

Education and Research

Nancy Roberts

The 2003/04 survey captured student education and research information that had not been reported since 1999/2000.

Student Days

- Student training clearly remained a high priority in most hospital pharmacy departments, with 83% of respondents reporting that training was provided for undergraduate student pharmacists in 2003/04 (Table I-1)
- Similarly, 84% of respondents reported training was provided for student technicians. This high level of involvement in technician training reflects the important and expanding role of pharmacy technicians in hospitals.
- Nearly a quarter of respondents (26%) indicated that training was provided for pharmacy residents, and 11% reported that training was provided for MSC hospital pharmacy students. Of the 16 respondents reporting that training was provided for MSc Hospital Pharmacy students, 14 were in Quebec, reflecting the Masters-level status of residency training in that province.
- Seventeen percent of respondents reported that training was provided for Pharm D students. More than half of the respondents who reported that training was provided for Pharm D students (13/25) were located in Ontario.
- The average of reported number of student days is summarized in Table I-1. This table reflects the average only in those departments that reported at least one student day for 2003/04.
- The percentage of respondents reporting student days and the average number of student days per student type could not be compared with the 1999/2000 results due to a change in the manner in which data was collected and analyzed in the 2003/04 survey. However, future surveys will provide for more accurate comparison and trending in this area.

Support for Student Education

- Fifty-five percent of respondents who reported that training was provided for student pharmacists reported that a stipend was received for training from a university or training organization.
- Provision of a stipend for training of Pharm D students was also relatively widespread, with 40% of the respondents who reported that training was provided for Pharm D students indicating that a stipend was received.
- Sixteen percent (6/38) of the respondents who reported that training was provided for pharmacy residents and 19% (3/16) of the respondents who reported that training was provided for MSc Pharmacy students indicated that a stipend was received for training.
- Twenty-two percent of respondents who reported that training was provided for student technicians reported that a stipend was received.
- The percentage of respondents reporting that a stipend was received to compensate for the training of students could not be compared with the 1999/2000 results due to a change in the manner in which data was collected and analyzed in the 2003/04 survey. However, future surveys will provide for more accurate comparison and trending in this area.

- The percentage of sites reporting that a university supported positions in the pharmacy department to provide dedicated time for student training decreased from 14% (n=16) in 1999/2000 to 4% (n=6) in 2003/04. The most significant decrease was reported in teaching sites, down to 7% in 2003/04 from 26% in 1999/2000.
- Overall, the average of reported number of FTEs supporting student training (1.2, n=4) remained similar to 1999/2000 (1.1 FTEs, n=16).

Research

- The percentage of sites reporting that original research was conducted decreased to 35% from 43% in 1999/2000, with the most significant decrease reported by 200-500 bed sites, from 51% to 26%.
- The average of reported number of active projects in hospitals reporting that pharmacy staff conducted research decreased from 5.9 in 1999/2000, to 4.9 in 2003/04. The largest variance was in sites with more than 500 beds, where the average reduced to 6.7 projects from 10.6 projects conducted in 1999/2000. This reduction may be related to the overall shortage of pharmacists, the 13.8% vacancy rate for residency positions and the reduction in teaching activity, as reported in the Human Resources chapter.
- The average of reported number of peer reviewed papers authored by staff was 2.6, a slight increase from 1999/2000 when the average of reported peer reviewed papers published or accepted for publication was 2.4. The reported level of publication was much greater in teaching hospitals (6.1) than non-teaching hospitals (0.5).

Table I-1. Education and Research 2003/04

Hospitals (n=)	All (144)	Bed Size			Teaching Status	
		100-200 (38)	201-500 (68)	>500 (38)	Yes (56)	No (88)
Respondents reporting that training provided for						
Student pharmacists (undergrad)	83%	71%	84%	95%	96%	75%
Pharmacy residents	26%	8%	19%	58%	57%	7%
MSc hospital pharmacy students	11%	3%	9%	24%	29%	-
Pharm D students	17%	3%	13%	39%	38%	5%
Student Technicians	84%	74%	88%	87%	95%	77%
Average Number of student days for						
Student pharmacists (undergrad) (n=117)	228	74	153	474	404	87
Pharmacy residents (n=34)	411	32	186	613	486	59
MSc hospital pharmacy students (n=13)	489	60	448	603	489	.
Pharm D students (n=24)	82	90	92	76	87	60
Student Technicians (n=112)	95	51	70	188	124	75
Stipend received for training:						
Student pharmacists (undergrad) (n=120)	55%	63%	51%	56%	63%	48%
Pharmacy residents (n=38)	16%	-	15%	18%	13%	33%
MSc hospital pharmacy students (n=16)	19%	-	33%	11%	19%	-
Pharm D students (n=25)	40%	-	67%	27%	38%	50%
Student Technicians (n=121)	22%	21%	23%	21%	28%	18%
University supports positions within department to provide dedicated time for student training						
Number FTE's (n= 6)	4%	3%	4%	5%	7%	2%
	1.2 (4)	1.0 (1)	0.3 (2)	3.0 (1)	1.5 (3)	0.1 (1)
% Pharmacy staff conducting original research						
Number of active projects (n= 50)	35%	21%	26%	63%	70%	13%
Number of peer reviewed papers authored by staff (n=144)	4.9	2.4	3.9	6.7	5.8	1.9
	2.6	0.4	2.7	4.7	6.1	0.5