Burnout and Occupational Stress

Comparison Between United Kingdom and Australian Podiatrists

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Professional and occupational burnout is a recognized syndrome among health-care professionals, although the point at which burnout begins is unclear. There is a dearth of research investigating burnout and occupational stress in relation to podiatric medicine, although two recent studies have reported high levels of burnout expressed by podiatric medical practitioners. This study was undertaken to compare the levels of burnout in newly qualified practitioners in Australia and the United Kingdom. The results suggest that levels of burnout are higher in these groups than indicated by the published normative medical data. Occupational stress was associated with lack of professional status and with geographic and professional isolation. Within these two themes, there were clear differences between the two groups. (J Am Podiatr Med Assoc 94(3): 282-291, 2004)

Burnout is a phenomenon that has been described and researched by several authors.[1-3] Freudenberger[1] originally described burnout as physical and emotional exhaustion in his 1974 seminal article, which depicted a syndrome that included negative self-concept, negative job attitudes, and loss of concern for clients. More recently, Maslach,[3] a social psychologist, has become the recognized leader in burnout research. She was particularly interested in the ways in which health-care workers in stressful jobs coped with their high levels of emotional arousal. She also investigated how cognitive coping strategies, such as detached concern and dehumanization, were used in self-defense. "Occupational stress" is a recognized term that refers to any affect-laden negative experience caused by imbalance between job demands and the response capability of the worker. The early work of Maslach[3] identified three general themes resulting from the emotional turmoil—emotional exhaustion, negative perceptions and feelings, and a crisis in professional competence. These themes are now recognized as the key components of the phenomenon of burnout. Burnout and occupational stress have been reported among health-care workers[3-5] and are considered to occur as a result of the chronic stress and emotionally challenging aspects of their work.

Most of the literature on burnout and the health-care professions has focused on nursing,[6-8] physiotherapy,[9-11] and occupational therapy.[12-14] Burnout and podiatric medicine had not been investigated until recently. The phenomenon has been summarized and described in podiatric medicine,[15] but no empirical data were reported. More recently, Mandy[16] reported some empirical work that investigated newly qualified podiatrists working in the UK Nation-

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al Health Service health-care system. The results suggested that burnout levels in this group exceeded published normative values for all health-care professionals. The results were specifically compared with those for newly qualified physiotherapists and were found to be significantly higher. The results were of concern and were explained in the context of isolation in the workplace and lack of respect from other professional disciplines. The same study was more recently replicated in Australian podiatrists.[17] The Australian education system is similar to that of the United Kingdom, requiring A-level-equivalent entry to a 3-year degree course. The course design and structure have also been influenced by many UK podiatrists living and working in Australia. The health-care system in Australia, however, is different, with more than 75% of podiatrists working in the private sector.[18] The Australian study investigated a spectrum of practitioners ranging from the newly qualified to those who had been qualified for more than 10 years. This range of data was collected to investigate levels of burnout and the point at which it began. The literature suggests that burnout develops over time as professional idealism is lost.[19, 20]

Burnout is becoming a topic of increasing interest, particularly in service professions. Australian and UK employees currently work longer hours than all of their European counterparts.[19, 21] Long working hours and lack of social and relaxation time are strongly associated with feelings of emotional exhaustion.[20] The literature suggests that employees in service professions may be particularly at risk of burnout because of the emotional demands of working with patients, which may be exacerbated by working alone and without the support of professional colleagues.[22] If this is the case, then podiatrists may be at high risk owing to the autonomous and individual nature of the work. This is a key issue for podiatrists who are largely employed in an outpatient primary-care capacity. These practitioners can spend long periods working independently with patients rather than in teams, which may subject them to higher levels of work stress and burnout.

As mentioned above, recent research has found significantly higher levels of burnout in podiatrists working in Australia[17] and the United Kingdom[16] compared with other health-care professionals. The nature of the work undertaken by both groups is fundamentally the same, but the environment in which the professional practice occurs is different. Most Australian podiatrists work in private practice immediately after qualification, but UK podiatrists generally begin practice in the National Health Service and move to private practice later in their careers. National Health Service employment may be attractive to newly qualified UK podiatrists because it offers a spectrum of employment options, including teamwork and dual-chair clinics in addition to the single-practitioner role. If, however, the difference in environment does not explain the results, then there may be other factors, such as aspects of professional practice itself, that require further investigation.

