

RESEARCH ARTICLES

Job Location Decisions of Pharmacy Graduates in British Columbia

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Objectives. To determine the factors influencing pharmacy graduates' selection of their first professional job location.

Methods. A survey was conducted of the 2007 graduating class of the University of British Columbia, examining hometown location, community and workplace factors, personal relationships, financial factors, and leisure activities. Responses were analyzed to determine whether community size or demographic characteristics affected the degree to which each factor influenced the job location decision.

Results. The majority of graduates moved from their hometowns to larger communities, mainly to the largest city in British Columbia. Most of those taking jobs in rural and remote communities grew up in or near those communities, and were more influenced by community size and anticipated working conditions, and less influenced by access to cultural and social activities, than their urban counterparts.

Conclusions. The admission of students from rural and remote communities is modestly effective in ensuring a supply of pharmacists for these areas.

Keywords: rural, pharmacy practice, pharmacist, recruitment

INTRODUCTION

Concern about recruiting and retaining rural practitioners exists in a variety of professions and locales. Thus, rural career choice has been studied in physicians, nurses, and other allied health professionals, and in various locations including the United States, Canada, and Australia. For rural physicians, the only consistent finding is that a rural upbringing is associated with the decision to practice in a rural area.¹⁻³ Previous residence in a rural area was also the primary factor associated with rural pharmacy practice in Australia.⁴ Conflicting reports exist on the influence of rural educational experiences on rural career choice. Some studies have found a correlation between exposure to rural practice during medical training and rural career, while others have shown either no association between experiential education in rural areas during training and subsequent rural practice, or an association between experiential education in rural areas and willingness to take temporary but not permanent positions in rural areas.^{1,3,5-7} Demographic and other personal characteristics are generally not predictive of rural practice.^{1,2}

Not all pharmacy graduates with a rural background will choose to work in a rural area upon completion of their education. In British Columbia, migration of young adults with university degrees from rural to urban areas has been demonstrated.⁸ A variety of recruitment strategies has been used to attract rural practitioners. Student loan forgiveness schemes and scholarships with return-of-service obligations are common; however, physicians going to rural areas to fulfill service obligations do not stay as long as those going voluntarily, and some of these schemes have high rates of failure to fulfill the service obligation.^{9,10} Other types of financial incentives include guaranteed minimum income contracts, travel allowances, and financial support for continuing education. Non-monetary incentives that address job satisfaction and lifestyle issues are also offered, such as provision of vacation coverage, career or educational assistance for family members, and access to cultural and other amenities.¹¹

Pharmacies in rural communities may not be financially viable.¹² Conversely, business opportunities may attract pharmacists to rural areas, provided there is an adequate supply of physicians.⁴ Pharmacists working in rural communities do report satisfaction with the varied nature of their work, their relationships with local physicians and other colleagues, and their relationships with their patients.⁴ However, little research has been reported

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on rural career choice by pharmacists. The few studies existing on pharmacists' career preferences focused on the type of practice (eg, community vs. institutional practice) rather than the type of location.^{13,14} The extent to which research findings on recruitment and retention of physicians in rural practice also apply to pharmacists is unknown. Hence, this study was undertaken to examine the job location decision of new pharmacy graduates, and the workplace, community, familial, financial, and recreational factors influencing that decision.

A shortage exists when demand exceeds supply. In the labor market for pharmacists, demand is driven by factors such as prescription volume, which increases with population growth, aging of the population, and availability of new drug therapies; an increase in the number of pharmacies; longer hours of operation; and expansion of the pharmacist's professional role.^{15,16} Meanwhile, the supply of pharmacists is affected by factors such as limits on the capacity of schools of pharmacy, attrition due to retirement, preference for part-time work, and patterns of migration and immigration of pharmacists.^{16,17}

