

Fall 2005

## Recruitment and Retention of Emergency Medical Technicians: A Qualitative Study

P. Daniel Patterson

Janice C. Probst

*University of South Carolina - Columbia*, [jprobst@mailbox.sc.edu](mailto:jprobst@mailbox.sc.edu)

Katherine H. Leith

Sara J. Corwin

M. Paige Powell

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### Publication Info

Published in *Journal of Allied Health*, Volume 34, Issue 3, Fall 2005, pages 153-162.

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# ▲ Recruitment and Retention of Emergency Medical Technicians:

## A Qualitative Study

*P. Daniel Patterson, PhD, MPH, EMT-B*

*Janice C. Probst, PhD, MS*

*Katherine H. Leith, PhD, LMSW*

*Sara J. Corwin, PhD, MPH*

*M. Paige Powell, PhD, MHA*

Emergency medical technicians (EMTs) are critical to out-of-hospital care, but maintaining staff can be difficult. The study objective was to identify factors that contribute to recruitment and retention of EMTs and paramedics. Information was drawn from three focus groups of EMT-Basic, EMT-Intermediate, and EMT-Paramedic personnel recruited from participants at an annual conference. Thoughts and feelings of EMTs and paramedics were investigated using eight questions designed to explore entry into emergency medical services, what it is like to be an EMT or paramedic, and the EMT educational process. Data were analyzed at the group level for common themes using NVivo. For a majority of respondents, emergency medical services was not a primary career path. Most respondents entered the industry as an alternate or replacement for a nursing career or as a second career following military medic service. The majority of respondents believed the job was

stressful yet rewarding, and although it negatively affected their personal lives, the occupation gave them a sense of accomplishment and belonging. Respondents expressed a preference for EMT education resulting in college credit or licensure versus professional certification. Job-related stress produced by numerous factors appears to be a likely contributor to low employee retention. Recruitment and retention efforts should address study findings, incorporating key findings into educational, evaluation, and job enhancement programs. *J Allied Health* 2005; 34:153–162.

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**Dr. Patterson** is an Agency for Healthcare Research and Quality/National Research Service Award postdoctoral fellow and is from the Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina; **Dr. Probst** is Director of the South Carolina Rural Health Research Center, Columbia, South Carolina, and Associate Professor in the Department of Health Services Policy and Management, Arnold School of Public Health, University of South Carolina, Columbia, South Carolina; **Dr. Leith** is a Research Associate with the Center for Health Services and Policy Research, Department of Health Services Policy and Management, Arnold School of Public Health, University of South Carolina, Columbia, South Carolina; **Dr. Corwin** is Assistant Professor in the Department of Health Promotion Education and Behavior, Arnold School of Public Health, University of South Carolina, Columbia, South Carolina; and **Dr. Powell** is Assistant Professor, Department of Health Services Administration, University of Alabama at Birmingham, Birmingham, Alabama.

This research was supported in part by a National Research Service Award Post-doctoral Traineeship from the Agency for Healthcare Research and Quality, sponsored by the Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, grant no. T32-HS000032.

Received July 24, 2003; revision accepted August 30, 2004.

Address correspondence and reprint requests to: P. Daniel Patterson, PhD, MPH, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, 725 Martin Luther King Jr. Blvd., CB #7590, Chapel Hill, NC 27599. Tel 919-966-0047; e-mail dpatterson@schsr.unc.edu.

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EMERGENCY MEDICAL SERVICES (EMS) is a vital part of the health care continuum for victims of trauma or sudden debilitating illness. Like many allied health practitioners, emergency medical technicians (EMTs) form the front line of their service. The EMS workforce can often go unnoticed until called upon and thus receives little attention from the public on issues challenging the workforce on a day-to-day basis. An issue of particular significance to the EMS system and one that has received little public attention is recruitment and retention.

In 2001, state EMS directors from across the nation identified difficulties in recruiting and retaining EMS personnel.<sup>1</sup> Barriers to recruitment and retention identified by the U.S. Fire Administration include inadequate emotional support after a critical incident, scheduling conflicts, family commitments, fear of disease spread, and excessive training requirements.<sup>2</sup> Perceived patient abuse of the EMS system has also been identified as a contributor to low retention of EMTs.<sup>3</sup> Although anecdotal evidence and small studies are available, a substantial literature exploring recruitment and retention of EMS personnel does not exist. Such literature, however, does exist in other areas of allied health, where the relationships between job stress and job satisfaction and job turnover in the workplace are well established.<sup>4-6</sup>

The study by Flanagan and Flanagan of correctional nurses, for example, identified a link between job stress and job satisfaction.<sup>5</sup> As perceived stress increased among correctional nurses, reported job satisfaction declined.<sup>5</sup> Other research has identified a relationship between job stress and

job satisfaction with absenteeism, illness, productivity degradation, and turnover.<sup>4,6,7</sup>