The aim of this study was to compare levels of burnout in Australian and UK podiatrists qualified for 3 years or less and to explain any differences between the two groups.

Methods

Protocol

The protocol for both investigations was the same. Ethical approval was obtained from the University of Brighton and the Curtin University of Technology ethics review committees. A letter of explanation about the study that included questions to determine the nature of employment, the length of time qualified, the respondent's sex, and numbers of colleagues in the work environment was sent to each respondent along with the Work Stress Inventory,[23] the Maslach Burnout Inventory (MBI),[24] and a stamped, self-addressed envelope. Anonymity and confidentiality of information provided by the respondents was ensured. The studies were conducted separately and sequentially. Sample size for each study was determined using a power calculation.

UK Sample Selection

The UK Council for Professions Supplementary to Medicine Register for Chiropodists and Podiatrists (1997/8)[25] was used to identify podiatrists qualified within the past 3 years. The total number of subjects available was 1,130.

Australian Sample Selection

The registration boards in each of the Australian states and each of the schools of podiatry were contacted for details of state-registered podiatrists. Names and addresses of qualified podiatrists were obtained from all of the Australian states except the Australian Capital Territory and the Northern Territory. The Australian Capital Territory would not provide a list of registrations owing to confidentiality laws, and the Northern Territory does not have a registration board. The total population available to be sampled at the time of the study was 2,101. Data for podiatrists qual-

ified for 3 years or less were extrapolated from the sample for comparison with the UK data. The total population of podiatrists qualified for 3 years or less was 320. This article presents the data for these respondents only.

Maslach Burnout Inventory

The MBI[24] is a validated questionnaire demonstrating convergent and discriminant validity, internal consistency, and test–retest reliability. Recognized as the leading psychological tool for measuring burnout, it consists of 22 statements about work-related feelings that measure the degree of burnout experienced in terms of three subscales: emotional exhaustion, depersonalization, and personal accomplishment.

The emotional exhaustion subscale assesses feelings of being emotionally overextended and exhausted by work, the depersonalization subscale measures the degree of loss of feelings toward patients, and the personal accomplishment subscale measures feelings of competence and success.

Each statement is measured on a scale from 0 to 6 (0 = never, 1 = a few times per year, 2 = once a month, 3 = a few times per month, 4 = once a week, 5 = a few times per week, and 6 = every day). Scoring procedures result in three separate subscale scores. The score for each subscale may be compared with published normative values or alternatively using cutoff criteria derived from normative data, classified into high, moderate, and low categories. Burnout is conceptualized as a continuous variable ranging from low to high. The scoring ranges for each category for each subscale are detailed in Table 1. High scores on the emotional exhaustion and depersonalization subscales and low scores on the personal accomplishment subscale are indicative of burnout.

Work Stress Inventory

The Work Stress Inventory[23] consists of 56 items describing various types of work stress. Respondents identified the amount of stress each item caused them on a six-part Likert scale ranging from 0 (no stress) to 5 (much stress). Scoring the Work Stress Inventory results in seven work stress factors: quality/quantity, role issues, responsibility/authority, social relationships, job satisfaction, organizational issues, and domestic effects. Each respondent derived an individual score for each factor from the 56-item questionnaire. In addition, there is an open-ended question for respondents to comment about sources of stress in their job not covered by the questionnaire. This is a validated questionnaire demonstrating face validity and test–retest reliability.

Table 1. Criteria for Each Subscale of the Maslach Burnout Inventory

	Score		
Subscale	Low	Medium	High
Emotional exhaustion	≤18	19–26	≥27
Depersonalization	≤5	6–9	≥10
Personal accomplishment[a]	≥40	34–39	≤33

[a]Personal accomplishment is reverse-scored compared with the other two subscales.

