

*Kotahitanga: Uniting Aotearoa
against infectious disease and
antimicrobial resistance*

A Kaupapa Māori and Primary Care Perspective

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Overview



Kotahitanga Report on Infectious Disease and
Antimicrobial Resistance

Māori and Primary Care Perspectives on ID and
AMR



The Report (March 2022)



DPMCSA call for ‘major science issues’

Panel of ten experts with more than 200 members of wider reference group
Over 18 months including during COVID and its lockdowns

The concept of kotahitanga – unity, togetherness – echoes throughout

- Māori and Pacific leadership was critical
- Many dimensions
- Interdisciplinary
- Across geographical boundaries and nations

“Evidence-based recommendations will improve the health and wellbeing of all New Zealanders and enable Aotearoa to play its part in global efforts to keep our medicines working for as long as possible.”



Recommendation 1



Develop an integrated surveillance and outbreak response system

Where we are

- Infectious disease surveillance is a ‘tip of the iceberg’ problem.
- AMR surveillance in humans is becoming increasingly sporadic, and isn’t routinely conducted in animals, plants, or the environment.
- Information isn’t always shared between and within the human, animal, and plant health sectors, or with the international community.

Recommendations

- Establish an integrated surveillance system that brings together information on microbes and infections, including drug-resistant organisms and genes, across human, animal, and plant health, and the environment.
- Share information openly, including with the international community.
- Enhance outbreak responses, informed by stepped up data collection and sharing.



Recommendation 2



Strengthen infection prevention and control

Where we are

- Avoidable infections occur in humans, animals, and plants (e.g. vaccine-preventable diseases).
- Infections occur in human health facilities, putting already sick people at further risk.
- NZ lacks leadership on infection prevention and control (IPC) and our workforce is underpowered.

Recommendations

- Develop a national approach to IPC and strengthen and expand standards.
- Build IPC capacity and expertise.
- Improve data collection, quality, and reporting on IPC.
- Encourage vaccine uptake, review the vaccine schedule, and increase vaccine use in animal health.



Recommendation 3



Grow NZ's infectious diseases capability and engage internationally

Where we are

- Our COVID-19 response showed the value of collaboration between scientists, practitioners, and policy makers.
- There is room to increase the number of people with expertise in infectious diseases and AMR in NZ.
- International connections are crucial for our research, practitioner, and policy communities.
- The government is investing \$36 million over three years in research focused on COVID-19 and other infectious diseases, through the Strategic Science Investment Fund (SSIF).

Recommendations

- Establish an inclusive infectious diseases network, building on the recently announced SSIF funding for infectious diseases.
- Develop a national strategy for infectious disease that encompasses human, animal, and plant health.
- Build the workforce, including by engaging rangatahi and tamariki.
- Remove barriers to data and information sharing.
- Support researchers, practitioners, and policy makers to engage internationally, including in the Pacific.



Recommendation 4



Enhance health literacy

Where we are

- COVID-19 has demonstrated that good communication can promote good health.
- Clear and consistent communication on infectious disease and AMR across the nation and throughout human, animal, and plant health is impossible without clear direction.
- Understanding of infectious disease and AMR could be lifted across a range of stakeholders and topics.

Recommendations

- Human health communication should be improved in patient care settings, public communication campaigns, and education.
- Communication should focus on equity and evidence, be co-designed, and be available in multiple languages.
- Communication in animal health should be improved and should align with human health initiatives to ensure consistency.



Recommendation 5



Reimagine primary care

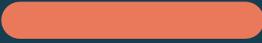
Where we are

- Logistical, cultural, and economic barriers impede access to primary healthcare and medicine.
- Barriers disproportionately affect Māori and Pacific peoples, rural communities, and materially deprived people.
- AMS practices in the community, where 95% of antimicrobial prescription and use in human health occurs, could be improved.

Recommendations

- Enhance equity and remove barriers to accessing healthcare and medicine.
- Consider making transport to healthcare more accessible, using virtual consultations, and reducing out-of-pocket spending.
- Rethink the approach to prescriptions so that practices align with good AMS principles and national infectious disease and AMR goals.





Kaupapa Māori and Primary Care perspective



Inequities in Infectious Diseases and AMR

Māori and Pacific people at greater risk of acquiring IDs (including drug-resistant), health complications, hospitalisation and death

Wider determinants important but inequities persist even after adjusting for age, sex and NZDep

Wider impacts

- Co-morbidities including fertility issues
- Missing school or work
- Lost opportunities
- Financial stress
- Mental health impacts

Type of Infection	RR Māori	RR Pacific
Hospitalisations	2.15	2.35
Staph	3	5
Rh fever	11.8	23.6
nmMRSA	2.41	1.48



Appropriate antibiotics?

Evidence inconclusive

- Lower rates of antibiotics prescriptions for Māori, then Pacific people in Tairāwhiti
- 2015 study showed higher rates of antibiotic dispensing for Pacific (3.49/1000) and Māori (3.23/1000) people compared with NZE (3.02) and Asian (2.35)
- Using daily doses, NZE had the highest rate of dispensing (37.41), followed by Pacific (33.01), Māori (30.69) and Asian people (26.99)
- Unequal need - community antibacterial dispensing only 19% higher in Pacific people, and 11% higher in Māori

My interpretation

Not enough for some e.g. GAS

Inappropriate prescribing for others e.g. Staph

ID and AMR would benefit from addressing poverty, housing

Māori input lacking



Open Access

Article

Māori Experiences and Beliefs about Antibiotics and Antimicrobial Resistance for Acute Upper Respiratory Tract Symptoms: A Qualitative Study

by  Kayla Hika ¹ ,  Matire Harwood ² ,  Stephen Ritchie ^{3,4}  and  Amy Hai Yan Chan ^{4,5,*} 

Antibiotics 2022, 11(6),
714; [https://doi.org/10.3390/
antibiotics11060714](https://doi.org/10.3390/antibiotics11060714)

Aim: To explore the experiences related to antibiotic use of Māori in Aotearoa, New Zealand.

