Community perceptions about infectious disease risk posed by new arrivals: a qualitative study

Julie Leask, Mohamud Sheikh-Mohammed, C Raina MacIntyre, Alexander Leask and Nicholas J Wood

ABSTRACT

Objective: To report on perceptions about the risk of infectious diseases from new arrivals to Australia arising from a wider study of mothers' attitudes to childhood vaccination.

Design, participants and setting: Six focus groups on perceptions about the benefits and risks of vaccination with 37 mothers of children aged 5 weeks to 18 years, mostly conducted in middle-class areas of Sydney between 6 October and 15 December 1999.

Main outcome measures: Mothers' views about infectious disease risk posed by immigration as a major reason to favour immunising children.

Results: The idea of immigration being the primary source of infectious diseases was striking, and arose among a number of participants in every group conversation. Mothers expressed their dread of new diseases "from overseas", and a sense that there are "more germs nowadays", mostly from increased immigration to Australia and international travel. Some perceived people coming from other countries as having more disease because of an innate susceptibility or through cultural practices.

Conclusion: Recent media coverage about infectious diseases importation by African refugees not only feeds, but reflects, community concerns about new arrivals as a source of allegedly rampant infection threatening Australians. These concerns have little evidence base. Public health advocates need to be proactive with the media to provide sophisticated counter-messages that expose the underlying subtexts and educate the community about the true risks of infectious diseases.

MJA 2006; 185: 591–593

For editorial comment, see page 587

On 8 March 2006, NSW Health issued a press release calling for more support from the Australian Government to "help cope with serious diseases being detected among African refugees".[1] That night, all major free-to-air television channels carried news reports, and, within 48 hours, eight articles were published in major daily newspapers and circulated by wire services. One headline spoke of an "exotic disease outbreak warning", with a list of "health dangers" discovered in Sydney among refugees, including "clinical rickets".[2] In the NSW Legislative Council, a conservative politician said that while "the current crop of commonly infected Africans has highlighted this matter for the public at large, this issue has been building for decades through inappropriate immigration".[3] In the days following the media coverage, there were anecdotal reports of parents in an area of western Sydney with a large refugee population asking for their children not to be seated next to African children at school. There was also a reported 30% drop in Catholic school attendance in the Newcastle area, with calls from parents expressing concern about diseases from children of refugees (Ms Marisa Salem, NSW Refugee Health Service Programs Coordinator, personal communication).

There is a considerable history in Australia of the concept of health threats posed by migrants being used as a political tool. In his history of public health in Australia, Sydney University academic Milton Lewis describes how the *Influx of Chinese Restriction Act 1881* (NSW) was justified in the context of a supposed smallpox risk posed by Chinese migrants as a reason for excluding them from Australia.[4] In the late 19th century, the perceived threat of Asian immigrants as carriers of disease was explicitly referred to as a reason to federate and so gain greater control over immigration. The work of another Sydney University academic, Alison Bashford, also points to an historical tendency to conflate disease and race.[5]

These historical and contemporary ideas reflect wider community concerns that exaggerate the threat of disease posed by immigration, and may be symbolic of other social anxieties.

Here, we report the findings from focus groups with mothers of young children that were held to investigate how parents respond to positive and negative media messages about vaccination. In particular, we report on perceptions about the threat of infectious diseases posed by immigration. Wider results are reported elsewhere.[6]

METHODS

Mothers were recruited from the waiting rooms of early childhood health centres in four mostly middle-class areas of metropolitan Sydney. The resulting focus groups were interviewed between 6 October and 15 December 1999. A list of question prompts guided the discussions and included soliciting spontaneous thoughts about childhood vaccination and asking what reassures and prompts concerns about vaccination. After this, video prompts were used to generate reactions to media rhetoric for and against vaccination. Neither the prompts nor the intitial questions included any reference to immigration or refugees as a source of contagion. Thematic analysis was applied to the overall question of how mothers reacted to differing arguments about childhood vaccination. The University of Sydney Human Research Ethics Committee and the ethics committees for the Central, Northern and Western Sydney Area Health Services approved the project. Further details about the methods and analysis are available elsewhere.[6,7]

RESULTS

Six focus groups were held with 37 mothers. Fourteen had two or more children aged between 5 weeks and 18 years, while the remainder had recently given birth to their first child. Their mean age was 32 years. Most (29) were born in Australia and the remainder were born in the United Kingdom (4), New Zealand (2), India (1) and China (1). Twenty-two participants had tertiary education.

A number of major themes arose and are reported elsewhere.[6] Here, we focus on disease threat from people born overseas, which was a theme expressed explicitly and pervading other themes. Talk of this threat

occurred during the early, unprompted discussions when mothers conveyed their views about the benefits of vaccination. The concept was striking, and arose in every group conversation among a number of participants. Multiculturalism was considered to bring new diseases through travel across our borders, through unvaccinated children, through cultural practices that spread disease, and through innate aspects of ethnicity that were believed to increase infection risk.