Data Analyses

All categoric data were cross-tabulated and statistically analyzed using the χ^2 test. The MBI scores were classified as continuous data and were initially categorized as low, medium, and high according to the recommended cutoff criterion in the MBI handbook[24] (Table 1). The published cutoff criteria were derived from a normative sample of 1,104 medical staff members (including doctors, nurses, and health-care workers). All continuous data were tested for distribution and were found to be normally distributed using the Kolmogorov-Smirnov test.

Comparison of means for the Australian MBI data, the UK MBI data, and the normative values was undertaken using an analysis of variance. The Duncan *post hoc* multiple range test was applied to investigate the differences among these means. The data from the Work Stress Inventory were ordinal, and their relationship to the MBI scores was analyzed using the Spearman rank correlation. An α level of .05 was used for all statistical tests unless otherwise stated.

Qualitative analysis of the data provided by subjects was categorized into themes using the data-analysis software package NVivo (QSR International, Lancashire, England). NVivo is designed to integrate coding with qualitative linking, shaping, and modeling and, therefore, takes qualitative inquiry beyond simple coding and retrieval.

Results

UK Results

The names of all of the eligible podiatrists were entered into a database, and the computer was used to randomly select a sample of 500 podiatrists for inclusion in the study.

Of the 500 podiatrists to whom questionnaires

were distributed, 130 were no longer working in the National Health Service and could not be included in the study. Of the remaining 370 questionnaires, 190 were completed, and 18 of these were either spoiled or not usable. Therefore, 172 questionnaires were analyzed (response rate, 46%). In this sample, 62% of the respondents were women and 38% were men. Raw burnout scores were classified according to the criteria detailed in Table 1.

MBI Scores. The MBI data were classified according to the criteria detailed in Table 1. Table 2 shows the distribution of scores for each of the MBI subscales. The distribution of scores indicative of burnout, ie, high scores on emotional exhaustion and depersonalization and low scores on personal accomplishment, was seen in 52 (30%) of 172 respondents. Of the 52 respondents demonstrating symptoms of burnout, 35 were women and 17 were men.

Work Stress Inventory Scores. Correlation scores indicated weak associations with Work Stress Inventory scores and the MBI data. None of the scores were found to be significant at $P < .05$.

Work Stress Inventory Qualitative Comments. Forty-eight respondents provided comments about their work stress. Six themes were identified and are detailed in order of importance. The data were not manipulated before being entered into the software program.

Too Much Work. This was a major theme and was widely reported. Particularly emphasized were the specific subthemes of 1) administration pressures, including "long waiting lists" and "writing up notes and record keeping procedures," and 2) time pressures, including "seeing extra patients," "no cover for illness," and "meeting targets."

Isolation. This theme included comments indicating feelings of professional isolation: "lack of teamwork" and "lack of professional colleagues with whom to discuss difficult cases."

Patients' Lack of Understanding of the Podiatrist's Job. This was a strong theme that was widely reported. The podiatrists reported that patients had a "poor understanding of their scope of practice," and they reported feelings of "being undermined" and strong feelings of "frustration" because of this lack of recognition.

Lack of Career Structure. Two subthemes were reported within this theme: 1) the lack of career prospects within the National Health System, including "lack of movement as a result of blocking at certain levels" and "no career pathway for clinical specialists," and 2) "the insecurity of temporary contracts and contractual work."

Psychosocial Problems. This theme included being ill-equipped to deal with patients' emotional problems, dealing with cultural and ethnicity problems, "aggressive and demanding patients," and being bullied at work.

Legal Issues. This theme included dealing with "patient complaints" and other legal issues.

Australian Results

A total of 825 questionnaires were distributed, and 397 were returned. Of these, 8 were spoiled or incomplete, 26 were returned because the respondents had moved and no forwarding address was given, and 2 were returned by people who had elected to leave the profession and were therefore discarded. From the remaining questionnaires, the data for all respondents who were qualified for 3 years or less were extrapolated and used in the analysis (n = 130). The response rate, therefore, was 41% (130/320). In this sample, 57% of respondents were women and 43% were men.

