with higher long-term risk of type 2 diabetes, high blood pressure as well as metabolic and cardiovascular diseases in adulthood. It can also lead to increased risk for depression.
- Fetal Alcohol Spectrum Disorder (Thanh, Jonsson & Moffatt, 2013)
 - Risk of FASD is 16 times higher for women of lower SES.
 - Becoming overweight or obese (Burns, Jones & Frongillo, 2010)

- 47% more likely to be overweight or obese, kids living in highly disadvantaged neighbourhoods.
- Due to fewer organised sports, facilities and services. As well as food insecurity, obesogenic foods.
- Suffer from asthma (Cantu et al., 2019; Redmond et al., 2021)
 - Due to low birth weight, lower rates of breastfeeding, poor household conditions, family, and environmental stressors and inadequate health literacy.
- Have tooth decay and poor oral health (Schwendicke et al., 2015)
 - Due to levels of access to health service utilisation and poor health literacy.
- Poorer developmental trajectories and developmental delay (Black et al., 2017).
 - Poverty is associated with deficits in language and cognition. Which can go on to impact upon school readiness

<u>Given these relationships between child health and poverty,</u> in order to thrive, it is clear children need support from early pregnancy onwards. Society must work to better engage with young families facing disadvantage so that everybody has equal access to supports and services that promote healthy pregnancy and high-quality childhoods into the future, if we are to break the cycle of intergenerational disadvantage (Perales et al, 2013).

Children's Education

<u>We know that education levels are associated with income and wealth.</u> Using the Longitudinal Study of Australian Children, we showed that the more university degrees present in the family at parent and grandparent level, the higher that child's literacy and numeracy scores on National Assessment Program – Literacy and Numeracy (NAPLAN) (Hancock et al 2018).

We found that attending playgroup between age 0-3 years conferred the greatest benefit to children from disadvantaged families, perhaps because they receive the kinds of enrichment through playgroup that may not be available in the home environment. However, this work also showed that disadvantaged families were less likely to participate in playgroup than more advantaged families, therefore many disadvantaged children may be missing out on opportunities to be school ready (Hancock et al 2012).

We have also shown how grouping parents and grandparents into clusters ranging from low- to high- risk on a range of human capital factors such as education and financial wellbeing is associated with patterns of literacy and numeracy outcomes for children, whereby children from families with low-risk profiles do notably better on NAPLAN from Year 3 to Year 9, compared to families with higher risk profiles who are more disadvantaged (Adams et al, 2022).

Essentially, parental and grandparental human capital is being transferred to children through a range of mechanisms associated with living in a family with high levels of

human capital and capability.

These intergenerational human capital outcomes provide support to the notion that "you can't be what you can't see". What happens in the home environment transfers to school, and then onward to outcomes in life. We have shown that kids from comparatively wealthy, educated backgrounds already have the foundations for academic success – this is borne out in their independent test scores. Kids from disadvantaged backgrounds need assistance to arrive at school with the same tools as more advantaged children, and to sustain their progress, otherwise these discrepancies will prevail. Disadvantaged households, where parents may have limited education, lower access to material resources, unstable housing, and are perhaps justice involved or battling health or substance use issues, cannot <u>always</u> provide a home environment that supports school readiness and the stability required for ongoing scholastic success.

Providing targeted educational and social support can not only show disadvantaged children and parents that aspirational pathways are available to them, but it can also deliver the foundation required to help these families achieve aspirational outcomes.

Consequences in Adulthood

Landmark work from New Zealand has demonstrated how disadvantage in childhood leads to a concentration of health and social service usage accruing to disadvantaged populations across the life course, with associated costs to government (Caspi et al, 2017).

It has been shown that better education outcomes lead to increased employment opportunities and higher incomes. Our work looking at NEETs (people not in employment, education, or training) showed patterns of income support receipt by agegroup, highlighting the skew towards those without skills and qualifications (Mitrou et al, 2021). Poor education places limits on opportunity and choice.

Low-skilled jobs are disappearing from developed economies like Australia due to globalisation and offshoring to low-wage countries, as well as increased automation due to technology (OECD 2007). In Australia, there are very few well-paid and secure job opportunities left for people without skills and qualifications. This paints a bleak picture for disenfranchised youth who may not have completed formal schooling, as they become exposed to the modern labour market.

A recent study of labour market outcomes from Denmark (Lesner, 2018) found that:

Socioeconomic status at birth was strongly associated with the level of educational

achievement achieved by the time these kids' reached adulthood.

- Individuals who experienced childhood poverty had lower earnings, lower labour market attachment, worse jobs in low-paying industries and held lower ranked positions.
- Individuals who experienced childhood poverty entered the labour market earlier, had completed fewer years of education, and displayed poorer high

school results.

