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Short Commentary

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Is there disparate provision of biologic therapies for chronic inflammatory conditions in New Zealand?

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Introduction

Biologic therapy is approved for the treatment of rheumatoid arthritis, inflammatory bowel disease and psoriasis in New Zealand. In order to qualify for subsidy for infliximab or adalimumab, treatment must be initiated by a relevant specialist. However, there is a clear role for family practitioners in ensuring that appropriate patients are offered these treatments regardless of ethnicity or levels of social deprivation. This issue was highlighted by the work of Mc Creanor and Nairn [1], who identified a tendency amongst non-Maori family physicians to attribute differences in health disparities as being due to the community itself. Such attitudes towards minority communities are widespread throughout the world and were most recently reported in the UK in the Report by the Commission on Race and Ethnic Disparities [2]. The potential for a significant role in the delivery of equitable care to Maoris and Pacific Islanders, following the passage of the Health Practitioners Competence Assurance Act, was outlined by Bacal et al [3]. General practitioners role in appropriate communication about new treatments

was emphasised together with the fact that they were seen as trustworthy. Such relationships are often not established with specialist hospital-based practitioners, who may be seen as distant and disinterested. However, a study of arthritis in New Zealand has shown that despite the disease having a higher prevalence in indigenous peoples, fewer referrals were made by family doctors to specialists [4]. Consequently, their access to expensive treatments, such as biologic therapies was limited. In this small study, access to biologic therapy across various communities was considered.

Method

The Ministry of Health was approached, under the Official Information Act 1982, for data on the prescription of infliximab and adalimumab, as publicly funded PHARMAC subsidised drugs, for the period 2016 to 2020, by ethnic group (Request 15823, June 2021). The data were limited by the fact that hospital dispensing was not counted. In addition, it was not possible to verify the accuracy of the data from a second source.

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Table 1: Provision of biologic therapy by ethnicity in New Zealand between 2016 and 2020 inclusive.

| Community | Population | Biologics | Cases/100,000 |
|-------------------|------------|-----------|---------------|
| Maori | 775836 | 2116 | 270 |
| Pacific Islanders | 381642 | 742 | 190 |
| Asian | 707598 | 1992 | 280 |
| Others | 3426249 | 31656 | 920 |

Results

96% of the Others community were European New Zealanders. They were significantly more likely to receive biologic therapies than Maoris (z = 58, p < 0.00001), Pacific Islanders (z = 46.5, p < 0.00001) and Asians (z = 54.8, p < 0.00001). The rate of prescription to these 3 minority communities was comparable with no significant difference. Within all four communities there was no significant difference in the proportion of the community receiving infliximab compared to adalimumab.

Discussion

An interpretation of the significance of these data was restrained by our limited knowledge of the prevalence of inflammatory bowel disease, rheumatoid arthritis and psoriasis amongst Maoris, Pacific Islanders and Asian communities in New Zealand. Clearly, they would need to be four times less common than amongst Other New Zealanders to justify these differences in prescription rates. Such disparities in access to biologic therapy are widespread across the English-speaking world. For example, studies on South Asian communities of Pakistani, Indian and Bangladeshi people in the UK have shown the incidence of inflammatory bowel disease and rheumatoid arthritis to be comparable to that of the European community [5,6], but there have been few studies of other migrant communities or of psoriasis. Despite this their access to expensive biologic therapies is significantly less than for their Western European counterparts [8]. However, Eastern European people in the UK also experience comparable reduced access to such therapies [8]. This would suggest that "otherness" plays a significant role in being underserved and this relates to the work of Bacal et al [3] on the need for clinical practitioners to develop cultural competence skills.

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European counterparts [8]. However, Eastern European people in the UK also experience comparable reduced access to such therapies [8]. This would suggest that "otherness" plays a significant role in being underserved and this relates to the work of Bacal et al [3] on the need for clinical practitioners to develop cultural competence skills.

Studies in the USA and the UK have demonstrated that minority communities with inflammatory bowel disease are less likely to receive biologic therapy than the White community in these countries. This has been shown for South Asians [8], Blacks [9], Latinos [10] and East European migrants [8]. However, there have been no studies on this issue in relation to rheumatoid arthritis or psoriasis, although an American report has linked lack of proficiency in English to a 60-fold reduction in access to biologic therapy [11]. This finding is consistent with that from Miami where an underserved community did not receive biologic therapy for inflammatory bowel disease because of system failures within the healthcare system [12]. In New Zealand experience of disparate care amongst Māori, Pacific and Asian groups compared to European/Other has been associated with higher unmet health needs [13]. It seems, therefore, probable that comparable issues are playing a part in reduction of access to healthcare. One clear factor has been reluctance on healthcare managers to take responsibility for such disparate care and develop effective mechanisms to overcome it [14].

Biologic therapy is expensive and although costs are likely to fall with the development of biosimilars the disparate provision of such treatment to minority communities raises serious questions as to the underlying reasons and how to address them. The phenomenon of disparate care is widespread and is currently highlighted by the Covid pandemic. The common feature that brings together migrant communities and indigenous population is that of otherness. We need to develop inclusive health care systems that ensure none are excluded because they are different. In New Zealand the magnitude of the problem could be better clarified through Freedom of Information requests to health boards on the number of biologic treatments offered to patients with specific conditions by ethnicity. In the UK this has proven to be the only effective method for obtaining such data. One of the requirements for release data in response to a Freedom of Information request is that it should originate from within the country or from someone with New Zealand citizenship and so one purpose of this short report is to stimulate such research.

Declarations

Note: White, White British, Black, Latino and South Asian are official terms used by USA and UK governments in the collection of ethnicity data.

This study received no funding.

There is no conflict of interest for either authors

The original data is available from the Ministry of Health as Request 15823, June 2021

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