MBI Scores. Raw burnout scores were classified according to the criteria detailed in Table 1, from which the number of cases of burnout was determined. Table 2 indicates the distribution of scores for each of the MBI subscales. The distribution of scores indicative of burnout, ie, high scores on emotional exhaustion and depersonalization and low scores on personal accomplishment, was seen in 33 (25%) of 130 respondents. Of the 33 respondents demonstrating symptoms of burnout, 19 were women and 14 were men.

Table 2. Comparison of Australian and UK Distributions of Respondent Scores Using the Maslach Burnout Inventory Criteria

	Low Score		Medium Score		High Score	
Subscale	Australian	UK	Australian	UK	Australian	UK
Emotional exhaustion	0	0	0	0	130	172
Depersonalization	0	0	0	0	130	172
Personal accomplishment	29	52	16	11	85	109

Work Stress Inventory Scores. Correlation scores indicated associations between personal accomplishment and all of the work stress factors (Table 3). All of the correlations were found to be significant at $P < .05$. Correlations were also demonstrated between depersonalization and quality/quantity of work and responsibility/authority. No correlations were demonstrated between any work stress factors and the emotional exhaustion subscale.

Work Stress Inventory Qualitative Comments. Twenty-five respondents provided comments about their work stress. Themes are detailed in order of importance as identified by the respondents.

Lack of Status and Recognition. This was a major theme and was widely reported. Statements included "being underappreciated by other professional disciplines," "lack of respect by other professional colleagues," "lack of respect by patients," "lack of respect by the Australian government," "lack of financial remuneration for a very responsible job," and "the patient's inability to understand the demands of juggling a clinical case load and administration."

Demands of Patients. Patients were reported to be overdemanding, with unrealistic expectations of the podiatrist and a stretched public-sector service. Patients were repeatedly reported to be "constantly demanding" and "noncompliant," with podiatrists reporting "complaints of waiting times/lists" and "continually having to keep the patient satisfied." There were repeated concerns about safety regarding patients, including "dealing with rude and aggressive patients" and "violent patients," and this theme linked with concerns about the lack of postgraduate education and feelings of being ill-equipped to deal with the psychological demands of patient care.

General Practice Issues. Professional and administrative issues were evident within this major theme. Professional issues included "keeping up to date," "time pressures," and "providing a service that was considered value for money." There were also important comments regarding intraprofessional stresses, including "dealing with conflicting advice from other podiatrists," "inability of others to perform their job," "lack of professional support," and "being responsible for others' mistakes." Administrative issues included "long waiting lists," "asking for payment," and "paperwork and administration."

Isolation. Respondents reported feelings of isolation both geographically and professionally. Many identified "lack of close professional support," "limited teamwork," and "lack of colleagues" as major stressors in the work environment.

Access to Postgraduate Education. Four subthemes were evident here: 1) the pressure to undertake postgraduate study, 2) the geographic difficulty of accessing education, 3) the difficulty of juggling full-time work and study—"mixing studying, keeping up to date, and attending conferences" and "the pressures of postgraduate study and continuing education," and 4) the inadequacy of some postgraduate courses.

Work-Related Illness. Several respondents reported work-related illnesses, including "repetitive strain injuries"; "injuries to back, neck, and forearm"; and "physical tiredness from work."

Fear of Contamination. A small number of respondents reported a fear of working with high-risk patients, including "contamination from high-risk patients," "contracting blood-borne viruses," and "fear of infectious diseases."

Dissatisfaction with the Job. A few respondents reported not being suited to the job, which gave rise to feelings of frustration: "bad choice of career" and "not a job I like." Others reported that the job lacked stimulation and was routine: "lack of variety," "boring," "limited scope of practice," "no stimulation," "poorly paid," and "inappropriate career leading to job dissatisfaction."