All of these outcomes are in line with childhood poverty affecting the skill formation of the child.

SES at birth was related to a series of mechanisms for educational attainment which include:

- Lower family educational aspirations
- Poorer family economic circumstances
- Suboptimal childhood cognitive development and ability
- Poorer physical health across a range of characteristics (cardio-vascular, respiratory, psychological, dental, substance use)

How do we know systems and services are making a positive change?

Only through collecting high quality data and using it for program evaluation.

For services to deliver appropriate support and for governments and organisations to make informed decisions about what programs to fund, we need high quality evaluations using high- quality program data to deliver a <u>high standard of evidence for program effectiveness</u>.

If program data are not of good enough quality to support attribution of the outcome of interest to deployment of a given program, then how can we make good investment decisions about continuing to fund that program?

This is currently challenging for some systems and services because there is not adequate investment in program data to measure their effectiveness. Program budgets are typically focused on inputs and activities, rather than measurement of outcomes and deliverables – we need to consider the evaluation requirements early and then invest appropriately in program evaluation to determine cost effectiveness and understand where in the life course trajectory we are best placed to make investments designed to reduce and prevent poverty.

How to solve this? Build government capacity to better resource services and NGOs for higher quality measurement of program effectiveness. Government investment in infrastructure to support deployment of a standardised metadata collection framework across NGOs needs to occur, and NGOs must be funded appropriately via their service contracts to collect such data.

Multiple studies have shown that returns on investment are greatest in <u>the early years</u> if we want to place very disadvantaged children on a path <u>away</u> from poor educational outcomes, involvement in child protection and justice systems, early parenthood, and low employment prospects, and <u>towards</u> safe, economic, and fulfilling life trajectories for themselves and their future children (Heckman et al 2010; Feinstein et al, 2017). Therefore, we need high quality evaluation to know which programs are truly evidence-based and cost-effective before we fund them at scale, otherwise we are short-changing society.

While the economic and social returns from early-years program investment may not be fully realised until 20-plus years into a child's future - well beyond any election term - the overall cost to society is lower, and the returns higher, for providing targeted, evidence-based support at the earliest opportunity.

Children are the most valuable infrastructure in our society

This is because they have their entire lives ahead of them---around 83 years from birth on current Australian life expectancy estimates. Children are next in line to be the engines of our economy and society. Their potential to deliver social, civic, and economic contributions to Australia and to the global community <u>across their whole</u> <u>lifetime</u> is unbounded.... But it requires strategic investment in the key foundations of modern, civilised life if ALL children are to reach their potential, not just those from well-resourced families.

The disproportionate contribution of disadvantaged children to lifetime health and social services expenditure for governments can be ameliorated by appropriate early years investment (Caspi et al, 2017). While we willingly and strategically invest enormous sums into physical infrastructure like hospitals, roads, railways, defence capability etc...<u>it is our human resource infrastructure that makes us a society in the first place</u>. We should not underestimate the value of this, and we can choose to invest accordingly.

Poverty is bad for those who experience it, and bad for societies that create, perpetuate, and accept it. It is particularly bad for children, as they are powerless to change the situation they are born into, yet there may be lifelong consequences for their prolonged exposure to poverty.

If children are our most valuable infrastructure, then <u>investing early</u> to maximise their potential, especially for disadvantaged children, ensures they are not left behind, and empowers them to make their best contribution to society across their lifetime.

Thank you.

References

Adams EK, Hancock KJ, **Mitrou F**, Christensen D, Taylor CL, Zubrick SR. (2022) Transfers of disadvantage across three generations using latent class associations within families. *Australian Journal of Social Issues*.

https://doi.org/10.1002/ajs4.206

- Black MM, Walker SP, Fernald LC, Andersen CT, DiGirolamo AM, Lu C, ... & Lancet Early Childhood Development Series Steering Committee. (2017). Early childhood development coming of age: science through the life course. *The Lancet*, 389(10064), 77-90.
- Burns C, Jones SJ, & Frongillo Jr EA. (2010). Poverty, household food insecurity and obesity in children. *Preventing childhood obesity: Evidence policy and practice*, 129-137.
- Cantu P, Kim Y, Sheehan C, Powers D, Margerison CE, & Cubbin C. (2019). Downward neighborhood poverty mobility during childhood is associated with child asthma: evidence from the geographic research on wellbeing (grow) survey. *Journal of Urban Health*, *96*(4), 558-569.
- Caspi A, Houts R, Belsky DW, Harrington H, Hogan S, Ramrakha S, Poulton R, Moffitt TE. (2017) Childhood forecasting of a small segment of the population with large economic burden. *Nature Human Behaviour*. 1: 5.

