

Examples of assessment of effectiveness of preventive population interventions using available data

The presentation will consist of examples of published evaluations of prevention and control activities, including mention of on-going initiatives.

National evaluation of mammography screening in Australia and New Zealand, in relation to breast cancer mortality outcomes. Results similar to those from randomised trials (30% reduction). Evaluation of the introduction of the organised approach to **cervical screening in NSW** in relation to incidence and mortality. Mortality reduction due to decline in incidence.

Long term trends in **Indigenous mortality in Australia and New Zealand** and the 'Gap' with the non-indigenous, in relation to a wide range of social and economic programs. Slow improvement in life expectancy of Indigenous, but 'Gap' unchanged because of simultaneous increase in non-Indigenous life expectancy. On-going research of effectiveness of **adult literacy campaigns in NSW using linkage** with health, justice and social databases to measure outcomes.

Analysis of the **decline in ischaemic heart disease mortality in Australia and New Zealand**, during the 20th century (from 1970), with calculations of attribution to reductions in population mean blood pressure, mean serum cholesterol, and tobacco smoking (from sample surveys). Approximately 80% of the mortality decline attributable to risk factor reduction in both Australia and New Zealand.

Lack of improvement in life expectancy in **Fiji** over 2 decades because of middle aged premature adult mortality, most likely due to (atherosclerotic) **CVD and diabetes mellitus (DM)**, in view of **increases in CVD risk factors from population surveys**, despite national non-communicable disease "prevention" programs. On-going research on contributions of various causes of death, especially confusion between coding of CVD and DM on death certificates. Similar situations exist in **Tonga, Kiribati, Nauru, Vanuatu**.

Investigation of sex differences in the epidemiological transition in **Sri Lanka** since 1920 indicates a reduction in infectious disease (both sexes), with increase in life expectancy in women, but plateau in

The School of Public Health
and Community Medicine

Seminar Invitation Get to know the SPHCM Professors

Wednesday 1st July
12:00 - 1:00 pm

[Seminar will be available by
Teams Meeting Link](#)



Venue: Seminar is available by [Teams Meeting Link](#)

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Recorded Seminars are available on the [SPHCM website](#)

Organisation: Seminars organised by Professor Robyn Richmond. Higher Degree student seminars organised by Poshan Thapa School of Public Health and Community Medicine, Faculty of Medicine, UNSW Sydney, NSW 2052, Australia |

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men because of increase in adult CVD mortality. A 3 year before and after trial of **locally designed health promotion for CVD risk factors** in Kalutara District (Western Province, Sri Lanka), monitored by random cluster samples, shows reduction in blood pressure and hypertension, blood glucose and diabetes, and serum cholesterol and hypercholesterolaemia.

Assessment of trends in major causes of **external cause mortality in young Australian men** indicating simultaneous suicide and drug-induced deaths during the 1990s (previously unreported), and a return to lower levels since that period, along with continued reductions in motor vehicle accident deaths. An hypothesis for consideration is common causality related to effects of labour market liberalisation from the mid-1980s. A **case control study** of suicide in young Australian adults indicated that, using the population attributable fraction (PAF), contributions of mental illness and socioeconomic status were approximately equal.

About Professor Richard Taylor, MBBS(Syd), DTMH(Lon), FRCP(UK), PhD(Syd), FAFPHM

Professor of Public and International Health, UNSW School of Public Health and Community Medicine

After graduation in Medicine from University of Sydney in 1968, I worked in hospital medicine in Sydney (St Vincents), New York City (Harlem) and England (Chelmsford), where I completed physician training, then studied Tropical Medicine and Hygiene at the London School. During the late 1970s-1980s I undertook epidemiological research and surveillance roles in the Pacific Islands while based in Melbourne (Monash University), then at the South Pacific Commission, Noumea, New Caledonia. Following return to Australia in the late 1980s I worked successively as a professor at Schools of Public Health (within Faculties of Medicine) at University of Sydney, University of Queensland and University of NSW, until the present.

My research over the past decades in Australia and internationally, has largely focussed on assessment of effectiveness of population wide preventive interventions, employing routinely collected or sample data, particularly related to control of non-communicable disease and external causes. Population-wide interventions are supposed to reduce disease incidence, thence mortality; or to reduce mortality through reduction in case fatality. It is important to assess whether these expensive population programs actually work, or whether change in approach is required.

At Schools of Public Health at Australian Universities I engaged in postgraduate coursework and research teaching, and I designed and introduced the Master of International Public Health (MIPH) at University of Sydney in 2000, and subsequently at University of Queensland and University of NSW.

I have worked closely with international agencies (especially World Health Organization and South Pacific Commission) in the Asia Pacific region, and with Health Ministries in Australia and New Zealand, and internationally. In 1990-2005 I was director of the NSW Cancer Registry, then epidemiological advisor to the NSW cervical and mammographic screening programs, while at University of Sydney, and I conducted nationwide reviews of the mortality outcomes of national wide mammography screening programs in Australia and New Zealand.

Research and service have thus encompassed a wide range of diseases and external causes, including (atherosclerotic) cardiovascular disease (CVD), diabetes mellitus (DM), breast and cervical cancer, and suicide (and other external causes). Experience in population prevention and control for one condition, can often assist with assessment of prevention and control for other different conditions.