While the demand for pharmacists might be greater than the supply in many locations, the extent to which such shortages have led to excessive workloads for pharmacists or the inability to meet patient care needs is not clear. For example, people rarely require access to a community pharmacist in the middle of the night, so the need for numerous pharmacies to be open 24 hours a day seems questionable. Nevertheless, workload and staffing issues were by far the most common concerns of pharmacists surveyed regarding the expansion of the scope of pharmacy practice.¹⁸ In an open-ended question about their top concerns about their own practice, 57% of pharmacists reported a shortage of pharmacists, insufficient staffing levels, being too busy, having too much paperwork, having too many technical tasks, and similar problems.¹⁸ Many stated that they were too busy to provide pharmaceutical care to their patients.¹⁸ Excessive workload has contributed to pharmacists making dispensing errors and failing to identify drug interactions.^{19,20} In response to such issues, some jurisdictions have created standards for pharmacist workload based on a maximum number of prescriptions per day or maximum number of technicians supervised.²¹⁻²³ In reality, appropriate pharmacist workload depends on many factors, including pharmacist work experience, technician abilities, dispensary design, and the type of prescriptions received, not to mention expected scope of practice, which varies widely and is evolving.²²

British Columbia is a Canadian province with a large land area and a small population of 4.1 million, just over half of whom live in Metro Vancouver, a single urban

area, which includes the city of Vancouver and its suburbs.²⁴ Pharmacy services in the province are provided by 4,219 registered pharmacists through 69 hospital pharmacies and 981 community pharmacies.²⁵ A job vacancy rate of around 10% has been reported, with more than half of these vacancies in communities that are rural (ie, small) and remote (ie, distant from Metro Vancouver).^{26,27} According to information obtained from the College of Pharmacists of British Columbia in February 2008, these communities were already underserved in comparison to Metro Vancouver, with fewer pharmacies and pharmacists per capita. Four hospital pharmacies in small towns have been closed in recent years because of the inability to hire pharmacists.²⁶

The Faculty of Pharmaceutical Sciences at the University of British Columbia, located in Vancouver, is the only school of pharmacy in the province, so it is an important source of new pharmacists. The school normally admits 140 students annually. In 2005, funding was obtained for 12 additional seats per year, which were allocated to qualified applicants from regions outside the Metro Vancouver area on the assumption that at least some would return to these regions after graduation. This study examined this assumption by addressing the research question, "What influences a pharmacy graduate's decision to take a job in a rural area?"

METHODS

This study was conducted using survey methodology in which a written questionnaire was administered in the spring of 2007 to an entire class of pharmacy students who were ready to graduate from the University of British Columbia (n = 125). Prior to beginning the study, approval was obtained from the university's research ethics board. The questionnaire was prepared based on findings from the literature and from interviews with graduates from the previous year (n = 12), who also pilot tested a draft questionnaire. Responses from the interviews and questionnaires were compared to assess for validity.

The questionnaire asked respondents to provide demographic data, including age, sex, marital status, and ethnicity; details of the type and location of the job they anticipated starting after graduation; where they had resided throughout their lives; current locations of immediate family members and significant others; locations of their 4 pharmacy practice experience courses; leisure activities they enjoyed; and details of their financial situation, including anticipated salary and monetary benefits, level of debt, and receipt of scholarships with return-of-service commitments. In addition, they were asked to rate the degree to which 43 individual factors in the aforementioned categories had influenced their job location

decision. These ratings were based on either a 4-point scale (from “no influence” to “strong influence”), or a 5-point scale (from “strong negative influence” to “strong positive influence”), as appropriate to the question.

Responses were coded by hand and entered into an SPSS (SPSS Inc., Chicago, IL) data file. Locations were classified according to size using the Canada Census designations of Census Metropolitan Area (CMA, population $\geq 100,000$), Census Agglomeration (CA, population $\geq 10,000$) and Rural and Small Town (RST, population $< 10,000$). Locations were also classified according to geographic area guided by the electoral districts for representatives to the council of the provincial pharmacy licensing body. The classifications used were as follows: Metro Vancouver, Vancouver Island, British Columbia Interior, and Northern British Columbia. An “Other” classification was used for a small number of communities near to but not part of Metro Vancouver and all out-of-province locations.

