

Current Work Locations and Reasons for Job Choice of Graduates of Memorial University School of Pharmacy

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Background

- The future of pharmacy in Canada is evolving
- Reforms in the health care system are recognizing the expanded role of the pharmacist¹
- Drugs are a significant health expenditure in the Canadian health care system
 - Prescription drugs cost \$18 billion in 2004, \$29.8 billion in 2008²

1. Taskforce on a Blueprint for Pharmacy, 2008
2. CIHI, Drug Expenditure in Canada 1985-2008

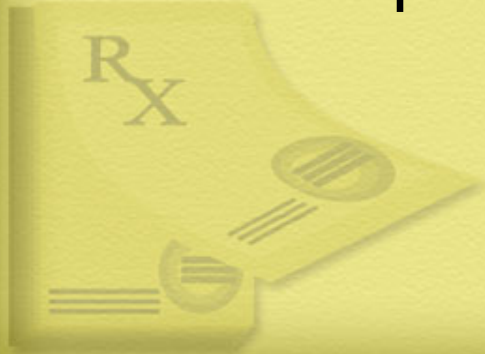
Background

- Current pharmacy human resources research in Canada examines aggregate national data¹
- Published surveys examining reasons for job choice or job change primarily US based
- Research lacking on Memorial pharmacy graduates

1. CIHI, Workforce Trends of Pharmacists for Selected Provinces and Territories in Canada, 2006

Purpose

- For graduates of Memorial University School of Pharmacy to determine:
 - The proportion of graduates working in pharmacy
 - The proportion of graduates working in NL
 - Factors influencing job choice
 - The predictors of working in NL



Methods

- Self-administered mailed survey of graduates between 1990 and 2007 with valid addresses (466/591, 78.8%)
- Data collected included:
 - demographic and job characteristics
 - ranking of importance of factors influencing their current job choice
 - Consideration of moving to or away from NL for a pharmacy job

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Methods - analysis

- Frequencies, mean \pm sd for demographic and job characteristics
- Chi-square and ANOVA for comparison of pharmacists working in and outside NL
- Multiple logistic regression to determine predictors of working in NL



Results

- Response rate – 300/466 (64.5%)
- 290/300 (96.7%) working in pharmacy
 - Subsequent career was medicine for 7 of 10
- 204/290 (70.3%) working in NL
 - 86/290 (29.7%) working outside NL, primarily in Canada

Demographics (n=290)

- Female: 61%
- Mean age: 34 yrs
- Had a rural background: 52%
- From NL: 86%
- Additional education: 9%
- Representation from all years of graduation

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Job Characteristics (n=290)

- Working in a rural setting: 32%
- Practicing in community pharmacy: 74%
- Full time job: 94%
- Worked for ≥ 3 employers since graduation: 41%
- Working as a pharmacist for other employers in addition to their primary job: 23%.

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Factors for choosing current job

- Top four reasons ranked as “important” for choosing current job:
 - Working conditions (99%)
 - Job benefits (97%)
 - Level of pay (97%)
 - Hours of work (96%)



Comparison of Respondents Based on Work Location (n=290)

Characteristic	Outside NL N=86	In NL N=204	p value
Age, mean (sd)	32.93(5.07)	34.7(6.23)	0.021
From NL n (%)			<0.001
No	36 (42.4)	4(2.0)	
Yes	49 (57.6)	193 (98.0)	
Yrs with current employer, mean(sd)	4.67 (4.01)	6.32 (4.56)	0.004
Income (per year)			<0.001
≤70 000	5 (5.9)	64 (31.4)	
> 70 000	80 (95.1)	140 (68.6)	
Job opportunity for spouse/partner			0.017
Not Important n(%)	39 (45.3)	123 (60.6)	
Important n(%)	47 (54.7)	80 (39.4)	

Predictors of working in or outside NL (n=290)

Variable	Odds ratio	95% Confidence interval	p value
From NL			<0.001
No	1.00	-	
Yes	32.84	10.63 – 101.51	
Income			<0.001
>\$70 000	1.00	-	
≤ \$70 000	7.06	2.40 – 20.77	

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Pharmacists wanting to return to NL

- 18/86 (20.9%) indicated they were considering return to NL to work in pharmacy
- Level of remuneration most important factor influencing their decision



Predictors of pharmacists wanting to return to NL (n=86)

Variable	Odds ratio	95% Confidence interval	p value
From NL			0.004
No	1.00	-	
Yes	23.60	2.74 – 203.11	
Age	0.77	0.65 – 0.90	0.001

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Pharmacists wanting to leave NL

- 24/204 (11.8%) of pharmacists indicated their consideration of leaving NL to work in pharmacy
- Level of remuneration most important factor influencing their decision



Predictors of pharmacists wanting to leave NL (n=204)

Variable	Odds ratio	95% Confidence interval	p value
From NL			0.022
No	1.00	-	
Yes	0.08	0.010 – 0.703	
Sex			0.006
Male	1.00	-	
Female	0.26	0.102 – 0.683	

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Limitations

- Cross sectional survey
- Addresses not available for 21%
- Difference in response rates
 - 53.2% outside NL; 70.8% in NL
- Recall bias
- All work locations (hospital, community, academic, etc) considered together

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Conclusions

- Memorial's School of Pharmacy contributing to the pharmacy workforce in NL
 - Two-thirds of respondents working in NL
 - About half of all NL pharmacists from Memorial
- NL retention rate may be improved by:
 - Increasing seats for NL students
 - Improving remuneration / incentives



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