In-depth, semi-structured interviews with 30 Māori adults recruited from primary care

23% male; age range from 20 to 77 years



Three themes

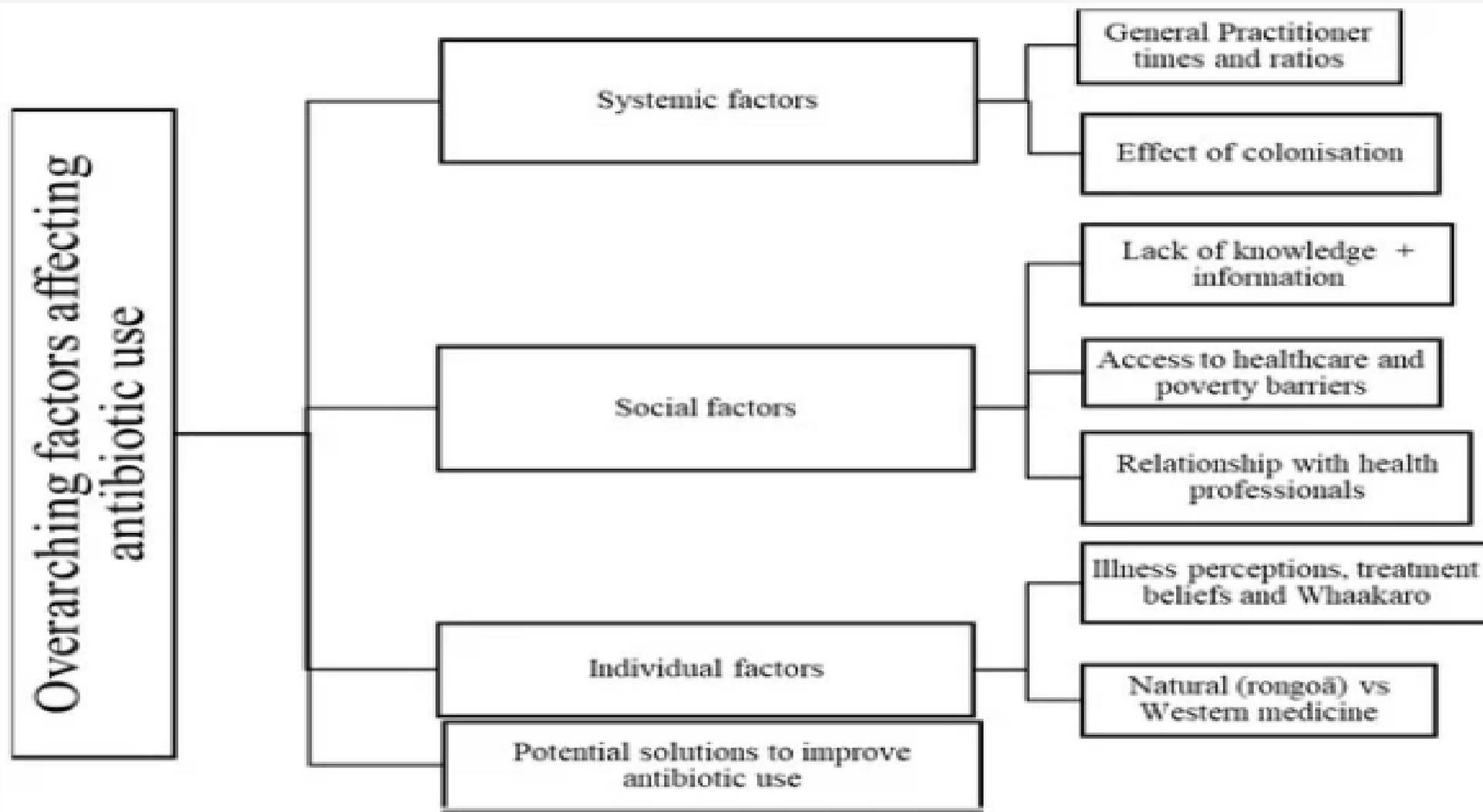


Figure 1

Suggestions

Centred on better communication to improve knowledge about antibiotics

“should give out more info[rmation] to our people [Māori] or to whoever, give out more information and explain to them that antibiotics that they’re giving to them,”

Cultural support and incorporate Te Ao Māori

“more cultural support to engage people with antibiotics... Understanding the medicines and the interactions. Using Māori Reo and Tikanga as way to help,”

Prevention to avoid using antibiotics in the first place

“more healthy living and that can avoid you from having to come on to see the GP [for infections] if we can live a more healthier life,” “we only share them around cos we can’t afford to come to the doctor”



Conclusion

- Complex
- Multi-faceted approach
- Te Tiriti principles provide a good framework for moving forward
 - Tino Rangatiratanga
 - Equity
 - Active Protection
 - Partnership
 - Options





Kia ora!