Responses on rating scales were quantified from 0 to 3 for the 4-point scales and from -2 to +2 on the 5-point scales. Mean ratings were calculated, then compared using the appropriate test to determine whether there were significant differences ($p \leq 0.05$) associated with job location type or with the demographic variables of age, sex, marital status, and ethnicity. Where the means for 2 groups were being compared (eg, males and females), the parametric and nonparametric options were the independent-samples *t* test and the Mann-Whitney U test. Where the means of 3 or more groups were being compared (eg, those located in CMAs, CAs, and RSTs), the options were the one-way-between-groups analysis of variance (ANOVA) and the Kruskal-Wallis test. To determine whether to use the parametric or nonparametric test, normality was assessed using skewness and kurtosis ratios and Kolmogorov-Smirnov tests. Where 3 or more groups were being compared and the omnibus test was significant, appropriate post hoc analyses were conducted. Specifically, Tukey’s Honestly Significant Difference test was used in the case of the one-way ANOVA, and Mann-Whitney U tests with Bonferroni adjustment applied to the significance level were used for each possible pair in the case of the Kruskal-Wallis test. Respondents who gave no response or a response of “not applicable” on a question were excluded from the analysis of that variable.

To facilitate analysis, a small number of categories were created for some variables based on response frequency. Age was collapsed into 3 categories: 23 to 25 years, 26 to 30 years, and over 30 years. Marital status was similarly collapsed into 3 categories: single and uninvolved in a relationship, single and involved in a relationship, and

in a committed relationship (ie, living together, engaged, or married). Ethnicity, which was self-reported using a multiple-response checklist derived from the Canada Census form, was collapsed into 7 categories: Canadian, Chinese, Chinese-Canadian, East Indian, Indo-Canadian, Canadian + Other, and Other.

RESULTS

Questionnaires were provided to 118 of the 125 students expected to graduate from the program in 2007. The remaining 7 were absent when the questionnaires were distributed and did not respond to e-mail requests to retrieve it or have it sent to them by mail. Completed questionnaires were returned by 103 students, for an overall response rate of 82.4%. Based on information provided by the school regarding gender distribution and hometown location for the whole class, the respondents were representative of the class.

Demographic data were provided by 102 of the 103 respondents, who ranged in age from 23 to 40 years of age, with a mean of 25.4 years. Most were between 23 and 25 years of age (66.7%), female (68.6%), single (73.5%), and described their ethnicity as Canadian or Canadian in combination with another ethnic group (59.8%). More details of the respondents’ demographic characteristics are shown in Table 1.

Table 1 also shows the location type, classified by size and geographic area, of the communities where students intended to take their first job upon graduation, reported by 99 of the 103 respondents. The remainder did not specify a job location. Sixty (60.6%) were accepting jobs in the large urban center of Metro Vancouver. Nine respondents (9.1%) were moving out of British Columbia, leaving 30 (30.3%) to serve the needs of the rest of the province, where 48.5% of the population resides in large and small communities, including the province’s 3 Census Metropolitan Areas (CMAs) other than Metro Vancouver, all 20 Census Agglomerations (CAs), and many Rural and Small Towns (RSTs). Most (93.2%) were happy or very happy with their location choice. The most common reasons stated for this happiness were proximity to family and friends, familiarity with the community from having lived there previously, and good working conditions. Those taking jobs in CAs mentioned affordability, the opportunity for adventure and/or independence, and access to leisure activities more frequently; and those taking jobs in CMAs mentioned proximity to friends, familiarity with the community, the (large) size of the community, and the ease of commuting to work more frequently.