Although research has yet to establish similar relationships in EMS, several EMT occupational factors have been identified as sources of high job stress and low job satisfaction.<sup>8-13</sup> Boudreaux et al. found high levels of job-related stress among a sample of EMTs in Louisiana, linking high stress to patient care activities and demanding work schedules.<sup>9,10</sup> According to other EMS researchers, job stress originates from numerous sources<sup>12,14,15</sup> and has been shown to negatively affect employee attitudes and employee/management relationships.<sup>8,11</sup> Job-related stress negatively affects the home life of EMTs and paramedics as well.<sup>8</sup> One study of EMT burnout showed a decrease in employee morale as stress and burnout increased.<sup>16</sup> Years of service are also affected.<sup>14,16</sup>

The EMS career entails high levels of stress and potentially low levels of job satisfaction. A link between job-related stress and EMT recruitment and retention has not yet been quantitatively documented, as it has been in other allied health professions. A connection is likely and as such deserves further investigation. Currently, one major investigative effort is under way, a 10-year longitudinal study of EMT job retention.<sup>17</sup> Excluding this study, little research has examined recruitment and retention of EMTs and what factors may predict entry or exit of the profession. The objective of the current study was to identify subjective factors that contribute to recruitment and retention of EMTs and paramedics, using currently certified EMT-Basic, EMT-Intermediate, and EMT-Paramedic personnel as subjects.

## Methods

The qualitative focus group interview technique was used in this study to obtain the perceptions and opinions of EMTs regarding factors that affect their recruitment and retention. With the focus group approach, a limited number of investigator-designed questions are placed before one or more groups for discussion. The intent is to allow participants' perceptions, beliefs, and concepts surrounding the study questions to emerge from their own experiences, with as little direction from the investigators as possible. A qualitative approach was particularly appropriate for the present study because it allowed for perspectives from small groups to be explored and analyzed in great detail. This approach, rather than a quantitative design, is appropriate when initiating research regarding a group of health professionals for which the knowledge base is not well established.<sup>18</sup> The collection and final interpretation of data take place by emergent design, allowing the researchers to formulate a rich understanding of the phenomenon "as is," as it is present in the natural environment of the research setting.<sup>19</sup>

Focus group interviews have been used in social science research since the 1980s because the technique is exceptionally effective in generating an original explication of individual beliefs and experiences.<sup>20</sup> This is accomplished through "collecting in-depth, qualitative data about indi-

viduals' definitions of problems, opinions and feelings, and meanings associated with various phenomena."<sup>21</sup> Particular advantages of this method relate to the benefits of group interaction in a supportive environment.<sup>22</sup> In fact, a supportive group environment is an essential component of focus group methodology; when participants feel comfortable, attitudes and perceptions from interactions with others develop around a problem, concept, area of interest, or topic of study.<sup>23-25</sup>

## DEVELOPMENT OF FOCUS GROUP QUESTION GUIDE

Focus group questions were designed after a thorough literature review, face-to-face interviews with local EMS providers, and an expert panel review. The literature review entailed a MEDLINE and Web of Science search for pertinent research, expanded through the citations listed in the identified articles. There was no time period restriction on the literature review. Face-to-face interviews with local EMS providers through unstructured dialogue assisted in question development and refinement. A question guide outlining the major question categories was developed following the guidelines provided by Krueger.<sup>26</sup>

Several studies identified through the literature review were particularly useful for the formulation and refinement of specific questions.<sup>8,11,13</sup> Questions were designed to gain information about relationships between (1) career planning and entry into the profession, (2) personal feelings and the work environment, and (3) job stress/job satisfaction and home life. In addition, thoughts and feelings about EMT education were sought from study participants. Information related to EMT education was sought in response to the recent adoption of the National Highway Traffic Safety Administration (NHTSA) curriculum standards for intermediate-level and paramedic-level EMTs by the southeastern state in which the study was conducted. Members of the expert panel and EMS experts consulted before and during the study also expressed concern over EMT education and its potential effects on recruitment and retention. Based on recent educational changes and informal discussions with experts, investigators decided to address EMT education in focus group sessions.

In a series of two reviews, a group of five experts in the fields of EMS, academic health services research, and qualitative investigation were presented a draft of focus group questions and a draft of the question guide. Revisions to the number and structure of questions and question guide were incorporated after each review. The final version contained eight questions, shown in Table 1, and focused on three areas of interest.

## RECRUITMENT OF FOCUS GROUP PARTICIPANTS

Participants for the study were recruited from among EMTs and paramedics attending an annual EMS symposium in a southeastern state in 2003. The symposium is an educational event sponsored by the State Office of EMS, the

state's EMS association, and other interested individuals and organizations (e.g., vendors). Two weeks before the annual symposium, a cover letter explaining the study and its purpose was mailed to a list of EMS agencies obtained from the State Office of EMS. Agencies on the list are EMS and related emergency systems (e.g., fire/rescue squads) known to employ EMT-Basic, EMT-Intermediate, and EMT-Paramedic personnel. Accompanying the cover letter was a flyer advertising the study and informing potential symposium attendees of focus group times and participation incentives. On-site registration was held the day of the study, limiting the number of participants to eight per group.

