

Summary points

Standardisation has been taken to mean that all the components of an intervention are the same in different sites

This definition treats a potentially complex intervention as a simple one

In complex interventions, the function and process of the intervention should be standardised not the components themselves

This allows the form to be tailored to local conditions and could improve effectiveness

Intervention integrity would be defined as evidence of fit with the theory or principles of the hypothesised change process

Competing interests: None declared.

Conclusion

The shackles of simple intervention thinking may prove hard to throw off. Although an intervention may be described as complex, the signs of simple intervention thinking will be apparent in how the intervention is described and whether integrity is tied to the extent to which certain standardised forms are present. Investigators should justify the approach they take with interventions—that is, whether interventions are theorised as simple or complex. Complex systems rhetoric should not become an excuse to mean “anything goes.” More critical interrogation of intervention logic may build stronger, more effective interventions.

Contributors and sources: All authors were collaborators in a cluster randomised intervention trial in maternal health promotion.¹⁴ All are participating in a newly funded international collaboration on complex interventions funded by the Canadian Institutes of Health Research. PH drafted the original idea for the paper based on experience and conversations with TR and AS. All contributed to developing the idea and writing the paper.

Funding: PH and AS are senior scholars of the Alberta Heritage Foundation for Medical Research. PH is also supported by an endowment as Markin Chair in Health and Society at the University of Calgary.

- 1 Nutbeam D. Evaluating health promotion—progress, problems and solutions. *Health Promotion Int* 1998;13:27-44.
- 2 Oakley A. *Experiments in knowing*. Cambridge: Polity Press, 2000.
- 3 Tones K. Evaluating health promotion: a tale of three errors. *Patient Educ Counsel* 2000;39:227-36.
- 4 World Health Organisation Europe. *Health promotion evaluation: recommendations for policy makers*. Copenhagen: WHO Working Group on Health Promotion Evaluation, 1999.
- 5 Medical Research Council. *A framework for the development and evaluation of randomised controlled trials for complex interventions to improve health*. London: MRC, 2000.
- 6 Secker-Walker RH, Gnich W, Platt S, Lancaster T. Community interventions for reducing smoking among adults. *Cochrane Database Syst Rev* 2002;3:CD001745.
- 7 Sussner M. The tribulations of trials. *Am J Public Health* 1995;85:156-8.
- 8 Thompson B, Coronado G, Snipes SA, Puschel K. Methodological advances and ongoing challenges in designing community based health promotion interventions. *Annu Rev Public Health* 2003;24:315-40.
- 9 Casti JL. *Would-be worlds: how simulation is changing the frontiers of science*. New York: John Wiley, 1997.
- 10 Flora JA, Lefebvre RC, Murray DM, Stone EJ, Assaf A, Mittelmark MB, et al. A community education monitoring system: methods from the Stanford Five-City Project, the Minnesota Heart Health Intervention and the Pawtucket Heart Health Intervention. *Health Educ Res* 1993;8:81-95.
- 11 Hawe P, Degeling D, Hall J. *Evaluating health promotion: a health workers guide*. Sydney: MacLennan and Petty, 1990.
- 12 Castro FG, Barrera M, Martinez CR. The cultural adaptation of preventive interventions: resolving tensions between fidelity and fit. *Prev Sci* 2004;5:41-5.
- 13 Llewellyn-Jones RH, Baikie KA, Smithers H, Cohen J, Snowden J, Tennant CC. Multifaceted shared care intervention for later life depression in residential care: a randomised trial. *BMJ* 1999;319:677-82.
- 14 Lumley J, Small R, Brown S, Watson L, Gunn J, Mitchell C, and Dawson W. PRISM (program of resources, information and support for mothers) protocol for a community-randomised trial. *BMC Public Health* 2003;3:36.
- 15 Paton J, Jenkins R, Scott J. Collective approaches for the control of depression in England. *Soc Psychiatry Psychiatric Epidemiol* 2001;36:423-8.
- 16 Israel BA. Social networks and social support: implications for natural helping and community level interventions. *Health Educ Q* 1985;12: 65-80.
- 17 Mullen PD, Green LW, Persinger GS. Clinical trials of patient education for chronic disease: a comparative meta analysis of intervention types. *Prev Med* 1985;14:735-81.
- 18 Durlak JA. Why intervention implementation is important. *J Prev Intervent Community* 1998;17(2):5-18.
- 19 Hawe P, Shiell A. Preserving innovation under increasing accountability pressures: the health promotion investment portfolio approach. *Health Promot J Aust* 1995;5(2):4-9.
- 20 McMahon AD. Study control, violators, inclusion criteria and defining explanatory and pragmatic trials. *Stat Med* 2002;21:1365-76.
- 21 Bauman LJ, Stein REK, Ireys HT. Reinventing fidelity: the transfer of social technology among settings. *Am J Community Psychol* 1991;19: 619-39.
- 22 Ottoson JM, Green LW. Reconciling concept and context: theory of implementation *Adv Health Educ Promot* 1987;2:353-82.
- 23 Flay BR. Efficacy and effectiveness trials (and other phases of research) in the development of health promotion interventions. *Prev Med* 1986;15:451-74.

(Accepted 24 March 2004)

Birth of a baby girl and social stigma

While working as a junior resident in India, I was posted to the neonatology ward of a hospital serving a rural area, where most of the babies born belonged to families from the surrounding countryside.

I soon realised that the birth of a baby girl was regarded as a calamity by the family, particularly by the father's mother. It was considered so bad that sometimes even the mother detested her newborn baby (although emotionally still cuddling her). The mother, still recovering from the trauma of the delivery, fearfully anticipated the possibility of rejection by her in-laws. In the worst cases the poor baby girl was abandoned by the family and left for adoption. In contrast, if a baby boy was born it was a joyous occasion. The family would bring sweets for the nurses and

doctors as a mark of happiness and gratitude. I was really shaken by seeing this level of discrimination faced by baby girls.

Then it happened, a baby girl was born and we all got sweets. The family was overjoyed with the news of the birth of the baby girl. This came as a surprise to all of the hospital staff. Later on, I learnt from one of the nursing staff that the baby was the first girl child in this family after two generations. Then I thought that all was not lost and a silver lining could be seen in the grey clouds.

I wish that every baby girl born in this world could receive a similar welcome. Since then I have cherished this dream that one day this social stigma of having a baby girl will disappear from our society.

Afshan Salim *paediatrician, Hull*