Integrative Review

Mentorship Landscape and Common Practices in an Academic Pharmacy Association

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**ABSTRACT**

**Objectives:** To explore the landscape of mentorship within professional associations in pharmacy academia, including reviewing available literature and describing currently available programs within the American Association of Colleges of Pharmacy, and recommend key considerations for the development of mentorship programs within professional associations.

**Findings:** A literature review of mentorship programs within professional associations for pharmacy academics was conducted, with a total of 5 articles identified and summarized. Additionally, a survey was conducted to determine the landscape of available mentorship programs within American Association of Colleges of Pharmacy affinity groups to capture unpublished experiences. Information regarding common characteristics and assessment methods was collected for groups that have mentorship programs, while needs and barriers were collected for those who did not.

**Summary:** Literature, while limited, supports positive perceptions of mentorship programs within professional associations. Based on the responses and working group experience, several recommendations are proposed for mentorship program development, including the need for clearly defined goals, relevant program outcomes, association support to reduce redundancies and promote participation, and, in some cases, implementation of an association-wide program to ensure access to mentorship.

**1. Introduction**

Mentorship involves an exchange between 2 or more individuals with varied levels of experience, where the mentor helps a mentee develop skills and knowledge to advance their career. The benefits of mentorship for faculty members in pharmacy education are widespread, and include improvements in self-perceived abilities across teaching, scholarship, and service activities; achievement of career goals; and increased job satisfaction, career commitment, productivity, retention, and career advancement. Additionally, mentorship promotes an environment of collaboration whereby support and resources are shared. Beyond professional growth, mentorship has also been recognized to positively influence personal well-being. These benefits extend across and affect mentors, mentees, and institutions. Because

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mentors play such an essential role in pharmacy education, to assist in the development of faculty members both personally and professionally, the Accreditation Council for Pharmacy Education standards require each school to have a sufficient number of faculty to address faculty mentoring. Although the value of mentorship is recognized, it must be noted that relatively few studies in academic pharmacy have evaluated outcomes of mentorship programs.

Some literature on mentorship exists for other health professions. Publication of mentorship programs within the academic medicine literature describes institution-specific programs, which vary greatly in design but demonstrate ways to boost productivity, secure job opportunities, increase feeling of support, promote familiarity with promotion criteria, and develop young practitioners. The academic nursing literature describes varied mentorship program structures, focuses, and pairings, and has demonstrated positive results for mentees and often mentors in aspects such as increasing scholarly output, student evaluations of teaching, and job satisfaction. Literature regarding mentorship programs within other health care professions is sparse, but a mentorship program for occupational therapy faculty demonstrated that faculty with mentors publish more than those without. In the health professions as a whole, mentorship has been found to increase retention, scholarship, career satisfaction, and self-efficacy of mentees.

Despite the benefits and positive attitudes toward mentorship, health sciences faculty often report not having a mentor. While the reasons for the lack of mentorship are likely varied, it is clear that not all faculty are receiving adequate mentorship through their home academic institutions. Thus, there is a potential role for national associations to bridge this important gap. While it is known that mentorship programs are offered within local, state, and national professional associations, few resources describe what programs are available. Several articles provide guidance for organizations that wish to initiate a mentorship program or describe mentorship programs in clinically-focused groups but few have focused specifically on professional association-based programs for health sciences faculty. In academic medicine, a professional pediatric rheumatology association implemented an association-wide mentorship program that included both fellows and junior faculty who could serve as mentors or mentees. While benefits were observed in a number of areas, including career development, connection to community, work-life balance, and scholarship, junior faculty participation was lower than that of fellows, resulting in a nonsignificant trend toward improvement in satisfaction of junior faculty mentees; however, the population sampled was small. Subsequently, researchers conducted surveys and focus groups of adult rheumatologists within a professional association to explore a mentorship program targeting that group. Respondents found that such a program should focus on career development, goal setting, and building a professional network, and the authors developed a framework for a program to address the key factors.

