8.11 Conclusion

Undone science is the research that is not carried out because the likely results would be unwelcome to powerful groups. When areas of science are not funded, policies can be designed on incomplete knowledge and result in unpredictable health outcomes in the population. This is because there are gaps in the scientific knowledge that underpins the value judgments that are made in policy decisions. Government policies that are designed on incomplete scientific knowledge may not protect the public interest. Areas of undone science have expanded in the era of globalization because industry is influencing the research agendas of both governments and research institutions. This is a consequence of industry being in partnership with universities and being the main sponsor for many private research institutions. In addition, government funding agendas have aligned with industry goals because the dominant network of scientists is influential on government advisory boards. A shift to industrial sources of funding for scientific research is also achieved when there is increased scope for the patenting and licensing of scientific discoveries. These developments lead to increased conflicts of interest in the production of scientific knowledge and in the design of public health policy, along with a lack of transparency. They also have the effect of reducing government emphasis on public interest research and increasing the pockets of undone science in different fields of science.

In Australia the federal health minister receives advice on vaccination policies from technical experts without consultation with the community. The institutional barriers that exist in the Australian political system and in academic and media organizations have resulted in the marginalisation of the public's contribution to vaccination policy, even though the public is a main stakeholder in these policies. The Australian government justifies current vaccination policies by claiming, in effect, there is no evidence of harm so therefore no action is required. However, this claim ignores the lack of evidence due to research that has not been funded. The undone science in Australia's vaccination policies includes comprehensive RCT's for the efficacy and safety of vaccines, either singly or in the combined schedule of vaccines in animals and humans. In this situation it becomes necessary for the public to have influence in the decision-making process to ensure that all relevant research is undertaken and accounted for in policy decisions.

The lack of integrity and rigour in the clinical trials and scientific research that is being sponsored by industry for global health policies was discussed in chapters 6 and 7. In chapters 9 and 10, I have provided case studies illustrating the undone science and industry influence in the promotion of global HPV vaccination programs and the pandemic 'Swine Flu' 2009 vaccine. These case studies illustrate how vaccines can be developed and policies implemented on incomplete science due to the political framework that results in undone science.