Because study goals centered on currently certified EMTs and paramedics, group participation was limited to EMT-Basic, EMT-Intermediate, and EMT-Paramedic personnel assumed to be actively using their training to treat patients. Because the literature review had identified conflicts with management as a potential source of dissatisfaction among nonadministrative field medics, state-level administrators and/or medical directors were excluded.<sup>11</sup>

Some background regarding the EMT career in the southeastern state in which this study took place will be helpful for understanding the context of focus group respondents. The Appendix also provides definitions of some of the terms used in this report. EMTs in the state are certified, not licensed. Three levels of certification are available, EMT-Basic, EMT-Intermediate, and EMT-Paramedic. The scope of practice varies by level of certification. EMT-Basic personnel are certified to perform basic emergency services (e.g., splinting), whereas EMT-Paramedic personnel often receive instructions from a physician and function as physician extenders. The state's Division of EMS requires that EMT-Basic personnel complete 140 hours of didactic education and have five patient contacts. Upon receipt of EMT-Basic certification, a person can pursue EMT-Intermediate or EMT-Paramedic certification. Educational and clinical requirements for EMT-Intermediate certification include 64 hours of didactic education and 16 hours of clinical training in addition to EMT-Basic requirements. Beyond EMT-Basic education, requirements for EMT-Paramedic certification include 504 hours of instruction and 520 hours of clinical training. In addition to didactic and clinical training before certification, EMTs of all levels must attend a minimum number of continuing education hours. Although completing the certification process can take anywhere from one to two years (in the case of going from EMT-Basic to EMT-Paramedic), many paramedics lack college educational credits or degrees. Associate degrees in EMS are available, however, from technical and community colleges. In this southeastern state, one such program exists.

Since 1998, all EMTs in the state must pass a nationally recognized certification examination. Continuing education required for maintaining national registry certification varies from 12 hours per year across a two-year period for EMT-Basic personnel to 24 hours per year for EMT-Para-

TABLE 1. Focus Group Question Guide

- 
- |    |   |
|----|---|
| 1. | Tell us who you are, where you work, and what you enjoy most when you are not an EMT.   |
| 2. | How did you get involved with EMS?  |
| 3. | What was it that attracted you to being an EMT?<br><br>PROBE: Think back when you began working in EMS, what was it that attracted you to the profession?   |
| 4. | How do you feel personally about being an EMT?  |
| 5. | What was the educational process like for you?<br><br>PROBE: What was particularly helpful about the educational process for you?<br><br>PROBE: What was frustrating about the educational process for you? |
| 6. | Describe your work environment for me?  |
| 7. | How has your personal life been affected by your job?<br><br>PROBE: Family life, marriage, etc.   |
| 8. | Of all the things we have discussed, which one is most important to you?  |
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medic personnel. Completing continuing education requirements and maintaining certifications are difficult. National standards require nationally certified EMTs to recertify every two years, whereas the state requires EMTs to recertify every three years.

#### DATA COLLECTION

Three focus group sessions were conducted, with sessions lasting no more than 60 minutes. Each session was attended by up to eight participants who were asked to sign an institutional review board–approved consent form and complete a demographic questionnaire before the discussion. The sessions were moderated by one of the study investigators, a researcher with experience in moderating focus group discussions. The principal investigator was also present to take notes and operate taping equipment. The session schedule allowed for enough time between sessions for the moderator and principal investigator to review session data and prepare for subsequent sessions. At the beginning of each session, the moderator and principal investigator introduced themselves and explained the study and the informed consent. They then proceeded with the discussion according to the focus group question guide. At the conclusion of the session, participants were given \$10 for their time.

#### DATA ANALYSIS

As outlined in previous research,<sup>27</sup> study data were analyzed using the process of coding participant responses, placing coded information into categories, and then reducing the number of categories into common themes. The process initially involved transcribing audiotapes and reviewing



session dictation. The session transcripts were then read several times in an effort to uncover natural language statements that conveyed a particular theme. During this initial stage, the researcher's thoughts and opinions regarding possible commonalities and themes were noted in the margins of the transcripts.

During a second stage, transcripts were transferred into the qualitative computer software NUD\*IST Vivo (NVivo).<sup>28</sup> NVivo is a text-based software package that allows for in-depth, detailed analysis of substantial amounts of text. The analysis involved both group and participant-level analyses. Group analysis identifies commonalities across all portions of coded text, resulting in theme development across participants irrespective of individual characteristics (e.g., age). Individual analysis identifies commonalities across all portions of coded text; however, commonalities can be grouped across individual characteristics (e.g., gender), permitting linkage of coded text.

The principal investigator began by developing a preliminary codebook, in the form of a hierarchical structure of themes and related subthemes that were based on marginal notations taken during focus group sessions. Through an iterative process of contemplating, coding, and categorizing study data, the information was distilled and the codebook refined until three overarching themes remained. Confirmability of codebook and theme development was attained by having another investigator repeat codebook development, assigning responses in a similar fashion as done by the principal investigator. Discussion of any differences in opinion followed until agreement was reached regarding code and theme assignment.

