



Filling the Gap in Geriatric Psychiatry Education for Medical Students: Development of the ADMSEP Annotated Bibliography of Web-Based Resources on Geriatric Mental Health for Medical Student Education

Mary C. Blazek¹ · Deborah B. Wagenaar² · William B. Brooks³ · Susan W. Lehmann⁴ · Dennis M. Popeo⁵ · Peter Holland⁶ · Kirsten M. Wilkins⁷

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The percentage of older adults in the USA continues to increase, and the number of older adults needing mental health care is growing. At the same time, fewer psychiatrists are entering the field of geriatric psychiatry. The gap between patient need and the number of geriatric mental health specialists is widening. The 2012 Institute of Medicine report “The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands?” predicts that most geriatric mental health care will be delivered by non-specialists. Therefore, all medical students, regardless of choice of field, will need to be competent and comfortable assessing the mental health needs of older adults [1].

Many academic institutions lack adequate faculty or resources to provide education about geriatric mental health to medical students. A 2015 survey of psychiatry clerkship directors in the USA revealed that 13% of medical schools responding lacked even a single geriatric psychiatrist on their faculty and 21% lacked any preclinical or clinical time dedicated to geriatric psychiatry [2]. The 17 Canadian medical

schools more consistently provide exposure to geriatric psychiatry, but 12 still lack a clinical component in geriatric psychiatry during their psychiatry clerkships [3].

Online interactive educational resources can fill this gap. Web-based resources can provide instructional materials for in-person experiences, such as team-based learning. Additionally, when instructors or time are limited, web-based resources can provide online modules that do not require in-person real-time instruction. These resources, once created, can be widely disseminated or implemented for various educational purposes [4]. The Association of Directors of Medical Student Education in Psychiatry (ADMSEP) created a Geriatric Psychiatry Task Force charged with developing an annotated bibliography of web-based resources to support medical student education related to geriatric mental health with one-stop access to peer-reviewed online learning objects. The task force comprised faculty, all of the rank Associate Professor, from The University of Michigan (MCB), Michigan State University (DBW), South Alabama (WBB), Johns Hopkins (SWL), New York University (DMP), Florida Atlantic University Schools of Medicine (PH), and Yale University School of Medicine (KMW) who met in person and via a series of scheduled conference calls in 2016 to 2018. This organizational statement describes the process of the development of the bibliography.

✉ Mary C. Blazek
mblazek@med.umich.edu

- ¹ University of Michigan Medical School, Ann Arbor, MI, USA
- ² Michigan State University Colleges of Human and Osteopathic Medicine, East Lansing, MI, USA
- ³ University of South Alabama College of Medicine, Mobile, AL, USA
- ⁴ The Johns Hopkins University School of Medicine, Baltimore, MD, USA
- ⁵ New York University Grossman School of Medicine, New York, NY, USA
- ⁶ Florida Atlantic University Charles E. Schmidt College of Medicine, Boca Raton, FL, USA
- ⁷ Yale University School of Medicine, New Haven, CT, USA

Development of the Bibliography

The development of the bibliography occurred in two stages. In the first stage, an expert consensus panel (MCB, DBW, WBB, SWL, DMP, PH, and KMW) developed inclusion criteria and an organizational framework and critically reviewed online repositories of educational resources. In the second stage, a pilot version of the bibliography was reviewed

by ADMSEP members for wider input of educational value and accessibility.

Stage 1: Development of Inclusion Criteria and Review of Online Educational Resources

Criteria for inclusion in the bibliography required the resource to be peer reviewed (i.e., ensured by a scholarly body as being of high educational quality), learner centered (i.e., learners are expected to be active participants responsible for their own learning), and interactive (i.e., learners actively engage with teachers, peers, or a virtual learning interface). To emphasize active learning, passive learning modalities such as articles, books, and PowerPoint presentations (whether narrated or not) were excluded. American Association for Geriatric Psychiatry (AAGP) Geriatric Mental Health Learning Objectives for Medical Students delineates the knowledge, skills, and attitudes regarding geriatric mental health that all medical students should learn, in six key domains such as normal aging, mental health assessment of the geriatric patient, psychopharmacology, delirium, depression, and dementia [5]. These learning objectives provided a framework to organize resources for the bibliography. Resources were also linked to the ADMSEP Key Diagnoses, Learning Goals, and Milestones for Psychiatry in Undergraduate Medical Education [6]. Two or more taskforce members reviewed every resource. The review process revealed that some resources encompassed multiple domains of geriatric mental health and others targeted faculty development. The categories of overview and faculty development were added.

Task force members scoured three online repositories of educational resources: MedEdPORTAL, the Portal of Geriatrics On-line Education (POGOe), and the ADMSEP Clinical Simulation Initiative (CSI) modules, using as search terms “geriatric psychiatry,” “geriatric mental health,” and the six domains of the AAGP Geriatric Psychiatry Learning Objectives. MedEdPORTAL describes itself as “a MEDLINE-indexed, open-access journal of teaching and learning resources in the health professions published by the Association of American Medical Colleges (AAMC), in partnership with the American Dental Education Association [7].” First published in 2005, it had over 2000 materials as of January 2016. POGO-e is a web-based clearinghouse for geriatric educational products developed with the support of the Donald W. Reynolds Foundation, also supported by the John A. Hartford Foundation, the Department of Veterans Affairs, and others [8]. There were 795 materials on POGOe as of 2012; but not all are peer reviewed. Three of the resources originally available on POGOe were

developed as Web-GEMS, a 26 module collection of virtual cases about geriatric topics. In 2016, the Web-GEMS collection was moved to the website of Aquifer, a non-profit educational organization which requires paid institutional membership [9]. Hence, they are no longer available free of charge. The series of the ADMSEP CSI modules are 14 online interactive modules developed by the ADMSEP CSI Taskforce to provide free, online curricular resources for psychiatric medical student education available worldwide [10].

