The Migration of South African Graduates to Canada: A Survey of Medical Practitioners in Saskatchewan

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Aim of study: To determine the socio-demographic profile of South African doctors who have permanently emigrated to Saskatchewan, Canada, and to find out why they left, how they have adapted and if they intend returning to South Africa.

Study design: A cross-sectional postal survey.

Method: All South African qualified medical practitioners in Saskatchewan with permanent registration (N=218) were mailed anonymity-assured questionnaires. A second mailing was sent to non-respondents.

Results: A 59% (N=107) response was elicited with 35 returned-to-sender. Most doctors (79%) had left South Africa after 1990. Most (58%) qualified at Afrikaans medium medical schools in South Africa. The male to female ratio was 88:12. Seventy-four percent (74%) of respondents were general practitioners. Prior to emigration, 67% of respondents were employed in the South African public service. Most doctors (59%) earned between R525 000 and R876 000 per year in Canada. Violence was the most important reason for leaving South Africa, followed by perceived economic problems in South Africa and adverse working conditions at State health facilities. Adaptation and positive adjustments in a newly acquired country and lifestyle were evident. Returning to South Africa does not seem likely unless crime and violence diminish substantially.

Conclusion: Most emigrants were male, recently qualified from all the major medical schools in South Africa, with equal Afrikaans and English speaking proportions. They left mainly because of fear for their personal security and poor working conditions in the South African public health sector. They are well settled in their new country, earn above average incomes in Canada and are very unlikely to return.

Introduction

The exodus of medical practitioners from South Africa has been a concern for many years. The large-scale emigration of professional people from South Africa could impact significantly on the institutional, economic, financial and personal levels of society. An apparently rapid increase in numbers occurred since 1990 when the in the country moved towards a democratic political system.

There is a dearth of research on the medical brain drain from South Africa. Speculation and viewpoints on the reasons for the medical migration from South Africa have put the emphasis on unacceptable working conditions, inadequate remuneration, political problems, violence and crime.

During the principal researcher's visit to Saskatchewan, Canada, in 1995, the extent of the problem and the opportunities for research of this matter became evident. In July 1996 there were 218 South African medical graduates on the register of the College of Physicians and Surgeons of Saskatchewan, the registering authority of the province, who were cited as permanent (non-locum) medical practitioners. This represented 14.8% of the total workforce of 1475 civilian physicians (General Practitioners and Specialists) of the province. A Saskatchewan Medical Association study in 1996 proved that 40% of the rural (towns <10 000 people) doctors in Saskatchewan were South African graduates. According to the Canadian Institute of Health Information 2% (649 general practitioners and 480 specialists) of the 55 006 medical professionals in the whole of Canada was South African-trained at the end of 1995.

The aim of this study was to gain a better understanding about the phenomenon of South African medical graduates immigrating to Saskatchewan, Canada. The study objectives were:

1. to determine their socio-demographic profile;
2. universities of original training and sectors of work in South Africa prior to emigration;
3. fields of training;
4. why they left South Africa;
5. patterns regarding length of stay;
6. appointments and remuneration in Saskatchewan;
7. to find out whether they intended returning;
8. and to probe their adaptation to their new country.
The study design was a cross-sectional postal survey. The target population was all the South African medical graduates, permanently residing and working in the province of Saskatchewan. The register of the College of Physicians and Surgeons of Saskatchewan, dated 9th July 1996, was used as the source of the mailing list. This register contained the names, addresses, countries of application for a work visa, university degrees and dates received and, where applicable, the fields of specialty of the registered persons.

A pilot survey was first conducted among three doctors in Saskatchewan to test the study design and questionnaire, three months prior to the undertaking of the survey. Ethical approval of the final protocol of the study was obtained from the College of Physicians and Surgeons of Saskatchewan and from the Research Committee of the University of Stellenbosch, South Africa.