## ESTABLISHING STUDY VALIDITY AND RELIABILITY

As previously stated, the goal of the focus group discussion is to develop an in-depth understanding of the meaning a phenomenon has for a group of people as they perceive it according to their contextually bounded realities as a group. Consequently, activities designed to establish the credibility (or validity) and reliability (or dependability) of the data must allow the study participants to take an active part in the process of verifying/falsifying the reality of that phenomenon as interpreted by the researcher. Of the credibility and dependability criteria suggested by Lincoln and Guba,<sup>29</sup> the activities of prolonged engagement, persistent observation, triangulation across sources, and the member check provide the most direct opportunity for such a central role of participants. Prolonged engagement and persistent observation were achieved in this study through the ongoing involvement of the principal investigator with the state's EMS community. He has been actively participating in many of the EMS meetings that occur throughout the state and remains in contact with EMS personnel through professional and personal connections. Triangulation across sources was achieved through the process of the focus group discussion itself, whereby participants were able to respond

to each other's comments, provide feedback and seek clarification for comments, and establish the authenticity of a theme as common for the group.

Although the fourth criterion, the member check, is considered by some to be a crucial activity,<sup>29</sup> it was excluded from the current study. Member checks entail returning the analytic results of a study to the participants for verification, giving them an opportunity to comment on and, if necessary, modify those results. Although advocates of the member check eloquently discuss its merits,<sup>29-32</sup> several issues that make its usefulness as a credibility criterion doubtful must be considered before it is incorporated into a research study. One issue of note, as Cutcliffe and McKenna point out, is determining when exactly credibility has been achieved.<sup>33</sup> Must the data be "checked" with every single participant in the study or with only a proportion of participants? Similarly, must participants agree with all analytic themes developed by the researcher or with only a portion of themes? Trying to answer these questions raises a related issue, namely the inherently positivist nature of the assumption that checking the researcher's account against a fixed truth or reality belonging to the participants can confidently establish credibility.<sup>34</sup> The naturalistic perspective holds that no single, static truth exists; therefore, offering the analytic results to participants for a credibility judgment may lead to disagreements among them or between them and the researcher that are difficult to reconcile.<sup>35</sup>

Some researchers question whether disagreements between the researcher and study participants should be reconciled at all. In conceptual and practical terms, the member check assigns greater analytic authority to participants than to the researcher. Doing so obviates the process of good qualitative research: the synthesis, conceptualization, and abstraction of multiple participant accounts into a researcher interpretation that is not more or less valid but simply different than each individual account.<sup>36,37</sup> Because it is the researcher who possesses the theoretical knowledge, research skills, and a much more complete understanding of the research question itself, he or she therefore must be "in charge, in control, and responsible for the research process and the research product."<sup>36</sup> To that end, the member check was not used in the current study.

## Results

### DESCRIPTION OF THE SAMPLE

A total of 21 persons participated in three focus groups: eight in session 1, seven in session 2, and six in session 3. The majority of participants was male, between the ages of 25 and 34 years, white, and certified as an EMT-Paramedic (Table 2). Most had at least some college in addition to their EMT training, worked more than one job (within and outside EMS), and had more than five years of experience in EMS. A majority of respondents identified the area in which they live and work as rural.

Based on group analyses, three common themes emerged: (1) “EMS is a professional afterthought,” (2) “EMS is an emotional paradox,” and (3) “EMS is an educational black box.”

#### DESCRIPTION OF THEME 1:

##### “EMS IS A PROFESSIONAL AFTERTHOUGHT”

Theme 1, “EMS is a professional afterthought,” reflects the common thread among most respondents that they did not originally plan on becoming an EMT. The theme incorporates three main motivational aspects of respondent’s choices to switch their career paths to EMS. Two of these aspects relate to what can be understood as more altruistic stimuli, whereas the third relates to a more self-serving stimulus. As common throughout all three focus groups, a majority of participants referred to their becoming an EMT as a “change” in their career path. This notion of change suggests that respondents did not choose the EMS career as their original career goal. In fact, they entered into their current career in EMS only after either completing their first career or failing to complete training for another, more attractive profession. Specifically, respondents came to the field of EMS either by way of nursing or military service. Both professions appeared to allow respondents to satisfy their desire to help others or give back to the community in some way, a desire that they were also hoping to satisfy as EMTs. It is noteworthy that most respondents selected the field of EMS as their new career path for one of two opposing reasons. On one hand, they felt great disenchantment with the training toward or with specific aspects of their originally chosen profession. According to them, they eventually recognized that their initial choice had been wrong and that becoming an EMT was their true calling. On the other hand, they felt great accomplishment in their originally chosen profession and were hoping to capture this feeling as an EMT as well. It is possible that respondents used this process of justification to substantiate to others, and to themselves, that a change in their career path was worth it in light of better pay and benefits from other, more lucrative professions.

