

## Assessing ethnicity in New Zealand health research

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### Abstract

**Aims.** To investigate the patterns and criteria reported for categorisation of ethnicity in a sample of health research reports which made comparisons between Maori and non-Maori.

**Methods.** A total of 98 research reports, which made comparisons between Maori and non-Maori samples, were selected from the New Zealand Medical Journal over five 12-month periods and one 24-month period between 1980 and 1996.

**Results.** Only 19% of the 98 articles reported any information about the criteria used for categorising ethnicity. Only three articles mentioned how people of dual or multiple ethnicity were categorised. Although the

term 'race' was commonly used in the 1980s, the terms 'ethnicity' and 'ethnic group' were more widely used later to describe ethnicity.

**Conclusions.** Much of the New Zealand research comparing Maori and non-Maori samples is likely to have unacknowledged error. Most articles did not meet minimum expected standards for reporting procedures for categorising ethnicity. There seemed to be little awareness of the major changes which have taken place in the New Zealand Census question concerning ethnicity between 1981 and 1996. Some suggestions were made for effective practice when assessing and reporting ethnicity in New Zealand research.

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Major decisions about policies and practices, in the delivery of health programmes and services, are sometimes made on the basis of differences in health status between Maori and non-Maori. Comparisons are frequently made between the health status of Maori and non-Maori groups.<sup>1</sup> The purpose of the present paper was to investigate the patterns and criteria used for categorisation of ethnicity, and reporting of findings related to ethnicity, in a sample of health-related research reports which made comparisons between Maori and non-Maori. Current meanings of the concepts of culture, ethnicity and race evident in social science literature are outlined and some suggestions are made for effective practice when assessing ethnicity in New Zealand.

In order to assess the extent to which ethnic categorisations are appropriate, it is important to distinguish three concepts that are frequently confused; ethnicity, race and culture.<sup>2,3</sup> The term ethnicity is now widely used to refer to the categories people use to describe themselves and others. Information about ethnicity is commonly obtained by self-report and is likely to reflect one aspect of the self and social identity of a person. In relation to ethnic groups, Smith has described ethnicity as having six attributes: a collective name, a common myth of descent, a shared history, a distinctive shared culture, an association with a specific territory, and a sense of solidarity.<sup>4</sup> Common meanings associated with ethnicity are; sense of identity or belonging to a specific group, cultural background, racial categorisation or descent, and a sense of shared destiny.<sup>3,5,6</sup> In most research contexts ethnicity is a more appropriate concept to use than culture or race.

The term race has generally been used as a way of categorising people based on their physical appearance and sometimes other biological characteristics. Most physical anthropologists have ceased using the term as a way of categorizing human groups because it is seen as having no specific validity.<sup>7</sup> The problems with the concept of 'race' as a scientific category system arise because variations in biological characteristics (such as skin colour, hair texture, facial features and body shape), which are thought by some people to be associated with distinct racial groups, do not consistently distinguish human groups referred to as 'races'.<sup>8</sup> The concept of race (physical appearance) needs to be clearly distinguished from the concept of culture (learned

behaviours). Some written sources confuse race and culture and create an impression that the terms have the same meaning.

Social science definitions of the term *culture* commonly refer to the meaning to systems and lifestyles of particular groups of people.<sup>9</sup> It refers to<sup>10</sup> "...the learned, socially acquired traditions and life-styles of the members of a society, including their patterned, repetitive ways of thinking, feeling, and acting...". Definitions of culture refer to learned patterns of behaviours which are not causally related to biological characteristics.

Researchers often assume that ethnicity, like gender, is unproblematic. Participants in surveys and other research samples are typically reported as being in one of several common ethnic groups in New Zealand. Often researchers do not mention the criteria used to make ethnic categorisations. This practice reflects the view that categorising ethnicity is clear-cut and that nearly everyone can readily be assigned to a single ethnic group. This perspective was noted by Schwimmer<sup>11</sup> in his comment that: "... every New Zealander knows that there are two distinctive major population groups in the country; the Maori and the Pakeha; and you belong to either one or the other".