For 93 of the 103 respondents, identifying both a job location and a hometown where they had resided for the

Table 1. Demographic and Job Location Characteristics of Pharmacy Graduate Respondents, N = 102

Variable	No. (%)
Age, y	
23-25	68 (66.7)
26-30	23 (22.5)
> 30	11 (10.8)
Sex	
Male	32 (31.4)
Female	70 (68.6)
Relationship status	
Single and uninvolved in a relationship	45 (44.1)
Single and involved in a relationship	30 (29.4)
In a committed relationship (living together, engaged, married)	27 (26.5)
Ethnicity	
Canadian	25 (24.5)
Chinese	22 (21.6)
Chinese-Canadian	13 (12.7)
East Indian	8 (7.8)
Indo-Canadian	4 (3.9)
Canadian + Other	19 (18.6)
Other	11 (10.8)
Job location type	
Census Metropolitan Area (population ≥ 100,000)	77 (77.8)
Census Agglomeration (population ≥ 10,000)	16 (16.2)
Rural or Small Town (population < 10,000)	6 (6.1)
Job location area	
Metro Vancouver	60 (60.6)
Vancouver Island	11 (11.1)
British Columbia Interior	7 (7.1)
Northern British Columbia	8 (8.1)
Other	13 (13.1)

majority of their childhood years was possible. The remainder either did not specify a job location or had moved frequently during childhood, so no hometown could be identified. Of these 93 respondents, 33 (35.5%) intended to take jobs in their hometowns and an additional 10 (10.8%) were moving among the communities that make up Metro Vancouver. Of the 50 respondents planning to take jobs away from their hometowns, 20 (40%) were moving into Metro Vancouver from elsewhere. A comparison of the hometown and job location type, seen in Figure 1, shows that the most common move was from a smaller community to a larger one. Only 6 of those who grew up in Metro Vancouver were planning to move away, and only 2 of these were moving to remote locations in British Columbia, with the remainder intending to take jobs in Ontario or the United States. The majority of

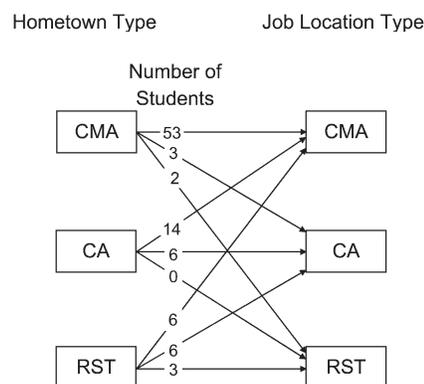


Figure 1. Comparison of hometown and job location type.

respondents taking jobs in rural and remote communities had grown up in the same area of the province, sometimes in the same community (Table 2). Among the 19 respondents who grew up in rural and remote communities and planned to take jobs outside Metro Vancouver, most (78.9%) were returning to the area of the province where they grew up, including almost half (46.7%) returning to their hometowns.

Table 3 shows the mean ratings on a representative sample of the factors investigated related to the community in which the job would be located, the nature of the anticipated job, personal relationships, financial issues, and leisure pursuits. Factors receiving mean ratings in the “moderate” to “strong” influence range (≥ 2) included current or previous residence in or near the community, pace of life in the community, access to an enjoyable job, long-term career and relationship plans, and proximity to parents and romantic partners. For the small number ($n = 8$) of respondents who had accepted scholarships with return-of-service commitments, the terms of their scholarships were a particularly strong influence on their job location (mean = 2.5 ± 0.9). Factors receiving mean ratings in the “no” to “weak” influence range (≤ 1) included the presence of family conflict, parental expectations of duty, desire to live at a distance from parents, and access to religious or spiritual activities.