“I was in the military and was involved there . . . so I just continued on.” . . . “I knew what I wanted to do, I wanted to be a nurse . . . but things did not go as planned.” . . . “When my son was having trouble breathing, that was a sign to get involved with EMS.” . . . “I went to nursing school, but that was way too hard.” . . . “I got into EMS and decided I liked it.”

In the second motivational aspect, respondents identified inspiration from others as an important impetus to enter into the field of EMS. In discussing how prior career choices led to their entry into EMS, a majority of respondents across focus groups identified the influence of important others who were working or had worked as EMTs and who functioned as role models for them. It seems that by

TABLE 2. Demographic Data Summary of Focus Groups

Variable	Frequency	
	No.*	%
Age (yrs)		
18–24	3	14.3
25–34	11	52.3
35–44	5	23.8
45–54	1	4.8
55+	1	4.8
Sex		
Male	12	57.1
Female	9	42.9
Race		
White	17	80.9
Black	4	19.1
Hispanic/other	0	0.0
Level		
EMT-Basic	2	9.5
EMT-Intermediate	2	9.5
EMT-Paramedic	17	80.9
Years worked in EMS		
0–5	7	33.3
6–10	7	33.3
11–15	5	23.8
16–20	0	0.0
21+	2	9.5
Type of service		
County	11	52.3
Fire/rescue	7	33.3
Volunteer	2	9.5
Private	1	4.9
Type of community (living in)		
Urban	9	42.8
Rural	12	57.2
Type of community (working in)		
Urban	7	33.3
Rural	14	66.7
Current no. of jobs		
1	6	28.6
2	8	38.1
3	6	28.6
4	1	4.7
Are all jobs in EMS?		
Yes	11	52.4
No	10	47.6
Education†		
Less than high school + EMT training	0	0.0
High school graduate + EMT training	5	23.8
Some college + EMT training	8	38.1
College graduate + EMT training	7	33.3

\*Total no. = 21.

†One respondent did not identify a level of educational attainment.

observing these role models, respondents again realized that they could satisfy their desire for being involved in their communities and contribute back by becoming an EMT. They frequently cited the “respect” that accompanies a

position of health care provider and that they observed others who were or had been working in the field as a reason for entering the EMS system. Thus, showing concern for their community by way of helping others in medical emergencies and being afforded respect from the community for this concern became, in part, dual justification for respondents to assume an EMS career.

"A relative of mine was a paramedic." . . . " . . . he told me good stories about being an EMT, so I decided to do it." . . . "I decided to give something back, because . . . when I was young, a paramedic saved my life." . . . "It's in my blood to help people . . . when people come up to you and tell you how much they appreciate your helping them . . . that makes so much of a difference; it's very rewarding."

Finally, in the third aspect, respondents recognized that being an EMT or paramedic provides them with an outlet for thrill-seeking behaviors. Clearly, as emergency technicians, respondents are able to satisfy their deeper desires for adventure and excitement in a manner that is respected, even admired, by society. According to respondents, EMTs are called upon to deal with difficult tasks that are often challenging. Doing so skillfully and responsibly is both rewarding and exciting, not only on a professional level but also on a personal level as well.

"I like to be in charge . . . like Moses . . . when you're in the truck and running a CODE 3, people have to respect you and get out of your way." . . . " . . . every call is a personal challenge . . . and that keeps me attracted and excited about EMS."

## DESCRIPTION OF THEME 2:

### "EMS IS AN EMOTIONAL PARADOX"

Theme 2, "EMS is an emotional paradox," reflects the emotional dichotomy respondents experienced as part of being an EMT. For participants, the EMS career appears to provide both intense stress and job-related dissatisfaction with intense professional camaraderie and satisfaction. Expressed feelings of stress as a result of the EMT role were common across all respondents and focus groups. Most felt pulled between their professional obligations for their role as an EMT and their personal obligations for their role as family member. A majority of respondents across all three focus groups were very clear about the intense conflict they experienced when taking home experiences and problems occurring at work. It appears that, although they felt much appreciation from the larger community, respondents did not sense similar approval from their spouses. In fact, most respondents said that they did not wish to communicate with their spouses over job-related events.

"It definitely affects your personal life . . . I'm divorced." . . . "The spouses don't get it . . . they don't understand." . . . "You store away the stress." . . . "You don't have a wind-down period." . . . " . . . it stresses you out . . . it can screw

up your head and your whole day, which directly affects your personal life with your family."

According to the respondents, the intense emotional pressure they experienced from the "encroachment" of their professional role upon their personal role was further compounded by the environmental and situational uncertainties that are inherent in being an EMT. In addition, respondents seemingly did not sense appropriate recognition from their superiors and/or management for the demands of their daily jobs. The occupational requirement of 24-hour readiness, coupled with the lack of educational know-how for dealing with consistent readiness, was also identified and referred to by respondents as a primary source of their job-related stress. Respondents believed low pay and inadequate benefits packages for EMTs inadequately reflect the professional efforts of most EMTs. In addition, inattention and lack of recognition by upper-level administrative and management staff do little to make EMTs feel valued. Rather, rules and regulations, such as stringent workplace protocols, are further sources of job-related dissatisfaction.