For each resource entry, task force members provided an annotation which included a description of content and format, suggestions for effective timing and location within curricula, and recommendations and comments regarding implementation. Each resource was also linked to the specific learning objectives outlined within the resource, as well as the relevant ADMSEP Psychiatry Milestones and AAGP Geriatric Psychiatry Learning Objectives.

Stage 2: Review and Solicitation of Feedback from ADMSEP Members

The task force presented a pilot version of the bibliography at the ADMSEP Annual Meeting in June 2018. The task force solicited feedback from ADMSEP members by using a case-based “scavenger hunt” to prompt exploration of and foster familiarity with the bibliography. Nine educational case vignettes spanned a broad range of medical education contexts, including preclinical, clerkship, and elective settings. An example from the educational case vignettes follows:

You are newly appointed to the medical school’s pre-clinical curriculum committee. The current psychiatry course is traditional lecture format. You’ve been assigned to find active learning exercises that will help students learn more about dementia. What materials from the bibliography could you incorporate into a new unit on dementia?

Ten psychiatry medical educators interacted with the bibliography to locate topic-specific resources in response to their assigned vignettes. The group, comprising 4 clerkship directors, 1 associate clerkship director, 1 educator consultant, 3 lecturers, and 1 director of medical student education in psychiatry, completed a brief anonymous survey including 5 Likert-scale questions and a section for free response. Regarding the bibliography, 70% agreed it was easy to navigate, and 100% agreed it would be useful in curriculum development. Regarding the resources within the bibliography, 90% agreed they would be useful to supplement their institution’s current curriculum. Sixty percent agreed that inclusion of ADMSEP Milestones and AAGP Learning Objectives was

useful, while 80% agreed that inclusion of individual resource learning objectives was useful.

As qualitative feedback, participants described the bibliography as “comprehensive,” “an inspiration,” and “an asset and a time saver.” Others expressed a desire to emulate the process for other subspecialties of psychiatry. Responses to requests for ways to improve the bibliography included adding a search function and a filter function. This feedback from ADMSEP members informed further revision of the bibliography.

Description of the Bibliography

The online annotated bibliography is organized under 8 headings: single session comprehensive overview, normal aging, geriatric mental health assessment, psychopharmacology, dementia, delirium, depression, and faculty development [11]. It contains 20 unique entries, some of which fit into more than one domain. All entries include descriptions of the format and content of the resource, recommendations for placement in the curriculum, and hyperlinks to the resource. To assist in curricular mapping, dropdown boxes reveal related AAGP Learning Objectives, the ADMSEP Milestones, and the specific learning objectives for each individual resource.

Conclusions and Future Directions

The ADMSEP Mission Statement espouses dedication to excellence in medical student education in behavioral health and psychiatry, using best pedagogical practices [12]. The Geriatric Psychiatry Taskforce is one in a series of workgroups created, first to develop milestones for medical student curricula and then to provide peer-reviewed resources to meet those milestones. As the ratio of geriatric mental health specialists to the growing number of older adults in our population shrinks, so too does the availability of those specialists to provide time and effort to undergraduate medical education. All medical students must be familiar and comfortable with geriatric psychiatry principles and knowledge, but non-specialist educators might be called to organize and deliver this content. This annotated bibliography provides one-stop shopping for curricular developers seeking to meet milestones and learning objectives with resources that fill gaps on the critical topic of geriatric psychiatry and behavioral health.

The fact that only 20 resources met the criteria of this project, out of the 3000 plus modules listed across the three online repositories, speaks to the woeful shortage of peer-reviewed, learner-centered, active learning educational materials available on this critical topic. Interested educators should be

encouraged to create more such offerings, to expand and enrich opportunities for pedagogically informed active learning on new content and to reinforce existing topics.

Although a trial of the bibliography was available to ADMSEP members at an annual meeting, the number of educators who participated in the pilot was limited. The actual practicality and usefulness of the bibliography will require time for real-world implementation and feedback from a variety of educational professionals who may use this resource. We hope that educators will explore the resources and use them as published or revise components of the materials to incorporate into their own purposes. The authors plan to continue to curate the bibliography, adding new resources as they become available. Feedback from users will continue to be helpful in informing future updates.

Finally, as ADMSEP members and other educators utilize the bibliography and its resources and find them effective, the process of developing the bibliography can be replicated to develop similar bibliographies in other subspecialties of psychiatry, including child and adolescent psychiatry, forensic psychiatry, addiction, consultation liaison, etc.

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Compliance with Ethical Standards

Disclosures On behalf of all the authors, the corresponding author reports that there are no conflicts of interest to disclose.

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