https://doi.org/10.1038/s41562-016-0005

- Cooke M, **Mitrou FG**, Lawrence DM, Guimond E, Beavon D. (2007) Aboriginal well-being in four countries: An application of the UNDP's Human Development Index to Aboriginal peoples in Australia, Canada, New Zealand, and the United States. *BMC International Health and Human Rights*. 7: 9.
- Davidson P., Saunders P, Bradbury B, and Wong M. (2020) Poverty in Australia 2020: Part 1, Overview. ACOSS/UNSW Poverty and Inequality Partnership Report No. 3, Sydney: ACOSS
- De Mola CL, De França GVA, de Avila Quevedo L, & Horta BL. (2014). Low birth weight, preterm birth and small for gestational age association with adult depression: systematic review and meta-analysis. *The British Journal of Psychiatry*, 205(5), 340-347.
- Feinstein L, Chowdry H, Asmussen K. (2017) On Estimating the Fiscal Benefits of Early Intervention. National Institute Economic Review. 240: 15-29. https://doi.org/10.1177/002795011724000111
- Hancock KJ, **Mitrou F**, Povey J, Campbell A, and Zubrick SR. (2018) Educational inequality across three generations in Australia. *Australian Journal of Social Issues* 53: 34-55.
- Hancock KJ, Lawrence D, **Mitrou F**, Berthelsen D, Nicholson JM, Zubrick SR (2012) The association between playgroup participation, learning competence and social-

^{10 |} Page

TALK: THE ROLE OF EVIDENCE TO REDUCE THE IMPACT OF POVERTY ON CHILD DEVELOPMENT SPEAKER: ASSOCIATE PROFESSOR FRANCIS MITROU

emotional

wellbeing for children aged 4-5 years in Australia. *Australasian Journal of Early Childhood*. 37(2): 72-81.

- Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010). The Rate of Return to the High/Scope Perry Preschool Program. Journal of Public Economics, 94(1-2), 114–128.
- Lesner, R. V. (2018). The long-term effect of childhood poverty. Journal of Population Economics, 31(3), 969-1004.
- Mi D, Fang H, Zhao Y, & Zhong L. (2017). Birth weight and type 2 diabetes: A metaanalysis. *Experimental and therapeutic medicine*, 14(6), 5313-5320.
- Mitrou F, Haynes M, Perales F, Zubrick SR, Baxter J. (2021). Not in Employment, Education or Training (NEET); more than a youth policy issue. *International Journal of Population Data Science*. 6 (1).
- Mitrou F, Cooke M, Lawrence D, Povah D, Mobilia E, Guimond E, Zubrick SR (2014) Gaps in Indigenous disadvantage not closing: a census cohort study of social determinants of health in Australia, Canada, and New Zealand from 1981–2006. BMC Public Health. 14: 201.
- OECD. Moving UP the Value Chain: Staying Competitive in the Global Economy. Main Findings. <u>http://www.oecd.org/sti/ind/38558080.pdf</u>
- Mu M, Wang SF, Sheng J, Zhao Y, Li HZ, Hu CL, & Tao FB. (2012). Birth weight and subsequent blood pressure: a meta-analysis. *Archives of cardiovascular diseases*, 105(2), 99-113.
- Perales, F., Higginson, A., Baxter, J., Western, M., Zubrick, S. and Mitrou, F. (2013) Intergenerational income support dependency: report to the Federal Government Department of Families, Housing, Community Services and Indigenous Affairs. St. Lucia, QLD, Australia: UniQuest
- Productivity Commission (2019) <u>Is Australia becoming more unequal? PC News May</u> 2019 - <u>Productivity Commission</u>
- Redmond C., Akinoso-Imran A, Heaney LG, Sheikh A, Kee F, & Busby J. (2021). Socioeconomic disparities in asthma health care utilization, exacerbations, and mortality: A systematic review and meta-analysis. *Journal of Allergy and Clinical Immunology*.
- Schwendicke, F, Dörfer CE, Schlattmann P, Page LF, Thomson WM, & Paris S. (2015).

Socioeconomic inequality and caries: a systematic review and meta-analysis. *Journal of dental research*, *94*(1), 10-18.

- Silveir VMFD, & Horta BL. (2008). Birth weight and metabolic syndrome in adults: metaanalysis. *Revista de saude publica*, *42*, 10-18.
- Thanh NX, Jonsson E, Moffatt J, & Dennett L. (2013). Fetal Alcohol Spectrum Disorder-Poverty Trap?. *Journal of population therapeutics and clinical pharmacology*, *20*(1).

TALK: THE ROLE OF EVIDENCE TO REDUCE THE IMPACT OF POVERTY ON CHILD DEVELOPMENT SPEAKER: ASSOCIATE PROFESSOR FRANCIS MITROU