"You always have to be ready . . . can't really relax." . . . "No matter what the call is, you're stressed." . . . "Some people just cannot keep up with the stress." . . . "The job is really stressful . . . it's so high with trauma, and many can't deal with the stress too much." . . . "The benefits are not good at all . . . same for the money." . . . "There are always personal and pay problems" . . . "We need more benefits and training so we are not forced to leave the service." . . . "We are what determine if someone lives or dies, therefore we need to be recognized for that and receive better pay." . . . "I hate the pay." . . . "I hate the pay, but love the job." . . . "Most people in our service have left because of the administrative change." . . . "The rules, regulations are biased." . . . "Desk people making the laws and regulations in EMS are stupid." . . . "They don't know anything about what we do."

Despite the many pressures and intense emotional conflict most respondents experienced, they were adamant that being part of the EMS team is akin to being part of an extended family. Most respondents felt understood by their immediate colleagues in ways their spouses and/or superiors could not. They particularly enjoyed the apparent camaraderie that seems common among EMTs and derived great satisfaction from knowing that they truly seem to make a difference in people's lives. In fact, based on respondents' comments, it appears that in a comparison of pros (the opportunity for saving other people's lives and helping the community) and cons (the great marital discord and lack of formal recognition from management), EMTs tend to highlight the pros and accept the cons as an inevitable part of the profession. The role as EMT has become their primary role with which they identify even when not on the job, and the praise they receive from others, such as their patients, is an essential factor in maintaining that role while minimizing other potential roles.

"Everyone gets along well, but we do have our moments." . . . "We are a close and personal group." . . . "We do have times that we get together outside of EMS and they are good." . . . "The camaraderie is outstanding." . . . "Everyone in it is my family . . . I don't have any other real family."

### DESCRIPTION OF THEME 3:

#### "EMS IS AN EDUCATIONAL BLACK BOX"

Theme 3, "EMS is an educational black box," reflects the commonly held opinion among most respondents that the educational process for EMTs and paramedics remains underdeveloped. As respondents pointed out, EMTs are given little formal guidance on how to train to become an EMT, how well training is recognized beyond the field of EMS, and how to maintain an up-to-date skill set. Although some positive changes have been made in educational quality, for example, by offering associate, bachelor's, and advanced degrees in EMS, the EMS educational process generally could be improved if structured so as to lead to college credit. Most respondents voiced their frustration with the general lack of respect for their profession and related it to the general lack of knowledge about what it takes to be an EMT. They agreed that EMS education should result in licensure rather than certification. In fact, according to respondents, the general lack of respect from other allied health professionals may be directly associated with the lack of licensure and/or college credit for EMTs and paramedics.

"Being an EMT is interesting because you do not get all the information about further training." . . . "Nurses get so much more than all of us do because they're licensed and we're certified." . . . "We need a degree in EMS to get respect!" . . . "I'm all for the licensed thing, because I know I can do more than a nurse can." . . . "We need a total professional degree." . . . "Nurses get too much respect versus EMTs." . . . "I would not go through the education again." . . . "I think the associate degree program is much better than the certification programs." . . . "We need a degree in EMS to get respect." . . . "No one wants to enter the profession because you don't get a degree."

According to respondents, another aspect of the educational black box in which EMTs find themselves is the fact that despite the poor recognition of EMT certifications, the educational process to enter the field is quite rigorous and time-consuming. Participant comments suggest that those outside of EMS have little appreciation for the determination and dedication many new EMTs bring to their profession. Learning the ropes is often physically and emotionally draining. In addition, it is an ongoing process due to continuing education and recertification requirements. At the same time, the in-class training may not necessarily reflect the real-life challenges EMTs face on the streets. Indeed, respondents believed that more hands-on activities might make training not only more realistic but ultimately more interesting and enjoyable as well.

"You have no life!" . . . "Your whole life is school, even after you get the certification. . . ." "Paramedic school is awful." . . . "Very time consuming!" . . . "All of the additional work is time-consuming." . . . "Travel to the educational centers is stressful." . . . "Getting the patch on my sleeve was a great feeling." . . . "The education to keep the patch is a lot of work." . . . "The schooling you get in the classroom is not the same as what you get in the street." . . . "We need to have more practice on the street." . . . "We need more hands-on training . . . it makes it more fun . . . versus reading and lectures."

## Discussion

The goal of the current study was to identify factors that contribute to recruitment and retention of EMTs and paramedics. Study findings identified three common themes that likely contribute to recruitment and retention of EMTs and paramedics. Themes identified in the current study appear to support an overall trend in high job-related stress and dissatisfaction with pay, administration, and educational underdevelopment. Study findings provide insight into an area of research not previously investigated using qualitative methodologies. Further, the findings contribute to a growing literature focusing on recruitment and retention of allied health professionals.