Within pharmacy academia, one large association caters to a variety of disciplines commonly housed within colleges/schools of pharmacy. This brings together varied groups of members, including practicing clinicians, administrators, medical librarians, pharmacologists, chemists, and more. This association, the American Association of Colleges of Pharmacy (AACP), is made of 30 smaller role- and discipline-based affinity groups, called Councils, Sections, and Special Interest Groups (SIGs), each having their own structure and governance. Mentorship is often discussed at the organizational level of AACP, and it is a clear priority within pharmacy education. Despite this, there is neither a central repository of available mentorship programs nor guidance for developing and maintaining programs within the association. Two association-appointed working groups were tasked with exploring the topic of mentorship on the basis of their experience in this area. Upon collaborative discussion, it became clear that there is a paucity of accessible information in the area of pharmacy education association-sponsored mentorship programs. Thus, the objective of this review is to:

2. Review of the Literature

2.1. Methods

A literature search was conducted in PubMed and ERIC (Education Resources Information Center) using various combinations of the following terms for articles published before September 2022: “Professional Organization” (medical subject heading [MeSH]), “Pharmaceutical Societies” (MeSH), “Mentors” (MeSH), “Mentoring” (MeSH), “Faculty, Pharmacy” (MeSH), “Education, Pharmacy” (MeSH), and “Pharmacy” (MeSH). Additionally, these terms were combined with “American Association of Colleges of Pharmacy” (text word). Articles were included if they described the structure or outcomes of a professional association-based faculty mentorship program for pharmacy educators. Reports of programs that involved learners or that were focused on nonfaculty clinicians were excluded.

3. Results

A total of 66 unique results were reviewed, with 3 articles meeting inclusion criteria. Although not identified using the search parameters listed above, 2 additional articles written by coauthors of this study were added for a total of 5 articles. Of the 5 articles identified, only 2 groups within AACP were represented, the Women Faculty SIG and the Pharmacy Practice Section, which will be discussed in turn.

3.1. Women Faculty SIG

The Women Faculty SIG has both small group mentorship and peer mentoring circles available and has published experiences with each. In the small group mentorship program, mentees were assigned mentors on the basis of multiple factors, including preferred mentor, discipline/practice area, type of mentorship desired, and location, into a pair, triad, or tetrads format. Each program cycle is 1 year in length, with flexibility allowed for the mentor pair or group to determine schedule and format of meetings. By 3 months into the program, 89% of mentees who responded to the check-in survey had established routine meetings with their mentor. Survey data in the first year of the program indicated high satisfaction, with 80% of mentees and 86% of mentors reporting that the program met their expectations and needs. Two of the peer mentoring circles have published about their experiences and recommended several strategies for forming and creating successful mentoring groups. Based on the strategy of forming Circles proposed by Lean In, these groups are made of women faculty from a variety of disciplines, titles, and length of time in academic roles. The first group published their experience as a group, including a set of recommendations for similar peer mentoring groups. First, the authors recommended consideration for aspects of group makeup. For example, while group members preferred an all-women model for this type of peer mentorship, they felt that diversity in institution type, academic rank, and roles/responsibilities was important when creating circles. Second, establishing ground rules and shared sense of trust and accountability was deemed as an essential part of the group’s success. Third, the authors advised having a clear logistical plan for assigning facilitation, arranging logistic details, and using technology to aid in connecting across locations and time zones. Overall, the authors
indicated that the program was a rewarding experience, although formal outcomes were not assessed. A second group used the Stanford Model of Professional Fulfillment as a framework on which to base their circle and to address their shared goals of professional and personal development. Examples of discussion topics were noted that aligned with the 3 domains of efficiency of practice, culture of wellness, and personal resilience. No outcomes were assessed, but the authors reported positive effects on well-being and called others to consider forming similar small groups of faculty.

3.2. Pharmacy Practice Section

The Pharmacy Practice Section has a year-long mentorship program that is typically one-on-one in format, although mentors may elect to have 2 mentees. Pairs are matched on the basis of gender preference, practice areas, desired area for mentorship, and location. While not required, meetings were encouraged at least quarterly, and a playbook detailed responsibilities for each party. For example, the mentee was responsible for developing the schedule and setting an agenda of topics to be discussed. Both mentors and mentees within the Pharmacy Practice Section mentorship program had positive feedback regarding the structure and outcomes of mentorship at 6 months into the program.

Most mentors (65%) and mentees (over 80%) reported making progress toward agreed-upon goals, and all mentors responded that they would encourage other senior faculty to participate in the program. The task force responsible for designing and overseeing this program published their experience with implementing this program.

