

Geographical access to termination of pregnancy services in New Zealand

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In New Zealand, several studies have noted rising inequalities in health in the past two decades.¹ Ethnic and geographic disparities in health have also been well-documented.^{2,3} As a result, the government has made a commitment to reducing inequalities in health between ethnic and socio-economic groups through the New Zealand Health Strategy.⁴ This paper discusses geographic access to first trimester termination of pregnancy (TOP) services in New Zealand, and points towards the need for action to ensure equity in access to TOP services.

TOP services are an important part of women's health services in New Zealand. In 2005, approximately 23% of the pregnancies in New Zealand ended with a TOP, and one in four women will terminate a pregnancy at some point in their reproductive lives.⁵ Although TOPs must be provided in certified facilities, medically speaking they are relatively simple services that can mainly be provided in outpatient clinics. While TOP services are one of the many core services that District Health Boards (DHBs) are obligated to purchase for their populations, DHBs are not required to provide local services. As a consequence, TOP services are not available in every region, forcing women from certain regions to travel long distances to access services. Furthermore, distance and travel time in rural areas have been identified as contributing to unequal access to general practitioners, who, along with family planning doctors are the primary referrers to TOP services.⁶

Direct and indirect costs can constitute a substantial burden on women who must travel to undergo a TOP, including negotiating time

off from work or studies, extended arrangement for child care, as well as transportation, accommodation and meals. International literature shows that women often travel long distance to access abortion services in cases where there are no services available locally, or in order to ensure anonymity.⁷⁻¹⁰ In a Canadian study, women of lower income were more likely to have travelled longer distances.¹¹ Further, in an Australian study teenagers were more likely to have travelled longer distances compared with older women.⁷

As part of reducing health inequalities, careful consideration must be given to ensuring equal access to health care, which has been defined by some as ensuring equal opportunity of accessing services at equal costs.^{12,13} The Population Based Funding Formula recognises the rural versus urban divide as a significant component in equity of access to services and therefore provides a rural adjustment in funding.¹⁴ However, there has been little debate and consideration in New Zealand as to whether the health system is providing equitable access to TOP services. This paper is intended to present the situation of geographic distribution of TOP services and contribute towards the continuous improvement of access to services around the country.

Methodology

This study has used various sources of data to describe the geographic distribution of first-trimester TOP services in New Zealand. These data sources and variables used in the analysis included:

Abstract

Background: The New Zealand government has made a commitment to reducing inequalities in health among its population through the New Zealand Health Strategy. Termination of Pregnancy (TOP) services are an important part of women's health services, and equity in access to services must be ensured.

Objective: Assess geographic accessibility to first trimester termination of pregnancy services in New Zealand, and discuss implications for equity in access to services.

Methods: TOP service information was obtained nationwide through online resources, and approximate driving distances between all major centres and the closest TOP service to which patients are referred to were calculated for each region. Census data and Statistics NZ data are used to compare population characteristics between regions with reduced geographic accessibility of TOP services.

Results: Women who live in regions that do not offer local TOP services must travel on average 221km to access TOP services. This equates to an average return-trip distance of 442km. Three of the five regions that do not have local TOP services available have a higher than average proportion of Maori population.

Conclusions: The results of this study demonstrate that first-trimester TOP services are relatively difficult to access for over one-sixth of the women in New Zealand.

Key Words: Abortion, equity, access to health services, New Zealand

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Census data

Population characteristics for each regional council area were obtained from the 2006 Census data available through the Statistics NZ website (www.stats.govt.nz). The data used included total resident population, percentage of female population and Māori as a proportion of the total population. Although health services in New Zealand are provided by 21 District Health Boards, the geographical size and population of these districts are extremely different. This study therefore uses the more evenly sized and distributed regional council boundaries as a measure of the distribution of service in different part of New Zealand.

Abortion services website

The location of TOP clinics was obtained on a website that consolidates information about abortion services in New Zealand (www.abortion.gen.nz). This website is sponsored by Istar Ltd, a charitable company established in 1999. Istar Ltd imports and distributes Mifegyne®, one of the pharmaceuticals used for medical TOP. The validity of the information provided on this website was subsequently verified with TOP service managers from nine of the 15 clinics that offer first trimester TOP services. The verification process was undertaken as part of a separate study (unpublished observations). Once the city or town that the clinics operated in were confirmed, these locations were then aligned to a regional council area.

Women's domicile data

Aggregated data providing the number of TOPs for women living in each regional council area in 2006 was obtained from Statistics NZ.¹⁵ This data used the domicile recorded on the TOP report for the Abortion Supervisory Committee at the time of the procedure and matched it to regional council areas, rather than area in which the service was performed. This provided a more balanced estimate of the demand for TOP services throughout the country.

Travel distance data

Travel distances from areas where no local TOP services are provided to the TOP service where referrals are made were

calculated with an online driving distance calculator (www.wises.co.nz). Referral patterns were identified through the TOP service information website specified above, as well as through the verification process. Distances represent a return trip, and were calculated from the main hospital in the main city or town in the region with no TOP service to the actual location of the TOP service(s) where women are currently referred. Where women may be referred to more than one other region, a range of travel distances were calculated according to all possible referral pathways. The distances calculated may not necessarily be reflective of women's actual driving distances, given that women are located in different places throughout the region. Therefore, these distances should be taken as approximations. The analysis also does not include travel distances and times for women who have a service in their region but who need to travel some distance to get to it.