However, such perspectives ignore the reality that many people are of dual or multiple ethnicity. Some researchers 'fudge' this reality by requiring that participants be categorised into only one ethnic group. As a result, major discrepancies are likely to occur between data sets using different categorisation criteria. An example of a major discrepancy was noted in a comparison of ethnic categorisations made by the Auckland Region Coronary or Stroke Study (ARCOS). The authors reported that of the 80 participants categorised as Maori in the study, only 40 (50%) were classified as Maori in the death registration data.<sup>12</sup> In the ARCOS study, the ethnicity classification was described as being based on 'cultural affiliation'. In the National Health Statistics Centre, ethnicity in death registration data was assessed by 'biological origin - half or more Maori blood.'

Over the four census periods from 1981 to 1996, there have been significant changes in the New Zealand census question relating to ethnicity (Table 1). These changes have

included: removal of terms relating to 'race' ('blood mixture of races', 'Caucasian'), changing to a more specific label for the dominant group ('European' to 'New Zealand/Pakeha'), recognition of non-New Zealand European groups (eg Dutch, Australian), and clearer acceptance of dual or multiple ethnicity ("Tick as many circles as you need to show ethnic group(s) you belong to").

**Table 1. New Zealand Census questions relating to ethnicity: 1981-1996.**

Year	Phrasing of question	Key phrases in instructions	Dominant group label
1981	Ethnic origin: one (full) origin (or) more than one	This question refers to the blood mixture of races within a person	Full European or Full Caucasian
1986	What is your ethnic origin?	(Tick boxes to) describe your ethnic origin	European
1991	Which ethnic group do you belong to?	Which ethnic group do you belong to?	New Zealand European (+Dutch)
1996	Which ethnic group(s) do you belong to?	Ethnic group or groups (cultural groups) you belong to or identify with	NZ European or Pakeha (+5 other European groups)

Accompanying changes in the census question, there have been marked changes in the proportion of Maori and New Zealand European/Pakeha groups calculated from census responses. Some key changes have been a decrease in the proportion of New Zealand European/Pakeha group (1986 = 82.2%, 1996 = 58.49%), and an increase in the proportion of Maori respondents (1986 = 12.5%, 1996 = 14.5%). As well, there has been a marked increase in the proportion of people reporting dual or multiple ethnicity. The proportion of people selecting only one ethnic group has fallen from 94.6% in 1986 to 81.0% in 1996. Over the same period, the proportion reporting two or three ethnic groups increased from 4.3% to 14.8%.<sup>13</sup>

Given the changes in the census question relating to ethnicity over the period 1981 to 1996, the question arises, to what extent have research reports comparing Maori and non-Maori samples taken these changes into account? As a considerable number of health-related research reports are published in the New Zealand Medical Journal it was decided to use this journal as a source of research reports.

## Methods

A survey of articles published in the New Zealand Medical Journal over the period 1980-1996 was carried out. Research articles, which compared Maori and non-Maori samples on at least one of the major study variables, were selected. The following were not included: commentaries and reviews, letters to the editor, and research articles reporting only the composition of ethnic groups within an overall sample (and which did not make a comparison between ethnic groups across another variable).

Articles were selected at three-yearly intervals to provide a manageable sample for the time period 1980-1996. The following years were included: 1980, 1983, 1986, 1989, 1992 and 1995-96. Articles for the two-year 1995-96 were combined because of the small number of articles that fitted selection criteria in 1995. A total of 98 articles were included in the analysis.

The purpose of the analysis was to investigate how comparisons of ethnicity, involving Maori and non-Maori, were framed and reported. For each article selected the following attributes were examined; (a) whether the criteria used to categorise ethnicity were reported, (b) the source of information about ethnicity among people in the sample (author or other), (c) the label used for 'ethnicity' (eg ethnic group or race), (d) whether participants having dual or multiple ethnicity were

acknowledged, and (e) what label was used for the European/Pakeha group (eg European, Caucasian). The reasons for making ethnic comparisons were not mentioned by most authors, and this topic was not covered in the analyses.