In addition to providing specific details on the makeup of the task force and how work was divided among the group, the authors included a survey to determine time and resources needed to launch the program. Most task force members who responded to the survey spent between 15 and 19 hours on administrative duties related to program development over a 12-month period. Task force members identified literature and documents from other mentorship programs as the 2 most commonly reported resources used to develop the program.

While splitting tasks into subteams was seen as a strength, coordination of timelines among these groups and difficulty in communication were reported as common barriers. The authors identified communication both within the group and with key stakeholders laterally and vertically within the association as being essential for building an efficient, sustainable program.

Limitations of the literature review include the small number of articles and limited outcome data available within pharmacy academic professional associations. In addition, the type of article we were searching for spans biomedical and educational research, and thus, not all articles or journals of interest may be indexed in traditional databases. Keywords used were inconsistent across articles, which made identification of articles difficult. Lastly, it is known that the data are incomplete: there are multiple groups within AACP that have active mentorship programs but have not published on the structure or assessment of their programs. Thus, we identified a need to assess all mentorship programs within the association, including key details on structure and outcomes assessed, including both perception-based and achievement of measurable goals, to give a more complete picture of the current state of mentorship within the association.

4. Case Report on One National Association

To assess the mentorship programs within AACP, all affinity groups within the association were surveyed in spring 2021 to determine their experience with and interest in mentorship programs. Groups with existing mentorship programs were asked to describe the structure of the program, duration, estimated number of participants, methods of recruitment and matching mentors with mentees, and methods of evaluation. Groups without a mentorship program were asked if they had identified a need for such a program and to identify barriers or concerns.

Approximately a third of the affinity groups offered a mentorship program. Some common characteristics were found in the domains of structure, program development, and assessment. For example, a web-based community discussion platform open to all organization members was used to recruit participants for almost all of the programs. There were, however, significant variations between them. The process of assignment of mentors and mentees differed greatly from program to program, where some or all of the following characteristics were used to establish matches: common discipline, mentor expertise/mentee need, mentee preference (as determined through the ranking of potential mentors from a provided list), alignment of professional development goals, random assignment, type of institution, and time zone of participants. The most common primary factor used in establishing matches was the professional development goals of the mentee. Most programs had one-on-one matches, but some also used group matching. If mentee interest exceeded mentor capacity, group matching was frequently used. Conversely, matching of peer mentors provided an avenue for mentors to be involved in the program if there were not enough mentees participating. Most programs were designed for matches to last a single year, while the others did not specify a match duration. Most programs with limited duration allowed the match to extend past the initial term if desired.

Most programs provided training resources and/or support for program participants. These resources included items such as documents describing best practices for establishing a mentor-mentee relationship, and a goals worksheet, and suggested topics for discussion. Programmatic outcomes were assessed by approximately two-thirds of programs, most commonly through participant surveys and/or personal communication. The frequency of these surveys ranged from quarterly to every other year. Finally, the most commonly identified requirements to maintain these programs were organizational support and recommendations of best practices for conducting a mentorship program.

Conversely, two-thirds of the affinity groups have not developed a mentorship program. The survey evaluated interest in starting a program and/or whether barriers existed that had prevented the establishment of a program. Just over half of those that did not currently have a mentorship program indicated that they were considering implementing one, and one section had completed a pilot program in the past. Only 3 indicated that they had completed a needs assessment. Of those 3, one was in the process of developing a program, and another was the section that had completed a pilot program. Most of those that had not performed a needs assessment indicated that they were planning on doing so in the future, especially after completing this survey, and 2 groups indicated that they would conduct a needs assessment if guidance was provided. In addition, there was some interest in including staff participation in a mentorship program, depending on the group. While it was noted by one program that the pandemic introduced challenges in creating a mentorship program, the greatest obstacles reported were lack of time, administrative workload, and lack of experience in such a process. When asked what types of support would be helpful, groups identified multiple items that would be useful (Table 1). In anticipation of some groups not having membership numbers to support an individual program, respondents were asked what format of mentorship would be preferred with the potential development of an association-wide program: the majority (60%) responded that pairs would be preferred to a group mentoring format.

The survey has several limitations. While overall response rate was high (87%), some programs may have been missed because of non-response. Additionally, the survey was sent to each groups’ current chair, with instructions to pass along to the responsible party; however,
Table 1
Types of Support Considered Helpful for Starting a Mentorship Program.