Travel across Australia's borders

There was a prevailing sense of modern times bringing novel threats. New diseases, greater social mixing, and higher diversity of people brought a sense that there are "more germs nowadays", mostly from increased immigration to Australia and international travel:

> And I think in our parents' generation it was different again, because there wasn't that big multiculturalism . . . [Others in group: That's right, that's right]. — Group 3, high-income area.

> You come across so many different ranges of people, all of whom carry different things. Like, look at the flus this year, they have been devastating for adults, not only for children. And that's I think purely because we are out so much and there are so many people interacting, that . . . Didn't they have a study that if Ebola was released in one country within 7 hours, it could be through like 90% of the world, purely through air flight and contact and . . . like the way AIDS is . . . in less than a day. — Group 3, high-income area.

Some mothers expressed a belief that most infectious diseases were imported and not endemic to Australia.

> . . . which spins me out, because they've a lot of Asian patients, and that's where the hep B actually comes from . . . — Group 6, low-income area.

> . . . things like sort of migrants and different nationalities and people from other countries coming in that [mean] your child is at risk of catching something if you don't have them immunised. — Group 2, middle-income area.

> It's coming into the country all the time. — Group 3, high-income area.

Accompanying this was the exaggeration of disease prevalence in other countries. For example, in the case of polio, which was nearing eradication at the time, one mother pointed out that "in other countries they don't have the polio vaccine. It is absolutely rife." (Group 3, high-income area). The language here reflected a view of other countries as hotbeds of exotic disease.

The unvaccinated

This concept of disease emanating from outside Australia's borders was linked with a view that a person's country of birth was predictive of their immunisation status and hence their risk to other children.

> You've got to have a zero immigration policy if you want to go along with the idea that there is no risk, because obviously there are countries that don't have an immunisation program, where there are high levels of disease and they can come in. That means that our child mixing in large groups, which they mostly do in childcare centres and schools, means they are going to be at risk. — Group 5, middle–high-income area.

Cultural practices

One mother saw multiculturalism as bringing to Australia differing standards that would increase disease risk.

> . . . and in Australia, being such a multi-cultural place . . . you can't be sure . . . and I'm not against multiculturalism, I'm just saying but you can't be sure of the standards of the parents that your child plays with . . . their kids and all that . . . You just don't know — all the different cultures have all different backgrounds, different beliefs . . . — Group 3, high-income area.

> I was gonna say, it's the simplest thing as well that makes it a problem when they come in, because our habits are so different. Spitting, the habit of spitting, which [Other member: Which is quite normal] which they keep doing here. They don't think there is a problem with it, and our kids see and think it's fun as well, unless you get it out of them. I mean that simple act [Other member: Can spread things so quickly] is why TB [tuberculosis] is an issue, it's an airborne virus. — Group 3, high-income area.

Innate susceptibility

There was also the perception that people from other nationalities had an innate predisposition towards having and passing on infection.

> She was saying that predominantly some of the other races are more prone to that. Sort of pick that thing up within their own culture. And that was also something that I'd sort of heard on one of the talkback programs. — Group 4, middle-income area.

More generally, ethnic diversity in Australia meant disease diversity for some mothers. Even when a direct link to vaccination was not made, mothers would sometimes speak of everyday objects as mere agents of transmission for germs from abroad.

Not all discussion conflated infection risk with immigration. There was also reference to water quality in Sydney, with discussions occurring a year after *Giardia* and *Cryptosporidium* spp. were detected in the water supply and consumers being advised to boil water. Also, during the time of the focus groups, television advertising for cleaning products constantly warned parents of the malevolent germs that lurked in households.

DISCUSSION

This study with mothers of young children found the value they placed on vaccination was strongly linked to a fear of infectious disease. What was revealing was how mothers believed these threats were posed. Children were seen as nowadays being more vulnerable to disease owing to international travel and immigration, unvaccinated children, and the cultural practices and even ethnic traits of people from overseas.

The study is limited to exploring the views of middle-class mothers and may lack generalisability to the wider community. However, these findings are supported by recent research on attitudes to refugees[8,9] and immigrant groups.[10]

A substantial body of research indicates that refugees pose a low risk of infection to the general community.[11-14] The concerns raised by politicians, the media and the public may not be entirely based on evidence, but rather, on wider social issues. In the focus groups, group dynamics and composition may have played a role. Women were eager to establish rapport with group members, which involved delineation between "self" (the group) and "other". Perhaps the overall ethnic homogeneity of the groups allowed this delineation to occur more at national and racial boundaries than at those of other social entities such as family groups, playgroups, mothers' groups and childcare. Such groups

are, in fact, settings in which infections common in our community are most likely to spread among children.

Recommendations

Even with the best public and media education strategies, it is unlikely that advocates will be able to enforce responsible reporting of infectious disease risk when, as shown in our article, such reporting occurs against a background of public concern about contagion and immigration. There is a willing audience who welcome representations that fit with established attitudes, and a mass media eager to appeal to known anxieties. In addition, there will be those complicit in feeding such concerns to advance their own interests.

