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**Are Paramedic Program Educators Overworked and Underresourced?**

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A third of educators had no access to peer-reviewed journals.

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Paramedic educators play a critical role in advancing EMS education, with their responsibilities often extending far beyond the classroom. While a 2005 study led by University of Toledo professor Judith Ruple described some characteristics of EMS educators at all levels, no previous studies have specifically explored the work of paramedic educators at a national level.1 In an effort to gain a better understanding of this profession, the National Association of EMS Educators (NAEMSE) teamed up with the National Registry of Emergency Medical Technicians (NREMT) to design a research study that would explore the workload of those who lead initial entry-level paramedic programs, as well as the resources available to them.

**Who Was Included in This Study?**

A random sample of 300 paramedic program directors was selected from the NREMT database to participate in our study. Since we were interested in paramedic educators, we asked all individuals from this sample whether they were responsible for teaching the greatest number of didactic and skills lab hours at their current entry-level paramedic program. If not, we asked the individual to provide contact information for the lead instructor. Only lead instructors were included in our study. We sent an e-mail link to an online survey containing 86 items related to educator workload, resources and demographics to our national sample of paramedic educators. We sent two additional reminder e-mails after the initial invitation to participate in our study.

**What We Found Out About Paramedic Educators**

A total of 68 (22.7%) educators responded to the survey. *Table 1* displays the demographic and work-life characteristics of the educators who responded. Most of the educators who participated in our study were male (76.3%) and the average age was 54 years. Nearly half of paramedic educators had a master’s degree or higher (44.7%), and a little less than one-third (29.0%) said they were currently enrolled in higher education. The majority of educators in our study worked at post-secondary institutions (69.1%) followed by governmental education or medical services, such as fire or EMS agencies (10.3%). Among educators at post-secondary institutions, most worked for two-year colleges (66.0%). Less than one-third of all paramedic educators in our study were tenured or on tenure track (27.8%). Among all programs, the median time to achieve a paramedic certificate was 52 weeks, with a median annual enrollment of 24 students. Paramedic program faculty consisted of a median of two full-time paid educators and four part-time paid educators. A total of 23.7% of educators said at least one volunteer taught in the classroom or skills labs at their program. The student-to-faculty ratio ranged from 1 to 15 students per educator.

**Paramedic Educator Workload**

Educators were assigned to work a median of 25 hours at their paramedic program in a week. However, the results of our study suggest paramedic educators are actually working far more hours than assigned. Educators reported working a median of 57 hours per week, with 56% of those hours spent on instructional tasks. *Figures 1* and *2* display the breakdown of educator workload by instructional and non-instructional tasks. Perhaps not surprisingly, many of the educators who participated in this study were dissatisfied with the current paramedic program workload (40.5%).

**Resources Available to Paramedic Educators**

Nearly a third of paramedic educators depended on volunteer instructors or proctors to run their skills labs (29.0%), and 15.8% had to borrow equipment either sometimes or often. Meanwhile, the vast majority of educators said they received donations from local EMS agencies (97.7%). As for access to other important resources, most paramedic educators did have access to clerical support for tasks such as copying and filing (84.2%), while fewer had access to grant writing (54.1%) and assistance with statistical analyses (46.0%). Only 34.2% of educators had access to a teaching assistant or work study. Overall, 86.8% of educators reported they had adequate non-consumable supplies and all educators had enough consumable supplies. *Figure 3* displays the percentage of educators who had access to selected resources.

Taking a closer look at paramedic program facilities we found nearly all educators had access to wireless Internet in the classroom (94.7%). Although still a majority, fewer had access to learning management systems, such as Blackboard or MyLab (79.0%), or to item analysis software such as Scantron (79.0%). Just over two-thirds of educators had access to peer-reviewed journals (65.8%). *Figure 4* displays the percentage of educators who had access to select resources at their paramedic program facility.

**Limitations of Our Study**

This study has limitations that may impact the generalizability of these results to paramedic educators was randomly selected, the survey response rate was low. We believe this may have been impacted by the recruitment strategy of our study. Since we did not have access to a database of lead paramedic instructors, we utilized an existing national database to contact program directors under the assumption that individuals in this role may also serve as lead instructors. We then depended on program directors who were not responsible for teaching the largest number of hours at their program to provide us with the contact information of the lead instructor. Program directors not serving as lead instructors may have simply opted not to participate in our study. As no demographic information was collected for those who did not respond to the survey, it is unknown whether these individuals differed from those who did respond.

**Why This Study Matters**

As the first national assessment of paramedic educator workload and resources for entry-level paramedic programs, this study provides a baseline description of what paramedic educators do and with what tools. Overall, the findings from this investigation suggest that the majority of paramedic educators worked far more hours than assigned and were dissatisfied with the current program workload

Our findings are similar to those of a 2007 nursing workload study where the average nursing educator worked 56 hours per week, which was above the average of 45 to 55 hours per week of other U.S. college faculty.2 The level of dissatisfaction reported by nursing faculty (44%) also paralleled that of the paramedic educators in our study.

With respect to demographics and work-life characteristics, the percentage of participants in this study who reported having a master’s degree or higher was significantly higher than that reported by Ruple, et al.1 While this might simply speak to a lack of representativeness for our sample, it might also be a result of increased education and preparation requirements associated with paramedic program accreditation.

As for resources, some educators may lack access to vital instructional materials, as slightly more than 15% had to borrow equipment for skills labs. Also, most programs did receive donations from local EMS agencies, which could possibly explain the large proportion of educators who reported having adequate consumable resources. Additionally, some educators reported they lacked instructional support. Although less than 25% of respondents said volunteer educators taught in the classroom or skills labs at their programs, about a third of educators did depend on volunteers to run their skills labs. Undoubtedly, the effort involved in recruiting and coordinating with volunteers requires time and can be stressful for educators. Further, most educators did not have access to a teaching assistant and about 20% lacked access to item analysis software, which has the potential to reduce the amount of time educators spend grading each week.

According to the *EMS Agenda for the Future*, “[academic institutions] should support EMS-interested faculty members ... in conducting credible systems research.”3 However, our study suggests paramedic educators may have limited opportunities to contribute to the body of EMS knowledge as the level of support and time allocated for research-related activities is low. Less than half reported having access to statistical support (46.0%), just over half (54.1%) had grant writing support and only two-thirds (65.8%) had access to peer-reviewed journals. Perhaps not surprisingly, most of the educators who had access to these research-related resources were at post-secondary institutions (76.5%, 90.0% and 88.0% respectively). These findings support results from a study by coauthor Elliot Carhart where most EMS faculty felt they lacked resources needed to conduct research.4 Future initiatives to support educators in contributing to EMS-related research should be undertaken.

Based on our study, paramedic educator workload should be further evaluated and initiatives should be developed to support educators who are bearing an excessive workload or consistently lack access to necessary resources. Future studies should explore the association between paramedic educator workload, job satisfaction and employee turnover.

*Acknowledgments: The authors would like to acknowledge the contributions of Bill Brown, Greg Cliburn, Dr. Heather Davis, Jennifer Eggerichs and Art Hsieh in the development of this survey.*

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