

The Context for Constrained Choice: A Case of Cardiovascular Diseases in Johannesburg, South Africa

Priya Buldeo, PhD^{1,2} | ¹University of the Witwatersrand, Johannesburg, South Africa, ²Human Sciences Research Council, Cape Town, South Africa

INTRODUCTION

South African Context

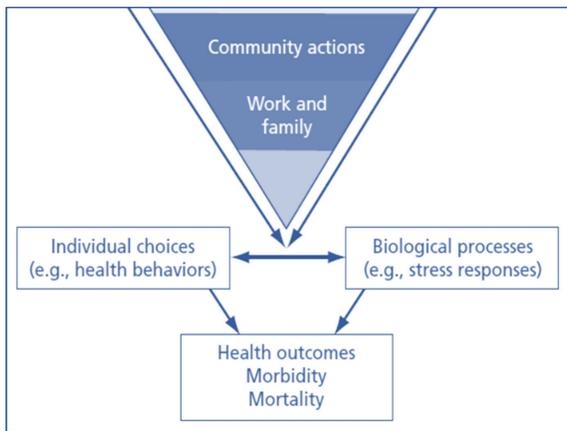


Figure 1. Conceptualisation of constrained choice [4]

- South Africa is in the midst of a transition from infectious to non-communicable diseases (NCD) [1].
- Against the existing burden of HIV/AIDS and TB, emerging epidemics like cardiovascular diseases (CVD) now represent a leading parallel threat for South Africa's health and development as it mostly affects the economically active population [2].
- The problem is that CVD

is often located within the dominant biomedical paradigm which fails to fully account for the underlying social-contextual factors that lead to lifestyle-related diseases.

- Moreover, health promotion messages target individual-level risk behaviours which assumes individual responsibility, agency and autonomy to make rational and informed decisions about behaviour change [3].
- The emphasis on the individual does not necessarily consider the social, economic, political, geographic and physical constraints that influence people to choose unhealthy behaviours or limit their choices of healthy ones.

AIMS

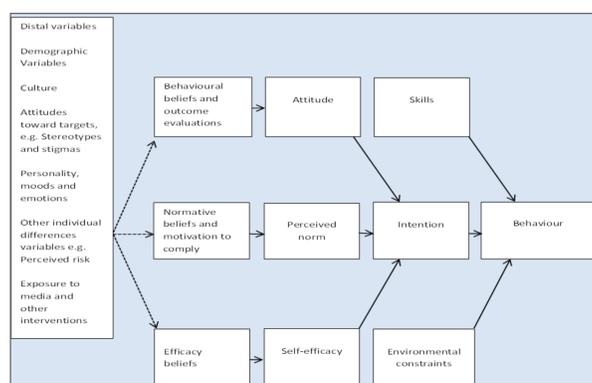


Figure 2. Integrative Model of Behavioural Prediction [5]

- To understand the health behaviours, CVD knowledge and risk perception among diverse populations of retail pharmacy workers in Johannesburg.
- To discover *how* different conditions affect agency over health, *what* factors remove individual autonomy to make heart-healthy choices and *why* individuals may or may not perceive themselves to be at-risk.

METHODS

- Anonymous self-administered questionnaires explored the reported health behaviours of a sample of working adults aged 19–75.
- The sample involved lay workers (non-health professionals) employed within a retail pharmacy setting.
- Responses of 400 (female: n=297; male: n=103) voluntary participants were included.
- Survey questions (closed and open) probed into respondents' demographics, self-reported health behaviours, and CVD-related knowledge, awareness and risk perception.
- Quantitative data: descriptive statistical analyses were conducted using SPSS 22.
- Qualitative data: thematic content analysis explored broader underlying themes.
- The Integrative Model of Behavioural Prediction was adapted as an overarching psychosocio-environmental framework to address the aims and answer the research questions.
- Ethics approval was obtained from the Human Research Ethics Committee (non-medical) at the University of the Witwatersrand (R14/49 Buldeo, ethics protocol number H13/01/21).

