

---

# Consumer activities on antimicrobial resistance in Australia

Jan Donovan

Australian Pharmaceutical Advisory Council (APAC)

## Abstract

**The focus of this article is the role of consumer education campaigns in Australia and overseas as an important step in helping people develop a more considered use of antibiotics. Evidence of the success of campaigns in Australia, New Zealand and the United Kingdom is presented. On the basis of this evidence, the paper argues that education campaigns are central to reducing inappropriate antibiotic use and lowering the chances of antibiotic resistance building up in the populations of developed countries. *Commun Dis Intell* 2003;27 Suppl:S42–S46.**

Keywords: antimicrobial resistance, JETACAR, public health, education campaigns

## *Introduction*

The Pharmaceutical Benefits Scheme provides consumers with equitable and affordable access to necessary antibiotics in the community. This access to antibiotic treatments has worked well for Australians, but many viral infections, such as upper respiratory tract infections are still being inappropriately treated with antibiotics.<sup>1</sup> In the 1940s coinciding with the introduction of penicillin, antibiotic-resistant bacteria were isolated in Australian hospitals. The implications and public health importance of antibiotic resistance have been well understood by health professionals such as microbiologists and infectious disease physicians but consumers lacked information about the health risks associated with antimicrobial resistance. This may partly explain the lack of political will to address this problem until recently.

In the late 1980s, the Consumers Health Forum produced a document titled *Towards a National Medicinal Drug Policy*. This work by consumers stimulated a quality use of medicines policy formulated by the Pharmaceutical Health and Rational Use of Medicines (PHARM) Committee and accepted as part of National Medicinal Drug Policy by government in the early 1990s. In 2000, the National Medicinal Drug Policy was revised and the National Medicines Policy was endorsed by government. The Joint Expert Technical Advisory Committee on Antibiotic Resistance (JETACAR) assisted this process, but until recently was not integrated with National Medicines Policy activities.

## *National focus on antibiotic resistance*

The JETACAR, a Commonwealth Government initiative, was a group of experts from human health, veterinary medicine and primary industry. They had the task of assessing the scientific evidence for a link between the use of antibiotics in food producing animals, and the emergence of antibiotic resistant bacteria in humans (JETACAR, 1999).<sup>2</sup> JETACAR reported to Government in 1999 and was then disbanded. A Government response to JETACAR was released in 2000 and this is now being implemented.

In May 2001 the Commonwealth Government sought participation from all of the key stakeholders in a National Summit on antimicrobial resistance, to assist in the implementation and consultation process. Five priority areas for action are: regulatory controls, monitoring and surveillance, infection prevention, and education and research.<sup>3</sup> These issues require governments, health professionals, consumers, veterinary professionals and agriculture producers to work cooperatively towards a solution to the problem.

Correspondence: Ms Jan Donovan, 25 New Street, Brighton Beach VIC 3186. Telephone: +61 3 521 8293.  
Email: jdonovan@netspace.net.au

---

The Summit reinforced the importance of educating the public, as well as the medical and veterinary professions and farmers about the appropriate use of antibiotics and flagged this as a priority. Other priorities identified included the greater involvement of consumer organisations in the development of community education initiatives, and establishing links with general practice and veterinary initiatives. Maintaining Australia's commitment to the World Health Organization's strategy to reduce reliance on antibiotics was also viewed as crucial.<sup>4</sup>

## *National Medicines Policy*

The quality use of medicines component of the National Medicines Policy is now the cornerstone for community action to minimise the inappropriate use of antibiotics in Australia. According to the National Medicines Policy 2000 all medicines should be used;

- judiciously: medicines should be used only when appropriate, with non medicinal alternatives also considered;
- appropriately: choosing the most appropriate medicine taking account of clinical condition, risks and benefits, dose, length of treatment and cost;
- safely: misuse, including overuse and under use should be minimised; and
- efficaciously: the medicines must achieve the goals of therapy by delivering beneficial changes in actual health outcomes.