Results

Table 1 shows a list of regional councils, the percentage of its population that identifies as Māori, the termination rate and a description of its first trimester TOP service availability. Of the 16 regional councils in the country, 10 regions have first trimester TOP services available within the region. The six regions without first trimester TOP service providers are Bay of Plenty, Gisborne, Manawatu-Wanganui, Tasman, West Coast and Southland. Tasman is excluded from this group because the main centre of Tasman (Richmond) lies directly adjacent to the city of Nelson, which does have a service. These remaining five regions represent 16.2% of the New Zealand female population.

Women who live in regions that do not offer local TOP services must travel on average 221km one way (range: 58-565km) to access TOP services (see Table 2). This equates to an average return-trip distance of 442km (range: 116-1130km). With an average driving speed of 80km/h (NZ open-road speed limit = 100km/h) that would entail an average travel time of 5.5 hours (range: 1.45-14.13 hours).

Table 1: Population characteristics and abortion service availability in different regions of New Zealand.

Regional council area name	% of Total NZ female population	% Maori of total population within region	Abortion rate/1,000 of total population	First trimester service availability
Northland	3.7	29.3	3.33	One service in Whangarei.
Auckland	32.0	10.5	5.54	Two services in Auckland.
Waikato	9.4	20.0	3.85	Services in Hamilton, Thames and Tokoroa
Taranaki	2.5	15.2	3.66	One service in New Plymouth
Bay of Plenty	6.4	26.3	3.52	Assessment and Referral Outside Region
Gisborne	1.2	44.4	2.72	Assessment and Referral Outside Region
Hawke's Bay	3.7	22.7	3.79	One service in Hastings
Manawatu-Wanganui	5.5	19.0	3.76	Assessment and Referral Outside Region
Wellington	11.1	12.3	4.88	Services in Masterton and Wellington
Tasman	1.1	6.9	3.18	Assessment and Referral Outside Region
Nelson	1.1	8.4	5.01	One service in Nelson
Marlborough	1.1	10.0	3.24	One service in Blenheim
Canterbury	13.1	7.0	4.04	One service in Christchurch
West Coast	0.8	9.3	2.59	Assessment and Referral Outside Region
Otago	5.1	6.3	3.60	One service in Dunedin
Southland	2.3	11.5	3.19	Assessment and Referral Outside Region

Three of the five regions that do not have local TOP services available have a higher than average proportion of Māori population (according to 2006 census, Māori people represent 14.6% of the total population of New Zealand). Gisborne region, with 44% of its population identifying as Māori, offers referral to Auckland, Hawke's Bay or Wellington region, with return travel distances ranging from 458-954km. Similarly, women living in the Bay of Plenty region (26% Māori population) who seek TOP services are referred to the Waikato region and must travel return distances ranging from 116 to 402km. Finally, women from the Manawatu-Wanganui region (19% Māori population) are referred to the Wellington region and face return travel distances ranging 298-394km.

The region with greatest travel distance is Southland, where women who wish to access TOP services are referred to Christchurch, with a return travel distance from Invercargill to Christchurch of 1,130km. Although Dunedin TOP services are closer, at time of writing Dunedin TOP services were unable to accommodate Southland patients.

Conclusion

The results of this study demonstrate that first trimester TOP services are relatively difficult to access for over one-sixth of the women in New Zealand. Women in areas with no services must travel considerable distances to access TOP services. Of particular concern for the Indigenous population of New Zealand, is that women in three of the regions with highest Māori population are required to travel some of the longest distances to access services, which presents an additional burden to an already stressful event and an already disadvantaged population.

Table 2: Driving distances from main centres to referred services for those in regions with no first trimester service.

Regional Council Area name (regions without TOP service)	Main centres for providing TOP services	Location of service(s) where patients are referred	Return-trip driving distance (km)
Bay of Plenty	Whakatane	Hamilton	378
		Thames	402
		Tokoroa	278
	Tauranga	Hamilton	204
		Thames	220
		Tokoroa	168
	Rotorua	Hamilton	210
		Thames	306
		Tokoroa	116
Gisborne	Gisborne	Auckland	954
		Wellington	458
		Masterton	878
Manawatu-Wanganui	Palmerston North	Wellington	298
	Whanganui	Wellington	394
Tasman	n/a ^a	Nelson	n/a
West Coast	Greymouth	Christchurch	478
	Westport	Christchurch	664
Southland	Invercargill	Christchurch ^b	1,130

Notes:

- (a) The main centre within the Tasman region is Richmond, which lies directly adjacent to the city of Nelson and is therefore excluded from this analysis.
 (b) Southland clients have been sent to Christchurch from 2007 due to a shortage of clinic hours available in Dunedin.

It is of note that medical TOP (referring to the use of mifepristone and misoprostol to induce termination of pregnancy) was introduced in New Zealand after the Ministry of Health approval in August 2001, and since has been adopted by four clinics in New Zealand.¹⁶ The increased provision of medical abortion as a safe and acceptable method of pregnancy termination could potentially broaden the service access points to some of the areas where there is no surgical service available.

There is an international trend to concentrate abortion services in metropolitan areas and into the hands of fewer doctors, as fewer doctors are being trained and are willing to provide the service.^{17,18} With the finding of this study showing that services are already relatively difficult to access for a large number of women, any further concentration of services into the biggest urban centres will only increase inequity in access to services. As part of this country's commitment to addressing health disparities, there is need for action to be taken to ensure equity of access to TOP services for women throughout New Zealand, with means of achieving this including ensuring that all DHBs provide a local service (both surgical and medical TOP); and where not available, fully cover travel and other expenses incurred by women accessing services elsewhere. Further research to explore TOP services accessibility and quality assurance is also needed.

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