Two lines of thought emerged under theme 1: "EMS is a professional afterthought." The first line of thought identified the EMS career as a secondary option to a more attractive career choice that the participant did not attain. Previous research<sup>13</sup> is in support of focus group results, suggesting that it may be difficult to create long-term job satisfaction among persons who possibly come into employment perceiving they settled for a "second-best" career. Future quantitative research is needed to confirm the extent to which an EMT career is entered as an acceptable but not necessarily fully desirable career path and to identify demographic factors associated with EMS entry as a career change. Based on the present finding, EMS directors and administrators may wish to ensure that recruitment and hiring interviews address the career goals and expectations of EMS applicants and relate the profession to these goals and expectations. Further, EMS administrators and service directors may be able to counter the "second-best" perception through recruiting efforts directed at young men and women early in career development. Educating persons on the potential attractants of the profession and its educational requirements and potential professional advancements may promote deliberate, rather than default, entry into the EMT field. With early reinforcement of career goals and more realistic employment expectations, retention may improve.

The second line of thought recognized in theme 1 identifies occupational attractants: elements of the EMS career that attracted individuals when they contemplated how to make a career change. Some attractants identified include the desire to help the community and serve others. Presentation of attractants like those identified in the current



study may assist EMS education specialists and recruiters in bringing new personnel into the profession. Presentation of employment attractants may need to begin in high school and first-year college programs.

Theme 2, "EMS is an emotional paradox," captured simultaneous feelings of job-related stress and satisfaction. Previous research of job stress and satisfaction among EMS personnel has identified career path indecision and workplace difficulties as contributors to high stress and dissatisfaction.<sup>3,8,11,15</sup> Work-related difficulties identified in the current study included required 24-hour readiness and lack of educational know-how for dealing with stressful situations. Addressing high stress levels attributable to the work environment should be a priority for EMS administrators at all levels. Stress relief programs have been proven successful in helping reduce job-related stress among staff exhibiting signs of high stress.<sup>38</sup> It may benefit EMS systems of all sizes to invest in stress reduction programs as a tool for retaining paid and volunteer personnel.

Under theme 2, respondents identified a lack of attention and recognition from upper administration as a source of job-related dissatisfaction. Previous research has identified an inverse relationship between job satisfaction and bad feelings for management.<sup>11,14,39</sup> The study by Flanagan and Flanagan of correctional facility nurses cited a lack of support and understanding from organizational superiors as an important source of stress.<sup>5</sup> How the relationships between EMTs and administration develop is not well known. EMS supervisors are generally promoted from within the ranks and may receive little or no management training. The lack of formal management training may contribute to apparently inattentive behavior perceived by EMT respondents. Research suggests that participatory, group-oriented supervisory practices increase job satisfaction.<sup>40</sup> Given the frequency with which management practices have been identified as a problem for field-level personnel, EMS system administrators should consider incorporating management training into orientation programs for new supervisors. Further, EMS system administration may benefit from quantitative studies exploring the beliefs, attitudes, and skills EMS managers bring to their roles as well as demonstration studies of the effectiveness of management skills training for EMS supervisors.

It is interesting to note that many respondents had negative remarks concerning the effects of EMS job stress on their family life but positive remarks about work-related relationships with colleagues, their EMS "comrades." Participant descriptions of peer relationships within the workplace suggest that camaraderie among fellow EMTs is a significant contributor to job satisfaction. Previous investigations of the EMS work environment have had similar findings.<sup>41</sup> In retrospect, it would have been desirable to ask more follow-up questions, attempting to tease out the subtleties and differences between perceptions of an unresponsive management and a tightly bonded work group. It may be that colleagues unite to support one another when

management is perceived to be unsupportive, or it may be that the respondents offering positive remarks were working under supervisors with a more acceptable management style. Alternatively, long hours spent with colleagues compared with infrequent contact with upper management may further contribute to the discrepancies.

A majority of respondents also identified stress and family-life problems due to the demands of their occupation. The contrast between positive work relationships and family strain merits further examination. Previous research suggests that programs designed to address work-related stress might improve home relationships.<sup>38</sup> Boudreaux et al., studying EMT job stress, identified common coping styles as self-blame, aggression, hostility, and risk taking.<sup>10</sup> Among fellow EMTs, these coping styles may be effective. These coping styles, however, may be less effective in improving home relationships, because home environments are pragmatically a less suitable environment for expressing aggression and hostility related to work. Open discussion about work between spouses and other family members may be more effective.