<table>
<thead>
<tr>
<th>Type(s) of support that would be helpful for starting a mentorship program*</th>
<th>Respondentsa N = 17 programs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample intake surveys for recruiting and matching mentors/mentees</td>
<td>17 (100%)</td>
</tr>
<tr>
<td>Guidance document for best practices and program structure</td>
<td>16 (94%)</td>
</tr>
<tr>
<td>Instructions for mentors</td>
<td>15 (88%)</td>
</tr>
<tr>
<td>Templates for organizational material (eg, matching spreadsheets)</td>
<td>14 (82%)</td>
</tr>
<tr>
<td>Sample surveys to assess program effectiveness</td>
<td>11 (65%)</td>
</tr>
<tr>
<td>List of contacts who have created/coordinated other programs</td>
<td>9 (53%)</td>
</tr>
</tbody>
</table>

*Respondents were able to select multiple options; aAffinity groups without mentorship programs included: Technology in Pharmacy Education and Learning, Pharmacogenomics, Directors of Development, Graduate Education, Geriatric Special Interest Group (SIG), Health Care Ethics, Administrative Services Section, Public Health, Social and Administrative Sciences, Substance Use Disorder SIG, Leadership Development SIG, Pediatric Pharmacy, Health Disparities and Cultural Competence SIG, Pharmaceutics, Minority Faculty SIG, Continuing Professional Development, Student Services Personnel.

the authors had no way to verify the accuracy of the data reported. Lastly, this survey only accounts for a single professional association. Other associations with a more focused scope may have different needs.

5. Discussion

Mentorship is a critical aspect of faculty development. To support pharmacy faculty in this manner, several affinity groups within AACP have formal mentorship programs that developed via grassroots efforts. This presents the potential for mentorship opportunities through multiple groups within a single overarching association. However, the variation of the programs and potential overlap in group membership could cause confusion for members. After reviewing the literature and using the affinity group mentorship programs as a case study, there are no clear, evidence-based recommendations for structure and operations of association-based programs. However, on the basis of what information is available, as well as collective experience, this group has suggested several key considerations to support the success of existing or future programs within a professional association as they implement and/or refine mentorship programs for their membership (Table 2).

Regardless of whether a mentorship program has been initiated already within an association group, one of the primary barriers to maintaining or initiating such a program is a need for information on best practices. Especially for associations that have multiple mentorship programs, a central repository of shared resources and program information would help improve program efficiency. This repository should include information to help members access mentorship programs, such as a listing of existing programs with contact information for coordinators of various programs, as well as information for program administration, including sample needs assessments, existing training materials for participants, and program outcome evaluation tools. Literature that provides examples and tools, as well as examples of mission/vision statements from currently available mentorship programs, could help standardize experiences across programs. Because there are multiple methods that can be used to match mentors/mentees, and this element of program execution is time-intensive, a comprehensive list of techniques used should be provided. This could include how matches are selected and information about whether matches are individual or small group matches. It is recommended that mentorship programs be 1 year in duration with the matching process occurring at a time of year that aligns with leadership transitions in the association. Clear expectations about frequency of mentor-mentee contacts should also be provided. Affinity or organizational groups within a national association that do not have a mentorship program and are considering developing a program should be encouraged to evaluate if this is a need for their members and whether appropriate mentor and mentee resources exist within the group to support development of a program. Groups who identify limited need or who have insufficient resources should carefully consider feasibility before creation and implementation of a program.

As a means to ensure that all members have access to mentorship programs, professional associations can also evaluate the potential benefits and feasibility of an interdisciplinary, association-wide mentorship program. These programs can address member needs by providing mentorship outside of home institutions while also opening an avenue to increase organizational engagement of members by allowing individuals to contribute to the association without needing to be elected into a position. An important step in considering a program such as this should be to determine how a mentorship program would support the association’s strategic priorities. In the case of AACP, such an interdisciplinary mentorship program aligns with Strategic Priority 4 (achieving well-being for all) and Priority 5 (strengthening financial health of AACP and our members) by adding a tangible value shown to increase professional satisfaction and sense of belonging, potentially leading to increased recruitment and retention for both mentors and mentees. An interdisciplinary association-wide program would also provide opportunity for those in groups of the association that have smaller memberships or whose membership composition may not support mentor-mentee matches. For example, some groups may be composed predominantly of later-career individuals who may not desire mentorship, or early-career faculty who do not feel prepared to serve as a mentor. A secondary audience could be individuals in groups with existing mentorship programs who may have needs that would be strengthened by cross-disciplinary mentorship options. For example, a possible disconnect between mentor expertise and mentee needs in the

Table 2
Recommendations for Association-Based Mentorship Programs.

