Scholarship in Residency: Invoking Change in the Era of Competency-Based Medical Education

The current research literature suggests that some gender imbalances prevail within postgraduate medical education. Specifically, trainees interested in research continue to be predominantly male.¹ This academic gender imbalance is reflected by a significant lag, and in some specialties, a decline in female senior authors compared to their male counterparts.² We hypothesize that the implementation of a writing mentorship program for female residents is a novel strategy to assist in creating and publishing their academic work. Such an approach could assist resident physicians in becoming lifelong learners, educators, and scholars.

A resident mentoring program for academic writing was piloted at McMaster University in Canada to determine whether it would influence the academic productivity of female psychiatry residents, as measured by number of publications. The McMaster postgraduate psychiatry training program is a 5-year program, and scholarly publication is not a current requirement. The number of all resident publications in peer-reviewed journals was measured over a 3-year period, predating and postdating implementation of a scholarly mentorship program for writing that has been offered on a voluntary basis to third-year female residents as of August 2011. In this program, interested participants ($n = 5$) were consecutively assigned to the same female faculty mentor, who

assisted in the residents' creation and submission of manuscripts to peer-reviewed journals. All participants were successful in generating multiple peer-reviewed publications. Since the implementation of the mentorship program, female-mentored trainees authored approximately two-thirds ($n = 9$) of all resident publications ($n = 15$), with 7 of 10 total projects with mentored participants as first author.

As shown in the TABLE, shifting trends toward increasing numbers of publications by female residents, as well as women in the first authorship role, compared to their male peers were noted with the addition of a structured mentorship program for women. Comparatively, downward trends were seen in male peers.

Effective scientific communication and dissemination of research findings are key skills for a physician. Yet there is rarely formal instruction offered in medical writing, nor are scholarship opportunities explicitly provided to residents, unless they are in a dedicated research track. In Canada, the Royal College Competence by Design initiative is being implemented in specialties over the next 5 years to support competency-based medical education on a national level.³ In this personalized, outcomes-driven educational model, residents will be required to actively assimilate the necessary knowledge and skills at each stage of training and career development. A writing mentorship program supports the development of numerous core competencies outlined in competency-based medical education. In addition to developing written communication skills, academic writing requires residents to collaborate with co-authors, and to professionally interact with editors and stakeholders as they work toward publication.

While our program was aimed at female trainees, this type of academic writing mentorship could benefit the scholarly productivity of *all* residents. Residency programs should make academic productivity a curricular goal, with a stance of offering multiple opportunities for residents to generate academic products. Although there are limitations to any interpretations

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TABLE

Total Number of Published Residents and Scholarly Productivity by Sex and Academic Year Group

2008–2011 Academic Years				2011–2014 Academic Years			
	Published Residents	Publications	First Authorship Resident Publications		Published Residents	Publications	First Authorship Resident Publications
Male ($n = 19$), No. (%)	2 (10)	3 (16)	3 (16)	Male ($n = 20$), No. (%)	1 (5)	1 (5)	0 (0)
Female ($n = 67$), No. (%)	7 (10)	8 (12)	2 (3)	Female ($n = 67$), No. (%)	10 (15)	14 (21)	10 (15)

deriving from a study limited to 1 department at 1 institution, it raises questions about the importance of formal training to promote scholarship within residency programs. Future studies are needed to explore the long-term impact of scholarly mentorship on residents of both sexes and across various specialties.

Jessica E. Wasserman, MD

Psychiatry Resident, Department of Psychiatry and Behavioural Neurosciences, Michael G. DeGroote School of Medicine, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada

Ana Hategan, MD, FRCPC

Associate Clinical Professor, Department of Psychiatry and Behavioural Neurosciences, Michael G. DeGroote School of Medicine, Faculty of Health Sciences, McMaster University

Karen Saperson, MBChB, FRCPC

Associate Professor and Associate Chair of Education, Department of Psychiatry and Behavioural Neurosciences, and Academic Head of Division of Geriatric Psychiatry, Michael G. DeGroote School of Medicine, Faculty of Health Sciences, McMaster University

Meghan McConnell, PhD

Assistant Professor, Program for Educational Research and Development, McMaster University

Sheila Harms, MD, FRCPC

Assistant Professor and Postgraduate Psychiatry Training Program Director, Department of Psychiatry and Behavioral Neurosciences, Michael G. DeGroote School of Medicine, Faculty of Health Sciences, McMaster University

References

1. Silberman EK, Belitsky R, Bernstein CA, Cabaniss DL, Crisp-Han H, Dickstein LJ, et al. Recruiting researchers in psychiatry: the influence of residency vs. early motivation. *Acad Psychiatry*. 2012;36(2):85–90.
2. Sidhu R, Rajashekhar P, Lavin VL, Parry J, Attwood J, Holdcroft A, et al. The gender imbalance in academic medicine: a study of female authorship in the United Kingdom. *J R Soc Med*. 2009;102(8):337–342.
3. Royal College of Physicians and Surgeons of Canada. CanMEDs 2015. <http://www.royalcollege.ca/portal/page/portal/rc/canmeds/canmeds2015>. Accessed February 2, 2015.