However, public health workers are obliged to defend the rights of minority groups when public health data are distorted. One strategy is to be more proactive with the media when such reports arise. This could involve representatives from health and relevant cultural communities and other advocates collaborating to plan effective counteractive messages, training spokespeople and developing relationships with journalists. Counteractive messages need to expose the underlying issues and provide the facts about infectious diseases.

As well as providing specific counterarguments, clinicians can educate new parents about the main types and sources of childhood infections (such as respiratory viruses and gastroenteritis in daycare centres), and the overall burden of these infections compared with other, rare diseases.

ACKNOWLEDGEMENTS

Simon Chapman, Penelope Hawe and Margaret Burgess were lead investigators in the original study. Mitchell Smith provided assistance with background information and proof reading. The initial focus groups study was funded under a project grant from the National Health and Medical Research Council. The National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases is supported by the Commonwealth Department of Health and Ageing, the NSW Department of Health and The Children's Hospital at Westmead.

COMPETING INTERESTS

None identified.

AUTHOR DETAILS

Julie Leask, PhD, MPH, DipAppSci, Conjoint Senior Lecturer[1] and Research Fellow[2]
Mohamud Sheikh-Mohammed, MIPH, MHSc, DipMedLabSci, Doctor of Public Health Candidate, School of Public Health[1] and Coordinator, Health Assessment for Refugee Kids[2]
C Raina MacIntyre, FRACP, FAFPHM, PhD, Professor, Discipline of Paediatrics and Child Health[1] and Principal Research Fellow[2]
Alexander Leask, MPH, DipAppEpi, BAgSci, Private Citizen[3]
Nicholas J Wood, MB BS, FRACP, Clinical Fellow[2]

1 University of Sydney, Sydney, NSW.
2 National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases, The Children's Hospital at Westmead, Sydney, NSW.
3 Sydney, NSW.

Correspondence: JulieL3@chw.edu.au

REFERENCES

1 Australian Associated Press. Govt ramping up African refugee efforts. *The Age* (Melbourne) 2006; 10 Mar. http://www.theage.com.au/news/National/Govt-ramping-up-African-refugee-efforts/2006/03/10/1141701678705.html (accesed Nov 2006).
2 Benson S. Exotic disease outbreak warning. *Daily Telegraph* (Sydney) 2006; 8 Mar: 9.
3 NSW Legislative Council Hansard. Infectious diseases. Article 37. 8 March 2006. http://www.parliament.nsw.gov.au/prod/PARLMENT/hansArt.nsf/5f584b237987507aca256d09008051f3/bcc032ce9ca837c2ca257135007ed6ed!OpenDocument (accessed Nov 2006).
4 Lewis M. The people's health. Vol. I. Public health in Australia, 1788–1950. Contributions in Medical Studies, No. 49. Westport, Conn: Praeger, 2003.
5 Bashford A. At the border: contagion, immigration, nation. *Aust Hist Stud* 2002; 120: 344-358.
6 Leask J, Chapman S, Hawe P, Burgess M. What maintains parental support for vaccination when challenged by anti-vaccination messages? A qualitative study. *Vaccine* 2006; 24: 7238-7245.
7 Leask J, Hawe P, Chapman S. Focus group composition: a comparison between natural and constructed groups. *Aust N Z J Public Health* 2001; 25: 152-154.
8 Schweitzer R, Perkoulidis S, Krome S, et al. Attitudes towards refugees: the dark side of prejudice in Australia. *Aust J Psychol* 2005; 57: 170-179.
9 Pedersen AW, Watt S, Hanser S. The role of false beliefs in the community's and the federal government's attitudes toward Australian asylum seekers. *Aust J Soc Issues* 2006; 41: 105-124.
10 Birrell B, Betts K. Australians' attitudes to migration. *Inst Pub Affairs Rev* 2001; Dec 3-5. http://www.ipa.org.au/files/Review53-4%20Australians%20Attitudes%20to%20migration.pdf (accessed Oct 2006).
11 Lumb R, Bastian I. Tuberculosis in Australia: bacteriologically confirmed cases and drug resistance, 2003. A report of the Australian Mycobacterium Reference Laboratory Network. *Commun Dis Intell* 2004; 28: 474-480.
12 Kaldor JM, Plant AJ, Thompson SC, et al. The incidence of hepatitis B infection in Australia: an epidemiological review. *Med J Aust* 1996; 165: 322-326. Comment in: *Med J Aust* 1996; 165: 300-301.
13 MacIntyre CR. Hepatitis B vaccine: risks and benefits of universal neonatal vaccination. *J Paediatr Child Health* 2001; 37: 215-217.
14 Nafstad P, Hagen JA, Oie L, et al. Day care centres and respiratory health. *Pediatrics* 1999; 103: 753-758.

(Received 12 Sep 2006, accepted 25 Oct 2006) ❑