The influence of the location of the 4 pharmacy practice experience courses taken by the respondents was rated on a 5-point scale, quantified from -2 to $+2$. The most frequent response in each case was that the course had no influence on the job location. Means ranged from 0.4 ± 1.0 to 0.5 ± 1.0 , with the introductory pharmacy practice experience (IPPE) self-arranged by students in a location of their own choosing receiving the highest mean rating. Some participants may not have rated the influence of each course in the manner intended, as there were several instances where a practice experience location was

Table 2. Comparison of Job Location Geographic Area with Hometown Area of Pharmacy Graduates, N = 93

Job Location Area	Hometown Area	No. (%)
Metro Vancouver	Metro Vancouver	34 (59.6)
	Vancouver Island	3 (5.3)
	British Columbia Interior	6 (10.5)
	Northern British Columbia	3 (5.3)
	Other	11 (19.3)
Vancouver Island	Metro Vancouver	1 (9.1)
	Vancouver Island	7 (63.6)
	British Columbia Interior	1 (9.1)
	Northern British Columbia	0
	Other	2 (18.2)
British Columbia Interior	Metro Vancouver	1 (14.3)
	Vancouver Island	1 (14.3)
	British Columbia Interior	4 (57.1)
	Northern British Columbia	0
	Other	1 (14.3)
Northern British Columbia	Metro Vancouver	0
	Vancouver Island	2 (33.3)
	British Columbia Interior	0
	Northern British Columbia	4 (66.7)
	Other	0
Other	Metro Vancouver	4 (33.3)
	Vancouver Island	0
	British Columbia Interior	2 (16.7)
	Northern British Columbia	2 (16.7)
	Other	4 (33.3)

rated as having a strong positive influence on the job location, yet was in a different community.

There were instances in which a significant association was found between the degree to which a factor influenced the job location decision and the type of job location, sex, age, marital status, or ethnicity of the respondent. For example, proximity to parents was more important to the 23- to 25-year-old respondents (mean = 2.3 ± 0.8) than to the 26- to 29-year-old respondents (mean = 1.8 ± 0.8), with this difference found to be significant by post hoc analysis following a Kruskal-Wallis test ($p = 0.02$). Similarly, personal plans for having or raising children were a stronger influence for those in committed relationships (mean = 2.6 ± 0.7) than for singles who were either involved (mean = 1.6 ± 1.1) or uninvolved in relationships (mean = 1.3 ± 1.0), with these differences found to be significant by post hoc analysis following a Kruskal-Wallis test ($p < 0.0005$).

Of greater interest were the differences associated with the job location type (Table 4). For example, the influence of the ability to practice pharmacy in the manner desired was significantly stronger for those taking jobs in RSTs (mean = 3.0 ± 0) than in CMAs (mean = 1.9 ± 0.2) or CAs (mean = 1.9 ± 0.6), while the influence of salary was

significantly stronger for those taking jobs in CAs (mean = 2.6 ± 0.4) than CMAs (mean = 1.8 ± 0.2).

DISCUSSION

The majority of graduates planned to take jobs in the Metro Vancouver area, in numbers somewhat disproportionate to the general population. Overall, the respondents were very happy with their job location, perhaps reflecting the choices available to them, given the current shortage of pharmacists. How they made that choice varied, but this study confirms that the hometown location was an important factor, particularly for those who grew up in Metro Vancouver. These graduates were unlikely to be taking jobs outside this area. The majority of those taking jobs in rural and remote communities grew up in or near those communities. Thus, the school's policy of selectively admitting applicants from outside Metro Vancouver for the 12 externally funded seats intended to address the pharmacist shortage in the province's rural and remote communities seems reasonable.

Additional admission strategies could further help to correct the maldistribution of pharmacists that leaves rural and remote communities underserved. First, in line with suggestions made for addressing the shortage of rural

