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Social determinants of health – Why treat without changing what makes people sick?

By Kevin McNamara

Learning objectives

After reading this article, pharmacists should be able to:

- Describe the social determinants of health inequalities
- Describe some of the social and environmental factors that influence our health
- Identify potential strategies to address health inequalities and promote greater equity in health.

Competency standards (2010) addressed: 1.2, 1.5, 3.3, 3.4, 6.2, 6.3.

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Background

Social determinants of health (SDHs) are the 'social circumstances in which people are born, grow up, live, work and age, including the health system', that increase the likelihood of health inequities in society.[1] SDHs can be social, economic, demographic or geographical in nature. Examples include social exclusion, occupational and environmental exposure to health risks, unemployment or job insecurity, low levels of education, adverse early childhood development, culturally inappropriate healthcare, and poverty.

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SDHs might adversely affect pharmacy patients through diminished physical access to medicines (e.g. in remote areas), inability to afford treatments, misalignment between patient beliefs and prescribed therapy, poor self-management practices in chronic disease, lack of engagement with beneficial pharmacist services (e.g. screening), or the absence of a carer.

The distribution of SDHs tends to vary within society, leading to increased rates of death and illness, reduced life expectancy, and reduced utilisation of health services for certain population groups. These differences in health status are evident between and within countries.[2] In Australia, notable examples of groups who suffer from health inequities include:[3]

- *Aboriginal and Torres Strait Islander (ATSI) peoples.* The general population of Australia has the fourth-highest life expectancy of any country (males: 79 years; females: 84 years). In comparison, the life expectancies for ATSI males (56–67 years, depending on data source) and females (60–73 years) are markedly lower.[2,3]
- *Males*. Females live for around four years longer than males.[3,4] While there are some biological determinants of poorer male health, social and environmental factors are thought to predominate.[4]
- *Rural and remote communities.* Compared with metropolitan centres, age-adjusted death rates for patients less than 65 years old were about 10% greater in inner regional areas, and almost three times greater in very remote locations. Although rural/remote death rates have declined, the gap with major cities remains.[3,5]
- *Socioeconomically disadvantaged individuals.* There is a socioeconomic gradient (or ladder) in health that runs right across society – poor health status is not just a concern at the extreme end of poverty and vulnerability. People in lower socioeconomic groups have shorter life spans and poorer health. Life expectancy is four years (male) and two years (female) lower for the poorest socioeconomic status (SES) quintile compared with the most advantaged quintile, based on mean household income.[6]
- *People with disabilities.* An estimated 3.9 million Australians have a disability. The 2007 *National Health Survey* identified a strong association between the severity of core activity limitation and the number of co-morbid health conditions. People with disabilities were four times more likely than others to report severe or very severe levels of pain, eight times more likely to experience psychological distress, and almost twice as likely to self-report a mood disorder.[3]
- *Some migrant groups*. Most migrant groups are as healthy, or healthier, than the general population. There are notable exceptions to this trend, although Australian studies confirming suspected causal links between migrant health inequities and SDHs often do not exist. For example, diabetes is significantly more common among migrants from India, Lebanon, Greece, Germany, Italy and Poland.[3] Mental health disorders among refugees are generally higher than the general population.[7]
- *Certain occupations.* Data from 1998–2000 suggest that death rates among male blue-collar workers (e.g. manual labourers) are twice as high as for white-collar employees (e.g. clerks, sales persons, etc.) and managers/professionals/administrators; the pattern is similar for females although the difference in death rates is smaller.[4]

From social determinant to health outcome

Shortened life expectancy is largely a result of raised adult mortality from the same non-communicable diseases that prevail in the general population (e.g. cardiovascular disease, respiratory disease, cancer, kidney disease, diabetes). Other long-term health issues such as mental health disorders, nervous system disorders, and musculoskeletal diseases contribute further to health inequalities through disability.[6]

The excess incidence of these chronic conditions are hardly surprising – increased rates of classic biomedical, lifestyle and behavioural risk factors such as hypertension, obesity, tobacco use, illicit drug use, poor nutrition and excess alcohol intake.[3] Suboptimal uptake of appropriate screening and other health services is also implicated.[8–12] We need to consider the 'causes of these causes' to explain the fundamental relationship between social inequity and health outcomes.

Consider first the obvious physical and material barriers to optimal health arising from resource inequity and conditions of living. There is often greater exposure to physical health risks for marginalised groups. For example, people from socially disadvantaged areas often lack easy access to a sufficient supply of nutritious food.[13–15] Financial barriers to accessing medical treatment also commonly exist.[16] Chronically ill patients report difficulty affording PBS subsidised medicines. Low income patients – especially the 'working poor' who do not qualify for concession co-payment rates – are particularly vulnerable, and sensitive to price rises. In fact, one quarter of patients from a NSW survey reported delaying a GP visit, and 20% reported not buying all their prescriptions to reduce costs.[16]

The circumstances in which we are born and raised also directly affect long term health and health behaviours. Poor fetal development (and low birthweight) is more common for those born into disadvantaged communities and can affect childhood physical, emotional and behavioural development.[17] This in turn can also lead to low educational achievement, behavioural problems and social isolation in adulthood.[17,18] The profound role of peer influence in determining perceptions of what is 'normal' and acceptable to others should also be considered. People who grow up in disadvantaged environments, where less healthy behaviours are more common, will probably adopt the normative behaviours of their peers in adulthood.[19,20] Added to all this, health literacy skills in Australia tend to diminish with increasing social disadvantage. This directly affects individuals' ability to obtain, understand and act upon information in a manner necessary for maintaining good health.