REFERENCES

- Mayosi, B.M., Lawn, J.E., Van Niekerk, A., Bradshaw, D., Abdoal Karim, S.S. & Coovadia, H.M. (2012). Health in South Africa: Changes and challenges since 2009. *The Lancet* 380(9858): 2029–2043.
- Micklesfield, L.K., Lambert, E.V., Hume, D.J., Chantler, S., Pienaar, P.R., Dickie, K., Puoane, T. & Goedecke, J.H. (2013). Sociocultural, environmental and behavioural determinants of obesity in Black South African women. *Cardiovascular Journal of Africa*, Review article 24(9): 369–375.
- Airhihenbuwa, C.O., Ford, C.L. & Iwelunmor, J.I. (2014). Why culture matters in health interventions: Lessons from HIV/AIDS stigma and NCDs. *Health Education & Behavior*, 41: 78–84.
- Bird, C.E. and Rieker, P.P. (2008). *Gender and Health: The Effects of Constrained Choices and Social Policies*, New York: Cambridge University Press. p. 64.
- Fishbein, M. & Yzer, M. (2003). Using theory to design effective health behaviour interventions. *Communication Theory*, 13(2), p.167.
- Buldeo, P. (2016). A psychosocial study of cardiovascular diseases, health behaviours and risk perception among retail pharmacy workers in Johannesburg, South Africa. PhD thesis. University of the Witwatersrand, Johannesburg. p.224.
- Dover, R.V.H. & Lambert, E.V. (2016). "Choice set" for health behavior in choice-constrained settings to frame research and inform policy: examples of food consumption, obesity and food security. *International Journal for Equity in Health*, 15:48, p. 6.
- Bradshaw, D., Pillay-van Wyk, V., Laubscher, R., Nojilana, B., Groenewald, P., Nannan, N. & Metcalf, C. (2010). Cause of death statistics for South Africa: Challenges and possibilities for improvement. MRC South Africa, Burden of Disease Research Unit.

RESULTS

Levels	Contextual factors	Psychosocial factors
<i>Societal</i>	Background and structural aspects such as: Public health promotion policy CVD programs and initiatives NCD prevention campaigns Healthcare institutional laws and policies Organisational culture TV, print and social media	Cultural identity and norms CVD health promotion Lifestyle behavioural beliefs Experiential attitude Judgement Shame Blame
<i>Social</i>	Physical and social environment: Access to PA resources and facilities Access to health knowledge and education Physical and built environment constraints	Shared community values Community efficacy Social cohesion and solidarity Childhood upbringing
<i>Interpersonal</i>	Personal responsibility for individual health: Living space (family, neighbours) Workplace environment Food preparation Gendered division of labour Material and financial wealth	Injunctive norms Descriptive norms Body weight shaming Personal weight goals and body image desires Outcome evaluation
<i>Individual</i>	Socio-demographic characteristics Self-reported CVD knowledge and risk Other's health knowledge and education Parenthood Marriage Agency Autonomy	Perceived self-efficacy Perceived knowledge Perceived constraints to better health behaviours Control beliefs Behavioural intentions Perceived values
<i>Habitual</i>	Constraints/facilitators to improve CVD-related health behaviours Recommended help-seeking behaviour Tradition/culture Positive lifestyle habits Workplace ethics	Positive and negative habits Aim to maintain health Motivated to change negative health habits Perceived body image expectation of significant other Salience of health and help-seeking behaviours

Table 1. The levels of interaction between contextual and psychosocial factors [6]

- Constrained choice is shaped by contextual and psychosocial factors.
- These unfold at different levels to influence CVD risk perceptions, health knowledge and help-seeking behaviours.
- Several constraints were found to influence health improvement and the ways in which lay retail pharmacy workers gave meanings to their health, health behaviours and choice of care.
- These constraints were socially and economically patterned across populations and geographic regions.
- Other constraints included:
 - Family responsibilities and time limitations.
 - Lack of motivation, laziness, tiredness, old age, joint pain and existing chronic conditions.
 - Long working hours and work-related stress.
 - Gendered and cultural norms in the family, workplace and community contexts.

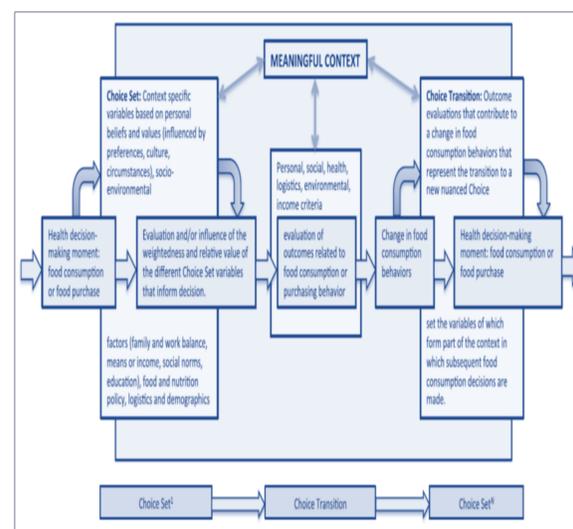


Figure 3. Choice for health behaviour in choice-constrained settings [7]

DISCUSSION & CONCLUSION

- In the absence of interventions that encourage communities to make healthier lifestyle choices, South Africa might be headed towards unparalleled rising healthcare costs and NCD-related morbidity and mortality [8].
- Perceptions and cultural ideologies about CVD risk, health and illness continue to influence health and help-seeking behaviours. This needs to be explored collaboratively by researchers from various disciplines.
- The results are relevant for policymakers and healthcare practitioners because it has potential to develop context-specific health promotion interventions and CVD prevention programs.
- It further informs and feeds into current debates on social transformation, chronic diseases and the future of healthcare provision and access.
- Overall, this study bridges contextual factors with the psychosocial to emphasise the context for constrained choice in South Africa.