A questionnaire was sent to all the doctors with permanent registration (N = 218) who had South African qualifications. A covering letter explaining the aim and purpose of the study was included. The questionnaire was divided into four sections. In the first, the reasons for leaving South Africa were explored. The second section focused on their present location, adaptation and expectations regarding their possible return to South Africa. The third section covered biographic detail of the doctors, their spouses, children, language preferences and current immigrant status. The fourth section covered appointments in Saskatchewan, specialty and specific professional interests. Open and close-ended questions were used on different scales, quantifying the responses.

Total anonymity of respondents was secured by means of a double envelope system. An independent person opened the first envelope. The first batch of questionnaires was mailed during October 1996. After receiving 88 completed questionnaires by November, a second mailing was sent to non-respondents in December 1996.

A custom designed database program was used for data capturing and analysis. The Epi-Inf 6.0 statistical analysis program was used to determine the 95% confidence intervals for proportions by means of the Fleiss-quadratic method, rounded off to the nearest integer. Categorical variables were compared by means of the chi-square test. P-values of less than 0.05 were regarded as statistically significant.

One hundred and seven (107) completed questionnaires were received, whilst 35 questionnaires were returned-to-sender, giving a final response rate of 59% (107/183). The 76 non-respondents did not differ significantly from the 107 respondents in any of the known characteristics on the register.

1. Socio-demographic profile

Eighty-six percent (92/107, 95%CI: 78-92%) of respondents were male, and Afrikaans was the home language of 51% (55/107, 95%CI: 42-61%) whilst residing in South Africa, with 49% English-speaking. This proportion changed since their arrival in Canada to 60% favouring English as home language. The majority of respondents (86%, 92/107, 95%CI: 78-92%) were married, with an average of 1.95 children per family.

Most respondents (79%, 85/107, 95%CI: 70-86%) left South Africa during the 5 year period preceding the study (between 1991 and 1996), 14 respondents left between 1986 and 1990, and 8 before 1986

2. Qualifications

Fifty-six percent (60/107, 95%CI: 46-66%) obtained their basic medical degree after 1985, and 84% (90/107, 95%CI: 76-90%) had qualified after 1980. The majority of respondents (58%, 62/107, 95%CI: 48-67%) obtained their qualification at one of the former Afrikaans-medium universities (Pretoria: 36; Stellenbosch: 19; Orange Free State: 7). The rest (45/107) qualified at Witwatersrand (19), Cape Town (19) and Natal (7).

Seventy-four percent (80/107, 95%CI: 65-83%) of respondents were general practitioners. The 27 specialists included psychiatrists (4), ophthalmologists (4), orthopaedic surgeons (3) and physicians (3). Forty-three percent (45/107, 95%CI: 34-53%) of respondents also had additional university or professional qualifications, other than a medical specialist qualification. These included 20 with postgraduate medical diplomas and 6 with family physician qualifications. The spouses of 87% of respondents (80/92, 95%CI: 78-93%) had tertiary qualifications.

### Table 1: Most important reason for leaving South Africa cited by South African Medical Graduates in Saskatchewan (N=107)

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Violence / Lack of Security</td>
<td>43</td>
<td>34-53</td>
</tr>
<tr>
<td>2. Political Uncertainty</td>
<td>19</td>
<td>12-28</td>
</tr>
<tr>
<td>3. Financial Opportunities Abroad</td>
<td>18</td>
<td>11-27</td>
</tr>
<tr>
<td>4. Improper Financial Remuneration</td>
<td>13</td>
<td>8-21</td>
</tr>
<tr>
<td>5. Medical Policy Changes of the Country</td>
<td>5</td>
<td>2-12</td>
</tr>
<tr>
<td>6. Lack of Job Satisfaction</td>
<td>2</td>
<td>1-7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
3. Employment

Most of the respondents (67%, 72/107, 95% CI: 58-76%) had worked in the public health sector immediately prior to leaving South Africa.