<table>
<thead>
<tr>
<th>Program aspect</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission/vision statement</td>
<td>Encourage each program to have a written statement that is available to participants. Share example statements developed by different programs in central repository.</td>
</tr>
<tr>
<td>Process for matching mentees and mentors</td>
<td>Provide detailed description of how matches occur. Examples of how each program matches mentees should be provided.</td>
</tr>
<tr>
<td>Duration of program</td>
<td>One-year duration should be standard, with new matches being released at the time of year that aligns with leadership transitions.</td>
</tr>
<tr>
<td>Frequency of mentor-mentee contact</td>
<td>Explicit communication about how contact will be initiated. Suggest that matches meet at least quarterly.</td>
</tr>
<tr>
<td>Training</td>
<td>Share existing training materials in a central repository. Provide repeated exposure to training materials.</td>
</tr>
<tr>
<td>Program outcomes</td>
<td>Share existing evaluation tools in central repository. Encourage annual evaluation of all programs. Tie outcomes to mission/vision statement and association goals.</td>
</tr>
</tbody>
</table>

area of scholarship or grantsmanship may be addressed by drawing from an interdisciplinary pool of participants.

When considering development of an interdisciplinary association-wide mentorship program or even supporting grassroots mentorship programs developed by groups within the association, there are a number of key considerations. The first is attaining endorsement by the professional association leadership, such as commitment from the board and support for the program(s). Input from leaders on both the mission/vision and relevant outcomes is important for securing adequate organizational and administrative support. Second, a diverse group of association members that represents a broad spectrum of experience and disciplines should be assembled to oversee such a program. If affinity group mentorship programs already exist in the association, it may be best to select the members of this committee from those who have been implementing these programs. If such programs do not already exist, then a variety of viewpoints should be incorporated, such as those from a combination of senior faculty who have served as mentors in other organizations or programs and junior faculty who may have better knowledge of mentorship needs within the association. Third, some staff and resource support may be needed intermittently to assist with certain facets of the program. This may include website design/support, database maintenance, and other administrative aspects. Clear communication between program and association leadership is needed to determine the extent of support available. Fourth, an avenue for organizational communication regarding mentorship is critical. This is needed to maintain and advertise available programs to the professional association’s members so that all who are interested may participate. The communication may take several forms and should include both a process to allow for a single and logical approach for recruitment to all of the association’s mentorship programs at the same time each year, and an online forum for sharing information and eliciting discussion across the membership regarding mentorship. Finally, there is a lack of longitudinal outcomes data from such programs regarding aspects such as faculty output, retention, promotion, etc., which suggests that more research in this area needs to be completed. Clear outcomes should be determined that are tied to the mission/vision of the program(s) and aligned with the priorities of the association. Regular assessment of outcomes by program leadership should help inform changes in the program to best meet the participant and association’s needs.

6. Conclusions

Literature that describes the development and efficacy of pharmacy professional association-based mentorship programs is sparse, although it is clear that programs do exist. Given the gaps in mentorship that affect health care profession faculty and potential benefits for participants, professional associations should consider the accessibility of mentorship to their membership. In addition, outcomes of association-based mentorship programs should be assessed, particularly in relation to achievement of stated program goals, well-being, and retention of membership in the association to further explore the effect of these programs on members.

Within AACP, a number of affinity group mentorship programs have been designed to fulfill the particular mentorship needs of their members. However, these programs also have individualized policies and procedures and a lack of uniformity across the association. Given that little information was broadly available about these programs or similar programs in other professional associations, it is likely that there is an opportunity for increased communication and collaboration in both AACP and other similar associations. It is crucial to support these programs while also providing oversight to reduce redundancies and promote participation. In addition, the development of an association-wide interdisciplinary program could help to fill gaps that currently exist in providing for the various mentorship needs of pharmacy faculty and staff. The recommendations provided in this review serve as a blueprint that may be applied to AACP or other professional associations to create and/or support their members’ mentorship needs.

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Author Contributions

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Declaration of Competing Interest

The authors have no competing interests to declare in relation to this article.

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References
