

Hypertension health literacy in Australia

Study protocol, Version 3.1, 19 September 2022

Principal Investigator

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Synopsis

Hypertension (high blood pressure) is a significant risk factor for heart disease, stroke and other cardiovascular diseases. In 2014-15 approximately 6 million Australians (34%) aged 18 years and over had high blood pressure, with two in three persons not taking medication to control their bloodpressure [1]. Patient knowledge about hypertension plays an important role in effective management of hypertension and related issues [2]. Little research has been done to investigate hypertension health literacy in Australia.

Research questions and scientific paper plan

The objectives of the study are to:

- 1) Estimate the prevalence of hypertension, and examine differences in hypertension healthliteracy by a range of patients' characteristics [scientific Paper #1]
- 2) Compare medication treatment combinations by patient characteristics [Paper #2]

Study population

Study population includes patients aged 30 years and over who attend select GP practices in Australia. A total of 3,000 patients will be recruited from 150 GP practices across Australia during May – September 2023. A representative sample of GP members of the Australasian Medical Publishing Company (AMPCo) will be selected from AMPCo mailing list, using simple random sampling, similar to the methods described in a prior research study [3]. If we assume a 10% response rate [4], we will need a random selection of 1,500 GPs in order to recruit 150 GPs to takepart in the study. Within each GP practice, 20 consecutive patients aged 30 and over will be recruited into the study.

Study questionnaire

Study questionnaire (Attachment 1) is designed to be completed by both the patient and the GP in a paper form. Patient's self-reported information consists of demographic details and answers to questions relating to hypertension literacy. The GP specific questions incorporate patient's body height, weight, blood pressure measurements and current treatment for hypertension. Paper formswill be manually entered in a database by a research assistant based at UNSW Sydney, based on the data dictionary.

Data sources

The data sources will comprise of the following:

- Self-reported questionnaires filled by the patients and the GP.
- Australian Bureau of Statistics (ABS) mid-year estimated residential population (in order to produce adjusted prevalence estimates) obtained from the ABS website.

Analysis

Data cleaning, management and analysis will be carried out using SAS 9.4 software. Graphics will be produced using RStudio.

Ethical considerations

Ethics: The ethics clearance for this study will be sought from the UNSW Human Research Ethics Committee (HREC) prior to the commencement of the study.

Informed consent: The investigator will obtain written informed consent from study participants (both the patient and GP) after explaining the study objectives, anticipated benefits and potential risks. The information about the study is outlined in the Study Information Sheet which will be provided to the participants. The original signed consent will be retained in the UNSW premises.

Privacy and confidentiality: We will seek to maintain participant privacy by following all required policies relating to privacy protection.

Data storage and retention – UNSW: Completed paper questionnaires and consent forms will be stored in locked filing cabinets at Dr Lujic's office, accessible via a swipe card. Scanned electronic copies of the questionnaire and consent forms will be kept on the UNSW secure network drive.

Intellectual property and copyright

Intellectual property and copyright conditions stipulated in the UNSW Policy will be followed.

Publication policy

Aggregate study findings will be disseminated via peer review publications and presentations (conferences and seminars). Authorship on publications and presentations will be decided based on the International Committee of Medical Journal Editors (ICMJE) Uniform Requirements for Manuscripts Submitted to Biomedical Journals.

Funding

This work is supported by a UNSW seeding grant (ID 1234/56).

Timelines

<i>Timeline</i>		<i>Estimated Milestone</i>
2023	January – March	Obtain HREC approvals
	March – April	Send GP invitations
	May – September	Data collection from GP practices
	September – October	Database design and data entry/cleaning
	October – December	Preliminary analysis for Paper 1
2024	January – March	Draft and submit Paper 1
	April – June	Analysis for Paper 2
	July – September	Draft and submit Paper 2
	October – December	Responses to journal reviewer comments

References

1. Australian Bureau of Statistics. National Health Survey: First Results Australia 2014-15. Canberra: Commonwealth of Australia; 2015. Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.
2. Hocking A, Laurence C, Lorimer M. Patients' knowledge of their chronic disease-the influence of socio-demographic characteristics. Australian Family Physician. 2013;42:411-6.
3. Schäfer WL, Boerma WG, Kringos DS, De Maeseneer J, Gress S, Heinemann S, Rotar-Pavlic D, Seghieri C, Svab I, Van den Berg MJ, Vainieri M, Westert GP, Willems S, Groenewegen PP. QUALICOPC, a multi-country study evaluating quality, costs and equity in primary care. BMC Fam Pract. 2011;12:115.
4. Parkinson A, Jorm L, Douglas KA, Gee A, Sargent GM, Lujic S, McRae IS. Recruiting general practitioners for surveys: reflections on the difficulties and some lessons learned. Aust J Prim Health. 2015;21(2):254-8.