In March 2002, the National Strategy for the Quality Use of Medicines was released by the Commonwealth Department of Health and Ageing.<sup>5</sup> The National Strategy is an important step forward as it acknowledges that there are still significant problems linked to the use of medicines in Australia. For example, the National Strategy points out that problems remain despite successful initiatives promoting the quality use of medicines in areas such as improved use of antibiotics and non-steroidal anti-inflammatory drugs with fewer hospitalisations and deaths associated with the adverse effects of these medicines. However, there is still no room for complacency as there are now around 140,000 hospital admissions each year associated with problems with the use of medication.<sup>6</sup> Older people on multiple medicines are at increased risk of medication misadventure and increasing risk of antibiotic resistance.<sup>6</sup>

## *Community use of antibiotics*

The number of prescriptions written for antibiotics declined from 26.5 million in 1993–94 to just under 23.3 million in 1998–99. One of the challenges has been to change community attitudes and promote ongoing and regular consumer information and education about the appropriate use of antibiotics. This includes such matters as their ineffectiveness in treating viral infections such as coughs and colds. Since 1992, the Commonwealth Government has actively sought to address the problem of antibiotic prescribing and use in the community, through consumer education campaigns. The National Strategy for the Quality Use of Medicines highlights education as an essential process to increase the awareness of communities, their knowledge and skills and motivation in relation to the quality use of medicines.

## *Consumer medicines education*

Australia has now become a leader in tackling the problems related to appropriate prescribing and use of antibiotics. Early work done by PHARM included the National Medicines Week campaigns on the appropriate use of medicines. The 1996 campaign specifically targeted the appropriate use of antibiotics by consumers. Themes of the 1996 National Medicines Week campaign in Australia were to:

- ask your doctor or your pharmacist about your medicines;

- 
- encourage people to be more aware of the risks and benefits of medicines; and
  - ask for and read Consumer Medicines Information.

The National Medicines Week campaign produced a range of promotional materials for use in local communities including a brochure titled *Antibiotics, your questions answered* and a booklet *Be wise with medicines* with a section 'When antibiotics will not help'. (Commonwealth Department of Health and Family Services, 1996).

Other activities included a National Phone-in Medicines Information Service, media and radio campaigns, written information in pharmacies and GPs' surgeries, community grants and educational sessions on the quality use of medicines.

An evaluation of the National Medicines Week campaigns 1996 to 1998 showed they were effective in terms of increasing community awareness of the 'be wise with medicines' messages. Knowledge of the messages increased from 19 per cent in 1996 to 26 per cent in 1998 and rose to 30 per cent in the older population. The evaluation found that the National Medicines Week campaigns had an impact on consumer attitudes, knowledge and behaviour in relation to medicines. Consumers who were aware of the National Medicines Week messages were more likely to take action such as asking questions, discussing the use of their medicines with their doctor or pharmacist and asking for a medicines review.

According to the report evaluating the quality use of medicines component of the National Medicines Policy, over 70 per cent of the population considered it inappropriate to take antibiotics for colds, the flu or a sore throat, while more than 20 per cent of people considered it inappropriate to take antibiotics for bronchitis. In 1999 the National Prescribing Service (NPS) ran its first consumer survey as part of the NPS evaluation activity in order to achieve a better understanding of the attitudes and beliefs of consumers towards the use of antibiotics for coughs and colds. Similar surveys were also conducted in 2000 and 2001. There was a perception in younger people (particularly young males) that antibiotics promote recovery and prevent deterioration. Consequently, the NPS campaigns in 2001 and 2002 developed messages to address this erroneous perception and specifically targeted younger people, those in the workforce and parents of young children.

### *National Medicines Week consumer projects*

As part of the 1996 National Medicines Week consumer activities, the Council on the Ageing (Australia) ran a major national project funded by the Commonwealth Department of Health and Ageing to coincide with National Medicines Week. Eighty peer educators were trained to disseminate information on the appropriate use of medicines including antibiotics. Peer educators held local discussion groups using the materials provided by the Commonwealth Department of Health and Ageing for National Medicines Week.

The formal evaluation funded by the Department of Health and Ageing identified a number of positive elements of this sort of approach. For example, the evaluation found that:

*'Important processes were established through the peer education program that continue to yield benefits ... a significant feature of the program was the extent to which resources were maximised... the grass roots networking and promotion that occurred would have been costly to run otherwise.'*

The evaluation of the 1996 consumer project also made the general point that the projects were a community development activity bringing together community members and professionals in a way that encouraged partnerships.