A source of EMT dissatisfaction that may not be easily resolved is pay and benefits. An informal survey of U.S. state and Canadian provincial EMS government offices identified wide variation in pay across those with EMT-Basic, EMT-Intermediate, and EMT-Paramedic certification.<sup>42</sup> In the current study, respondents believed their pay and benefits are inadequate for the work performed. This dissatisfaction echoed the findings from a survey of nationally registered EMTs, which found that 94% were dissatisfied with their overall compensation (salary plus benefits).<sup>43</sup> Indeed, many focus group respondents indicated they work multiple jobs to make ends meet. Findings from the Longitudinal Emergency Medical Technician Demographic Study Project<sup>43</sup> may shed additional light on the relationship between salary and retention. At present, it may be useful for employers to measure salary and benefit packages against those being offered locally for other allied health professionals (e.g., nurses).

Finally, educational recognition was a major concern among responding EMTs. Many alluded to the lack of college credit for hours dedicated to education and training and absence of professional recognition through licensure as a source of frustration. Most respondents indicated that their maximum education level was some college plus EMT training. Thus, the respondents' strong tendency to advocate for college credit, toward a collegiate degree in EMS, may have several roots: (1) they do not receive the respect that they believe might accompany a degreed occupation, (2) they do not receive the compensation that accompanies degreed occupations, or (3) they cannot use their EMS training to accumulate educational credit in order to enter another, more lucrative field. One positive finding, however, and one that is of particular interests to EMS administrators, is that implementation of educational requirements from NHTSA (<http://www.nhtsa.gov>) was not

perceived as negative, as some local EMS directors had feared (personal communication, W. Minikiewicz, January 2003). Based on respondents' remarks, most view national certification requirements positively. Study findings suggest that regular surveys of EMTs before, during, and at the conclusion of initial and continuing education programs may be necessary. Feedback may assist in improving class structure, content, and delivery.

## Limitations

Results of qualitative research are limited in generalizability and must be interpreted with caution. States and local communities vary in their approach to dealing with emergency medical needs, and thus EMT work environments vary. The findings of this study are limited to the perceptions and opinions of EMTs who chose to (1) attend an annual conference and (2) participate in the current study. Therefore, they may not represent the thoughts and perceptions of all EMTs in the state under study, much less the nation. Consensus on a question might indicate beliefs that are confounded by factors not accounted for in this study (e.g., societal beliefs).

Item development for the discussion guide was also limited. Experts and professionals reviewing items used in the current study may have allowed personal biases to influence the items used. On the other hand, although it is possible that personal biases were introduced during item development, it is unlikely that any one expert or professional reviewing focus group items significantly affected item development. Focus group items used in the current study were used based on a general consensus on a commentary from a panel of experts; they were not constructed on the recommendation of a single individual.

Finally, interpretations of the focus group results are limited. In qualitative research, the process by which results are interpreted and analyzed is, by design, inherently subjective. In fact, the software used in the current study is designed for investigators to code respondents' remarks as the investigators interpret them. However, individual biases were minimized through confirmability codebook and theme development.

## Conclusions

Themes identified in the current study have been constructed from commonalities across focus group respondents. From the study findings, it appears that job-related stress and dissatisfaction are a composite of factors related to entry into the profession, the workplace environment, and the educational processes. Job-related stress and dissatisfaction are thus a production of numerous factors and likely contributors to low employee retention. Individual factors, their relationships with one another, and their effect on recruitment and retention of EMS personnel should be explored further.

EMS is the gateway into the health care system for persons in need of rapid medical assistance. Establishing and maintaining a well-trained and experienced EMT workforce is vital to the continuum of care that begins with out-of-hospital services. Further research is needed to ensure that future policies regarding recruitment and retention, education, and workplace protocols are evidence based and effective.

The authors thank William "Bill" Minikiewicz, MPA, EMT-P, for his consultation and expertise. Bill is a county EMS systems director, Calhoun, SC, who served as a consultative expert throughout the study period.

This research was supported in part by a National Research Service Award Post-Doctoral Traineeship from the Agency for Healthcare Research and Quality sponsored by the Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, grant no. T32-HS000032.

## APPENDIX

### Terms

**Emergency medical services (EMS):** the arrangement of personnel, facilities, and equipment for the delivery of health care services under emergency conditions.

**Emergency medical technician (EMT) or EMS personnel:** persons trained and certified or licensed to provide emergency medical care, whether on a paid or volunteer basis, as part of a basic life support or advanced life support out-of-hospital emergency care service or in an emergency department or pediatric critical care or specialty unit in a licensed hospital.

**EMT-Basic:** certification of a person completing the revised 1994, 110-hour Department of Transportation, National Highway Traffic and Safety Administration EMT-basic standard curriculum. Additional requirements are common and vary across states.

**EMT-Intermediate:** certification of a person already possessing EMT-basic certification who goes on to successfully complete a minimum of 64 additional classroom hours and 16 clinical experience hours. Materials used in class sessions are those developed by the Department of Transportation, National Highway Traffic and Safety Administration. Additional requirements are common and vary across states.

**EMT-Paramedic:** certification of a person completing the most recent version of the Department of Transportation, National Highway Traffic and Safety Administration EMT-paramedic curriculum. Additional requirements are common and vary across states.

**Field medic:** slang that refers to EMTs of all levels who are active in caring for patients in the field.

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