Chronic stress associated with ongoing adverse social conditions is thought to independently affect health outcomes. Stress arousal increases the release of cortisol and other glucocorticoids from the adrenal cortex, and release of adrenaline from the adrenal medulla.[18] This activates adaptive cognitive, behavioural and physiological mechanisms causing increases in heart rate, blood glucose levels and blood pressure, and suppressed immune response. It can also contribute to altered social learning and responses to social cues. While these physiological changes can have positive outcomes in acute situations, chronic stress is associated with the development of hypertension, type 2 diabetes, cardiovascular disease, mental health disorders and obesity.[18] Chronic stress, isolation and social deprivation are associated with alcohol, tobacco and illicit substance use.[17] These behaviours further reduce social empowerment and inflict independent adverse health consequences. These situations do not just occur at the extreme end of disadvantage. Repeated studies suggest that work-related stress, linked to lack of control over work and workload, contributes to poor mental and physical health.[17]

The 'systems put in place to deal with illness' are also important SDHs. Reduced accessibility and acceptability of key health services can cause or exacerbate health disparities. For example, Australian acute cardiac services and heart failure management programs are overwhelmingly clustered within metropolitan areas. Additionally, the supply of doctors per capita declines by more than 50% from metropolitan areas to outer regional areas.[3,21,22]

The absence of culturally safe health practices can cause an additional barrier to access. If culture-specific beliefs about illness and disease prevention are not acknowledged and appropriately addressed, it may deter individuals from culturally diverse communities from seeking treatment.[10,23] Language difficulties may exacerbate access issues for cultural and ethnic minorities.

The pharmacist's role in addressing social determinants of health

There is an ethical responsibility for health systems and health professionals to actively respond in a manner that promotes fairness and health equity. The roles of pharmacists in addressing SDHs are not well clarified in policy statements, but there are some areas where pharmacists can make a difference. This guidance is by no means comprehensive, but might help as a starting point for those keen to actively target health inequity in their community.

Pharmacists first need to be aware of key groups in their community affected by health inequities, and the nature by which they are affected. Census data for your locality – including key issues such as employment status, countries of origin, occupation type, number of Indigenous inhabitants and average income – is available via the Australian Bureau of Statistics website (www.abs.gov.au). You can investigate the key local healthcare challenges by contacting community health organisations or local councils (who generally deliver local programs and initiatives targeting ethnic communities, youth, immunisation uptake, older people and disability issues). This may also uncover referral options for patients with needs outside your scope of practice (e.g. accommodation). Government websites (e.g. Australian Institute of Health and Welfare at www.aihw.gov.au) are also very useful for identifying health trends within different population groups. This accessible information provides a solid basis for addressing health needs.

Understanding these needs allows you to focus services to address social

determinants of health. There may be relevant services you can introduce or expand including health in pregnancy, immunisation programs, opiate replacement programs, or risk screening for cardiovascular disease and diabetes. You may also wish to examine the manner in which these services are delivered. For example, a systematic approach to screening, whereby at-risk individuals are actively identified and approached, might facilitate more equitable service delivery than a patient-driven approach. If individuals are likely to have difficulty accessing onward referrals (for reasons of affordability, proximity, opening hours or cultural appropriateness), there is a greater professional obligation to facilitate further care for patients as part of screening or disease management processes.

Handling cultural issues appropriately can be very important in establishing effective relationships with consumers. Pharmacists should strive to ensure clear communication of information and encourage questions – assume low health literacy levels unless proven otherwise. Evidence-based behavioural change strategies should be applied where necessary to help shift individual perceptions of what is 'normal' and healthy. Consult local cultural and ethnic group representative organisations about requirements for culturally appropriate care. Overall, ATSI peoples have some of the greatest health disparities compared with the general Australian population.

Cultural awareness training is highly recommended for any pharmacist with ATSI clients. Non-Aboriginal health professionals will benefit from initial support and training to deliver culturally appropriate care, even if they have the best of intentions.

Local and national health policies are also important determinants of access to quality healthcare for such groups. The effects of co-payment increases, un(der)subsidised professional pharmacy services and screening programs, and underuse of home medicines review (HMR) services may adversely affect the health of the most vulnerable in society. Hence advocacy by pharmacists and pharmacy organisation is also a crucial aspect of our professional response.

Conclusion

The fact that health disparities exist for certain groups suggests that conventional clinical approaches are insufficient for their care. Pharmacists, as highly accessible health professionals, have an ethical responsibility to consider how social determinants of health affect the care they provide to patients, and to advocate for health policy that promotes access to quality health services for all Australians.

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Questions

A score of 3 out of 4 attracts 0.75 CPD credits.

1. Which of the following is NOT a social determinant of health?

a) Social isolation.
b) Unemployment.
c) Inappropriate healthcare.
d) Penicillin allergy.

2. Which of the following statements is FALSE?

a) ATSI life expectancy is at least 10–15 years less than the general Australian population.
b) The adverse health consequences of socioeconomic disadvantage are obvious only at the extreme end of the SES spectrum.
c) Overall migrant health status is as good, or better, than that of the general population.
d) Blue-collar workers have higher mortality rates than their white-collar counterparts.

3. Which of the following social circumstances help to explain long-term differences in health status?

a) Poor fetal development.
b) Poor health literacy.
c) Chronic stress.
d) All of the above.

4. Which of the following is CORRECT?

a) There is no clear association between work-related stress and chronic disease.
b) Access issues are only a legitimate social determinant of health for rural and remote communities.
c) Peer influence has a significant effect on individual health behaviours.
d) All of the above.