A more recent project conducted by Council on the Ageing in 2000–2001, focused on all medicines (including complementary). It adopted a community/business partnership approach to work with health professionals through the involvement of pharmacists in training older people about the wise use of medicines.

## *Outcomes of consumer campaigns*

There are major advantages for health professionals and government working in partnership with consumer organisations on antimicrobial resistance. The materials produced for consumers such as those produced for the National Medicines Week campaigns are widely disseminated at the local level. With input from the target groups, written information is designed to meet the needs of consumers and is widely disseminated and discussed. A more informed network of locally based peer educators is established and awareness is raised about the problem. A better understanding of the problems of antibiotic use and antimicrobial resistance greatly assists in changing attitudes and addressing the issue in the community.

Unfortunately, the National Medicines Week campaigns about the wise use of medicines including antibiotics were not ongoing. However, the NPS has broadened its work, focusing on the community with a 'wise use of antibiotics' message 'common cold needs common sense'. During the winters of 2001 and 2002, this message was widely publicised in local press, community grants enabled local level discussion and the messages were reinforced on billboards in some capital cities. The NPS campaign works with diverse groups of consumers, including non-English speaking consumers. Consumer activity at the local level is encouraged through a community grants process. The winter 2002 campaign is being evaluated.

## *Consumer strategies in other countries*

Other countries such as the United Kingdom (UK), the USA and New Zealand are also concerned about the appropriate use of antibiotics in the community. Both the United Kingdom and New Zealand run campaigns targeted to both consumers and prescribers on the ineffectiveness of antibiotics for coughs and colds. For example, the UK has recently targeted campaigns on the appropriate use of antibiotics for viral upper respiratory tract infections to both prescribers and consumers. In the UK, a 9 per cent reduction in consumption of anti-microbials was achieved. The UK and New Zealand campaigns produce posters and leaflets for use by consumers and health professionals.

In New Zealand, written materials about colds and flu are also disseminated to the community through general practitioners. The Pharmaceutical Management Agency in New Zealand has run the campaigns in the years 1998–2001 from May to September. The New Zealand campaign aims to educate prescribers, consumers and the general public about the appropriate use of antibiotics in respiratory infections. An evaluation component is included with each campaign. The evaluation of the 2000 campaign showed that prescriptions for antibiotics were reduced by 14.8 per cent from January to December 2000 compared to the same period in 1999. There was also a shift in prescribing from broad spectrum to narrow spectrum antibiotics, improved public understanding of the role of antibiotics and changing consumer expectations about receiving antibiotics.

## *The future*

To be effective, future Australian consumer campaigns need to work in partnership with and engage consumer organisations. Health professionals and other stakeholders need to foster consumer partnerships to ensure antibiotic awareness campaigns are coordinated. Consumer campaigns, such as the National Medicines Week campaigns and the National Prescribing Service *Common colds need common sense* campaign are part of Australia's contribution to the World Health Organization's global strategy to address antimicrobial resistance.

To continue to be effective, these campaigns need to be ongoing, engage consumers and work at the local as well as the national level. The consumer education funding announced in the last Federal budget 2001–02 will be an important resource for additional consumer activity in curbing inappropriate use of antibiotics in the future. The issue of antimicrobial resistance in Australia is a major public health issue and consumers have an important role in ensuring its growth is curbed.

---

## *References*

1. National Prescribing Service. Evaluation report No. 2. National Prescribing Service; Sydney, November 2000:8.
2. Commonwealth Department of Health and Aged Care. Report of the Joint Expert Technical Advisory Committee on Antibiotic Resistance (JETACAR). Commonwealth Department of Health and Aged Care, Commonwealth Department of Agriculture, Fisheries and Forestry—Australia. Biotex Canberra, 1999.
3. Commonwealth Department of Health and Aged Care. Communique National Summit on Antibiotic Resistance 2001, Commitment and Communication, Issue 1.
4. World Health Organization. Global strategy for containment of antimicrobial resistance. World Health Organization, 2001.
5. Department of Health and Ageing. The National Strategy for Quality Use of Medicines. Department of Health and Ageing, Canberra, 2002:4.
6. Commonwealth Department of Health and Aged Care. National Medicines Policy. Commonwealth Department of Health and Aged Care, 2000:3.