Forty-six percent (49 I | 07, 95%CI:36-56%) of respondents indicated that they had entered into a contract with a Canadian health authority, which included a time commitment clause, mostly ranging from 3-5 years. Only 34.5% (37/107, 95%CI:26-44%) of respondents indicated that they had not received any form of subsidy during or after relocation, and also did not have any definite time commitment towards a Canadian authority.

4. Income

Fifty-nine percent of respondents (631 | 07, 95%Cl:49-68%) earned a gross income in Canada of between R525000 and R876000 per year, with only 23% (24/107, 95%CI:15-32%) who earned less than R525 000. Seven earned more than one million Rand per year. The exchange rate at the time of the study was 3.5ZAR = 1.0Can$.

5. Reasons for leaving South Africa

The respondents were asked to indicate their most important reason for leaving South Africa, from a list of choices. These are tabulated in Table I. Violence and lack of security was chosen by 43% (46/107, 95%CI:34-53%). Almost one third (31%, 33/107, 95%CI:23-41%) of the respondents indicated that they had been victims of violence. They had either lost family members in violence (3/33), suffered physical harm to themselves or to family members (16/33), suffered loss of possessions (26/33), received threats (9/33), or experienced psychological trauma related to violence and crime (9/33).

The respondents were also asked to nominate other important reasons for emigrating. The following were nominated: Adventure and travel (16/107); objection to the pre-1994 political system (5/107); and objection to the post-1994 political system (4/107).

A set of closed questions explored their reasons for emigration in more depth. Respondents were asked whether they agreed or not with a list of statements listed in Table II. Once again the greater majority agreed with statements about the role of safety, insecurity, violence and political stability.

6. Adjustment

Adjustment and attitudes towards their new lifestyle in Canada was also explored. Respondents were asked whether they agreed/ disagreed with a set of statements listed in Table III. It is clear that most adapted easily to their new personal and professional lives.

7. Returning to South Africa

When asked about their plans regarding returning to South Africa, the 60%, (64/107, 95%CI: 50-69%) indicated that it would be most unlikely for them to return. Only 7% (8/107, 95%CI: 4-15%) indicated that they were likely to return, although 33% (35/107, 95%CI: 24-43%) were either unsure or did not reply. Respondents were finally asked to rate certain given factors that may positively influence a decision to return to South Africa (Table IV). Low crime, a stable political system and their family in South Africa ranked as the most important factors.
Discussion

This survey was conducted only amongst South African emigrants who have permanent resident status and still resided in Saskatchewan. The 59% response rate was fair, taking into account the 17% inaccuracy of the mailing list. The respondents did not differ in any of the known attributes on the register from those that did not respond.

No accurate figures exist on the number of doctors emigrating from South Africa every year. The results of this survey may seem to indicate accelerated emigration (85/107) during the 5 years preceding the study (1991-1996) compared with those emigrating between 1986 and 1990 (14/107). The majority of all doctors, however, including South Africans, move out of Saskatchewan towards the denser populated areas in Canada and the United States of America, within three to five years.16

A rather surprising finding was the fact that 58% of respondents qualified at one of the former Afrikaans-medium medical schools in South Africa. In 1997 only 46% of new doctors in South Africa graduated from one of those universities. This finding is a strong indication that emigration of doctors is no longer confined to the graduates of English medium universities. This is supported by the fact that 49% of respondents indicated that Afrikaans was their home language in South Africa.

The 88:12 male to female ratio of South African doctors in Saskatchewan may indicate a greater likelihood for male doctors to emigrate, since the ratio of male to female doctors in South Africa was 79:21 in 1997. Some of the reasons for this male preponderance could be the relatively remote rural setting of Saskatchewan, and the fact that husbands can often not find suitable employment and may have trouble obtaining a work permit.