Table 3. Influences on Job Location Decision by Pharmacy Graduates, N = 103

Factor	n	Influence Rating,^a Mean (SD), Max. = 3.0
Community factors		
Currently living in or near the community	76	2.1 (1.1)
Previously lived in or near the community	71	2.1 (1.1)
The community is not too large	82	1.4 (1.1)
The community is not too small	84	1.7 (1.1)
Pace of life in the community	92	2.2 (0.9)
Workplace factors		
Access to an enjoyable job	91	2.2 (0.8)
Ability to practice pharmacy as desired	88	2.0 (0.9)
Good coworkers	80	1.8 (1.0)
Pace of work on the job	84	1.9 (0.9)
Long-term career plans	96	2.1 (0.8)
Relationship factors		
Proximity to parents	99	2.1 (0.9)
Proximity to siblings	91	1.8 (0.9)
Proximity to boy/girlfriend	36	2.3 (0.9)
Feelings of duty towards parents	95	1.2 (1.1)
Parental expectations of duty	95	1.0 (1.0)
Parental support for independence	93	1.3 (1.1)
Presence of family conflict	63	0.7 (0.9)
Desire to live at a distance from parents	74	1.0 (1.0)
Long-term relationship plans	71	2.2 (1.0)
Plans for having or raising children	67	1.9 (1.1)
Financial factors		
Salary	96	1.9 (1.0)
Level of debt	85	1.4 (1.2)
Signing bonus, license fees paid, or similar benefits	89	1.2 (1.1)
Cost of living in the community	95	1.6 (1.2)
Leisure factors		
Access to sports and physical activities	97	1.7 (1.1)
Access to cultural and social activities	97	1.9 (1.1)
Access to religious or spiritual activities	81	0.7 (1.1)
Access to community and volunteer activities	91	1.0 (0.9)

^a 0 = no influence; 1 = weak influence; 2 = moderate influence; 3 = strong influence.

physicians, targets could be set for admissions that better reflect the distribution of the population.²⁸ Admission standards should not be compromised for the sake of admitting more students from rural areas; rather applicants meeting all admission criteria could be selected in proportion to the population of the area of the province in which their hometown is located. This would be possible to implement only if there were sufficient qualified applicants from around the province. Thus, a second strategy of actively recruiting applicants from outside Metro Vancouver would be advisable. Current recruitment efforts of the school have been limited, consisting mainly of participating in occasional events on campus aimed at students in science programs, and attending career events at local high schools when invited. For recruitment out-

side Metro Vancouver, the school has relied on the efforts of the University's student recruitment and advising personnel. More aggressive recruitment by the school has not been a priority for a number of reasons, including lack of resources and the fact that there have been sufficient qualified applicants.

Admission to the school is a competitive process, and applicants must have successfully completed high school and the necessary prepharmacy courses at the college or university level. Thus, at least some recruitment activities need to be targeted at rural high school students, as their current rates of high school completion and aspirations for higher education are lower than their urban counterparts.^{29,30} Additionally, recruitment efforts aimed at students in regional colleges and other universities in the

Table 4. Significant Differences in Job Decisions of Pharmacy Graduates by Location Type, N = 103

Factor	Location Type ^a	Mean (95% CI)	Result ^b (Omnibus and Pairwise)
Currently living in or near the community	CMA	2.3 (0.3)	$p = 0.001, \eta^2 = 0.19$ CMA > CA, $p = 0.001$
	CA	0.4 (0.7)	
	RST	1.6 (1.1)	
The community is not too large	CMA	1.1 (0.3)	$p = 0.001, \eta^2 = 0.16$ CMA < CA, $p = 0.009$ CMA < RST, $p = 0.003$
	CA	2.0 (0.7)	
	RST	2.5 (0.6)	
Ability to practice pharmacy as desired	CMA	1.9 (0.2)	$p = 0.008, \eta^2 = 0.09$ CMA < RST, $p = 0.002$ CA < RST, $p = 0.006$
	CA	1.9 (0.6)	
	RST	3.0 (0.0)	
Pace of work on the job	CMA	1.8 (0.2)	$p = 0.015, \eta^2 = 0.08$ CMA < RST, $p = 0.007$ CA < RST, $p = 0.09$
	CA	1.8 (0.5)	
	RST	2.8 (0.4)	
Access to sports and physical activities	CMA	1.4 (0.2)	$p < 0.0005, \eta^2 = 0.18$ CMA < CA, $p < 0.0005$
	CA	2.6 (0.3)	
	RST	2.0 (1.3)	
Access to cultural and social activities	CMA	2.1 (0.2)	$p = 0.02, \eta^2 = 0.08$ CMA > RST, $p = 0.009$
	CA	1.8 (0.5)	
	RST	0.8 (0.8)	
Salary	CMA	1.8 (0.2)	$p = 0.011, \eta^2 = 0.08$ CMA < CA, $p = 0.003$
	CA	2.6 (0.4)	
	RST	2.0 (0.2)	
Level of debt	CMA	1.2 (0.3)	$p = 0.019, \eta^2 = 0.10$ CMA < CA, $p = 0.005$
	CA	2.2 (0.7)	
	RST	1.3 (0.3)	
Signing bonus, license fees paid, or similar benefits	CMA	1.1 (0.3)	$p = 0.026, \eta^2 = 0.08$ CMA < CA, $p = 0.02$
	CA	1.9 (0.5)	
	RST	1.0 (1.2)	