## Results

As shown in Table 2, only 19% of the 98 articles reported any information about the criteria used for categorising ethnicity. Some examples of text from the reports, which were coded as reporting information about the criteria used for categorising ethnicity, were:

*Ethnicity was indicated by self identification and participants were classified as being of Maori, Pacific Islands or other ethnic group. (1996)*

*Using the parents' self assigned descriptions of ethnicity, infants were classified as Maori if one or both parents were Maori.... (1995)*

*Ethnicity was self reported in four categories: European, Maori, Pacific Island Polynesian and other races. (1992)*

*We classed as Maori those considered by both the general practitioner and practice nurse to fit the 1981 census definition of one half or more Maori ancestry. (1989)*

*Ethnic classification in national mortality statistics is based on the biological origin of the parents of the deceased as reported by a close relative. (1989)*

*On the question of race, the pupil gave his own racial identification according to his own personal belief. (1986)*

*A person of Maori origin was defined as one who claims half or more Maori ancestry. (1980)*

**Table 2. Ethnicity criteria and labels used in NZ Med J articles.**

Year	Number of articles	Criteria for ethnic categorisation mentioned	Label used to refer to ethnicity*	
			ethnicity, ethnic group	race
1980	9	11%	18%	67%
1983	17	24%	29%	59%
1986	14	21%	29%	71%
1989	21	14%	52%	43%
1992	16	13%	94%	0%
1995-96	21	29%	95%	5%
Total	98	19%	58%	37%

\*Where two terms were used (eg race & ethnic group), the most frequently used term was counted. Five articles (5%) did not use any term to refer to ethnicity.

The label used to refer to the ethnicity variable (either in the text of the article or a table) is shown in Table 2. Where more than one label was used, the label used most often was coded. The terms 'ethnicity' or 'ethnic group' were most frequent, becoming the predominant label in the 1990s. The term race was occasionally used in articles published in the 1980s but has declined in use since then.

Only three of the 98 (3%) articles mentioned how participants of dual or multiple ethnicity were categorised (eg "subject with mixed non-European/European parentage were allocated to the non-European ethnic group"; "a small number of mixed ethnicity were excluded").

For each article, it was noted whether the author collected the ethnicity data, or whether these data had been taken from another data source. Overall, 59% reported ethnicity

data had been collected by the author(s). There was a trend towards increasing use of secondary data (collected by someone other than the researchers) in the articles between 1989 and 1996 (23 out of 27 articles), compared to the period 1980-1986 (2 out of 31). Fifteen percent of the articles did not give any information about the source of the data reported.

The most common label used to describe the dominant group was 'European' (64%), followed by 'non-Maori' (18%) and 'Caucasian' (12%). Over the time period, use of the term 'non-Maori' increased and use of 'Caucasian' decreased. The term 'Pakeha' did not appear in the articles surveyed, in spite of its increasing use in the 1990s and its use in the 1996 census question.

## Discussion

It is likely that much of the New Zealand research comparing Maori and non-Maori samples has methodological shortcomings that cast doubt on accuracy of the resulting data. Most of the articles surveyed did not meet the minimum expected standards for reporting procedures used to categorise ethnicity. Especially notable was the lack of information provided by authors about the categorisation of participants of dual or multiple ethnicity. There seemed to be little awareness of the major changes that have taken place in the New Zealand census question relating to ethnicity.

The issue of accuracy and consistency of categorisations of ethnicity in Maori/non-Maori comparisons has been commented on.<sup>14,15</sup> Of specific note is distinguishing whether Maori samples are based on the 'sole Maori' category (those who have selected only the 'Maori' category - 7.56% in 1996 census) or the 'all Maori' category (those who selected the 'Maori' category, whether or not they also selected other categories - 14.5% in 1996 census). Within the sample of 98 articles, few reported information relevant to this distinction even though the census data since 1986 make it possible for these two categories to be distinguished.

The following suggestions are made for effective practice when assessing and reporting ethnicity in New Zealand research. These are consistent with the 1996 census question and the guidelines for "Recording Patient Information:

Ethnicity" published in the New Zealand Health Information Service.<sup>16</sup>

- Use the 1996 Census question or similar question for assessing ethnicity where feasible.
- Report the question used to gather ethnicity information (for both researcher-gathered data and data from secondary sources).
- Allow for dual or multiple ethnicity.
- State the procedures used for coding and combining responses into the ethnic categories reported.
- When comparing Maori with other ethnic groups, or with census data, state whether using 'sole Maori' or 'all Maori' category.

Historical comparisons across pre-1986 census periods require special consideration for ethnic categorisation because of the major changes which have taken place in the New Zealand Census questions and changes in the ways in which the Department of Statistics has been collating census ethnicity data.

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