Exploring the reasons for emigration was an important objective of this study. Two different sets of questions (Tables I and II) underline the effect of crime and violence. The reason to leave South Africa “for our children’s future” (Table II) ties in with the concern regarding “violence and the importance of safety for a family.” A large number of the respondents (67%) indicated that they had worked in the South African public health sector immediately prior to their emigration. A large proportion also indicated that their working conditions (75%) and the hospital situation (69%) played a major part in their decision to emigrate. The public health sector was therefore the major loser of medical manpower, and working conditions within the public sector contributed substantially to this effect. Despite adverse working conditions that were prompting emigration (Table II), apparent job satisfaction in South Africa has made the option to emigrate an even more difficult choice.12

Insufficient financial compensation and uncertainty regarding the South African economy, coupled with enhanced economic prospects abroad, have played a substantial part in deciding to emigrate (Tables I and II). Sixty-one percent of respondents agreed that financial reasons played a major role in their decision to emigrate, and it is common knowledge that medical practitioners in Canada earn substantially more than their South African counterparts. This is supported by the findings in this study that the majority of respondents have an above average gross income in Canada, even in Canadian monetary terms. Gross income does however not reflect overheads in a practice, nor does it reflect personal taxation, which can amount to 52% per annum.

Political change as motivation for emigration did not seem to be a decisive factor among the respondents (Table II).

Table III: Adjustments and attitudes towards a new lifestyle: past, present and future perceptions of South African Medical Graduates in Saskatchewan

<table>
<thead>
<tr>
<th>Agree (%)</th>
<th>N</th>
<th>95%CI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Although our children have changed schools coming from South Africa, they have adjusted very well.</td>
<td>100</td>
<td>31/31</td>
</tr>
<tr>
<td>2. My training and experience in South Africa served as an excellent basis for current work.</td>
<td>95</td>
<td>102/107</td>
</tr>
<tr>
<td>3. I enjoy my work in my current practice situation.</td>
<td>87</td>
<td>93/107</td>
</tr>
<tr>
<td>4. I have adjusted well to the Canadian lifestyle.</td>
<td>84</td>
<td>90/107</td>
</tr>
<tr>
<td>5. The sacrifices I have made were worthwhile given the gains coming.</td>
<td>83</td>
<td>89/107</td>
</tr>
<tr>
<td>6. Immigration restrictions regarding my spouse made adjustments towards Canada more difficult.</td>
<td>66</td>
<td>41/62</td>
</tr>
<tr>
<td>7. I have become better integrated in the community and a new way of life than my spouse.</td>
<td>36</td>
<td>30/83</td>
</tr>
<tr>
<td>8. If my spouse feels we should return to South Africa, we would immediately.</td>
<td>26</td>
<td>21/82</td>
</tr>
<tr>
<td>9. I see myself in current practice until my retirement.</td>
<td>18</td>
<td>19/107</td>
</tr>
<tr>
<td>10. If I can be accommodated in a private practice in South Africa today, I would return immediately.</td>
<td>10</td>
<td>11/107</td>
</tr>
</tbody>
</table>
Interestingly, the pre-1994 political dispensation government appears to have had an equal influence on attitudes towards emigration, as does the current dispensation.

The respondents were mainly young and mobile, 62% (66/107, 95% CI: 52-71%) indicated that they had worked abroad prior to settling in Saskatchewan. This would have eased the adaptation process. The UK was the most prominent recipient country for respondents, 28% (30/107, 95% CI: 20-38%) worked there before moving to Canada.

Emigrants are likely to have high degrees of personal skills. This explains why adapting to a new life style was executed successfully by the majority of respondents. Eighty-four percent of respondents indicated that they and their families had adjusted well to the Canadian lifestyle, with children adapting apparently more easily than adults had. All respondents with families felt that their children, having changed schools, had adapted well. In order to acquire landed immigrant status, a waiting period of two to three years is required to elapse from date of arrival in Canada. This period leaves a restriction on a spouse regarding a work visa, a factor that makes adjustments into the new country difficult, according to 38% of the respondents. Despite this, spouses still adapted well, which probably explains why so few respondents planned to return to South Africa. Only 36% indicated that they had adapted better than their spouses to the new life.