^a CMA = Census Metropolitan Area; CA = Census Agglomeration; RST = Rural or Small Town.

^b η^2 denotes effect size (0.01 = small, 0.06 = medium, 0.14 = large).

province would be worth considering in attempts to redress existing geographic imbalances. For example, Victoria, located on Vancouver Island, is the second largest CMA in the province, with 8.4% of the provincial population, yet only 3.9% of the study participants were from Victoria.²⁴ Youth living in Victoria and attending the University of Victoria have access to many programs, and may not be aware of or motivated to pursue a program like pharmacy that necessitates moving to Vancouver to attend the University of British Columbia. Thus, it might be worth considering expanding the pharmacy program through the creation of satellite campuses at universities located in remote communities, as has been done in the University's medical program.

Also, given this study's findings on the importance of work conditions, such as the ability to practice pharmacy in the manner desired, and long-term career plans, the school might consider adding its voice to those calling

for expansion in the scope of pharmacy practice. The abilities of many pharmacists are underutilized, which may lead to dissatisfaction with the job. Employers might also consider these factors in their own recruitment efforts to attract pharmacy graduates to rural and remote communities. They also might take advantage of the findings that those taking jobs in CAs were more strongly influenced than others by financial factors, including anticipated salary, monetary benefits such as signing bonuses, debt load, and access to sports and physical activities; while those taking jobs in RSTs were more strongly influenced than others by the ability to practice pharmacy in the manner desired, and by the pace of work they anticipated. In contrast, those taking jobs in CMAs were more strongly influenced than others by currently living in or near the community where they intended to work, and access to cultural, entertainment, and social activities. Expectations for such strategies should be tempered,

however, by the reality that net migration is occurring from smaller to larger communities, and from all areas of the province into Metro Vancouver.

The location of pharmacy practice experiences had little influence on job location decisions, suggesting that the requirement for all students to complete at least 1 practice experience outside Metro Vancouver was not helpful in addressing the maldistribution of pharmacists. However, the requirement might provide exposure to a particular management style or clinical activity which could influence the job location decision; thus, the type of pharmacy practice rather than the location may explain respondents reporting that an experiential course location strongly influenced a job location decision in a different community.

This study had some limitations related to methodology. It is possible that the students in the study were atypical, or that the job market they were entering was unusual in terms of where jobs were available. Few of the students were taking jobs in rural and remote areas, limiting the power of the study. Accordingly, the results have been applied with caution to the formulation of recommendations for admission and recruitment practices. Also, demographic findings were deemed unremarkable and have not been considered in these recommendations.

CONCLUSIONS

This study provided useful information about where pharmacy graduates intend to take their first job and why. A comparison of hometown and job location showed a pattern of migration from smaller to larger communities. Nevertheless, more than half of those planning to take jobs in rural and remote communities grew up in or near the community. This finding supports the admission strategy of using hometown location to address pharmacist shortages in rural and remote communities.

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