Reviewing Table III, it seems unlikely that even a third of the respondents would return to South Africa. A pertinent question in our study on the possibility of returning to a private practice of their choice in South Africa, showed that only 7% of respondents had such intentions. Fairly high remuneration, successful adaptation abroad and worthwhile sacrifices made in the process, imply a low percentage of returning emigrants to South Africa. Ongoing violence and little evidence that the South African economy will improve, make it even less likely that emigrants will return to this country.

South African graduates are welcome and accepted abroad, specifically in Saskatchewan. This adds to the growing belief amongst the medical fraternity in South Africa that emigration is a viable option whereby one can leave serious problems behind and enjoy a better quality of life. Positive feedback from the emigrant contingent overseas encourages others to leave South Africa.

### Acknowledgements

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### Table IV: Adjustments and attitudes towards a new lifestyle: past, present and future perceptions of South African Medical Graduates in Saskatchewan

<table>
<thead>
<tr>
<th></th>
<th>Agree (%)</th>
<th>N</th>
<th>95% CI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Low rate of crime and violence in South Africa.</td>
<td>62.6</td>
<td>67</td>
<td>52.6-71.6</td>
</tr>
<tr>
<td>2. A stable political system in South Africa.</td>
<td>58.9</td>
<td>63</td>
<td>48.9-68.1</td>
</tr>
<tr>
<td>3. Family in South Africa.</td>
<td>54.2</td>
<td>58</td>
<td>44.3-63.7</td>
</tr>
<tr>
<td>4. A strong South African economy.</td>
<td>48.6</td>
<td>52</td>
<td>38.8-58.4</td>
</tr>
<tr>
<td>5. The climate and weather in South Africa.</td>
<td>47.6</td>
<td>51</td>
<td>37.9-57.5</td>
</tr>
<tr>
<td>6. An improvement in hospital conditions.</td>
<td>46.7</td>
<td>50</td>
<td>37.1-56.8</td>
</tr>
<tr>
<td>7. The relative beauty of South Africa.</td>
<td>40.4</td>
<td>42</td>
<td>30.1-49.2</td>
</tr>
<tr>
<td>8. A sound National Health System in the country.</td>
<td>38.4</td>
<td>40</td>
<td>28.3-47.3</td>
</tr>
<tr>
<td>9. Replicating current work in South Africa.</td>
<td>36.5</td>
<td>38</td>
<td>26.6-45.4</td>
</tr>
<tr>
<td>10. Typical sports and entertainment in South Africa.</td>
<td>30.4</td>
<td>32</td>
<td>21.6-39.6</td>
</tr>
<tr>
<td>11. A relative low tax system in South Africa.</td>
<td>23.8</td>
<td>25</td>
<td>15.9-32.7</td>
</tr>
<tr>
<td>12. Study opportunities in South Africa.</td>
<td>14.4</td>
<td>15</td>
<td>8.3-22.4</td>
</tr>
</tbody>
</table>

### Conclusion

The South African medical graduates in Saskatchewan comprise a fairly recently qualified, predominantly male group of doctors. They come from all the South African universities, and from the Afrikaans and English and language groups. They are well remunerated in Canada and have adapted well to their new country. Most have contractual agreements with a Canadian authority to serve between 3-5 years in Saskatchewan. Their return to South Africa is highly unlikely. Most cited fear for personal safety, crime, violence and poor working conditions in the public health sector as the most important reasons for leaving South Africa.

Urgent action aimed at making South Africa a safe and prosperous country to work in would be a major step to curb the medical brain drain to Saskatchewan. The absurd situation of South African medical schools training so many doctors who leave to work in rural areas abroad while there is a pressing shortage at home in rural areas is self-evident.
References