Table 3. Spearman Correlation Coefficient Values for Work Stress Inventory Scores and Maslach Burnout Inventory Subscale Scores for the Australian Data

	Subscale		
Work Stress Factor	Personal Accomplishment	Depersonalization	Emotional Exhaustion
Quantity/quality	–0.4[a]	0.3[a]	0.01
Role issues	–0.4[a]	0.2	0.09
Responsibility/authority	–0.4[a]	0.3[a]	0.04
Social relationships	–0.4[a]	0.2	0.05
Job satisfaction	–0.4[a]	0.16	0.1
Organizational issues	–0.4[a]	0.2	0.05
Domestic issues	–0.4[a]	0.2	0.01

[a]Coefficient value significant at $P < .05$.

Comparison of MBI Scores and Published Normative Data

There were significant differences in the mean MBI scores among the Australian data, the UK data, and the published normative data ($F_{2, 1403} = 9074.5$; $P < .01$) (Table 4). Results of the Duncan *post hoc* multiple range test indicated that the Australian and UK mean MBI scores were significantly higher than the published normative values ($P < .01$), but there was no significant difference between the Australian and UK means.

Discussion

The aim of this study was to determine whether newly qualified podiatrists working in Australia exhibited levels of burnout equivalent to those reported by newly qualified UK podiatrists[16] and to explain similarities or differences in the results.

Identification of the burnout syndrome requires subjects to have high scores on the emotional exhaustion and depersonalization subscales and low scores on the personal accomplishment subscale. Both studies reported cases of burnout in the sample: 30% in the UK study and 25% in the Australian study. Both groups had a similar distribution of scores on the MBI. However, a difference that must be noted is that the UK podiatrists were employed in the National Health Service, a state health provider, whereas the Australian podiatrists included both public- and private-sector practitioners.

Consideration of the individual MBI subscales demonstrates that the Australian and UK podiatrists had high levels of emotional exhaustion and depersonalization. The scores are considerably higher than those reported in studies investigating burnout in other professions. For example, a small study reported by Scutter and Goold[9] indicated that physiotherapists qualified for less than 5 years had emotional exhaustion in 24% of cases (n = 16) and depersonalization in 9% of cases (n = 6). In a more recent study,[26] physiotherapists qualified for 2 to 3 years, which is considered to be a more accurate reflection of the newly qualified period, reported emotional exhaustion in 29% of cases and depersonalization in 23%. High emotional exhaustion scores occur as a result of an inability to deal with the emotional demands of interacting with patients. Interpersonal demands resulting from the "helping-type relationship" are considered to be central to the development of burnout. The high emotional exhaustion scores reported in this study may be explained by some of the qualitative comments reported in the Work Stress Inventory. In the UK and Australian studies, the respondents highlighted common themes, although the ranking of importance of some of them differed. Both Australian and UK podiatrists highlighted the lack of professional status among colleagues and patients as the most stressful part of their professional role. The Australian group suggested that their lack of status resulted in other professional disciplines not appreciating their scope of practice or role. Of more concern, they also reported intraprofessional stresses, including "dealing with conflicting advice from other podiatrists" and "the inability of other [colleagues] to perform their job adequately." This suggests both intraprofessional and interprofessional conflict.

The social standing of the client body is commonly suggested as a factor affecting both interprofessional and intraprofessional status.[27] The activity of professional practice and the environment in which it operates are also considered to influence status. Although there are domains of specialization within podiatric medical practice, the scope of practice is essentially associated with the provision of care to elderly patients. It is generally accepted that elderly people carry low status.[28]

The UK podiatrists reported this theme only in relation to patients, expressing strong feelings of frustration as a result of "patients having a lack of understanding of the extent of their professional role and scope of practice." Patient lack of understanding of the podiatrist's role can be explained using the classic description of "professional mystique" by Cherniss.[29] Professional mystique is a mismatch between patient

Table 4. Mean Maslach Burnout Inventory Subscale Scores for Each Group

	Mean (SD) Subscale Scores		
Group	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Australian data	46.1 (7.4)	58.0 (11.5)	25.9 (15.4)
Medical normative data	22.2 (9.5)	7.1 (5.2)	36.5 (7.3)
UK data	45.3 (7.0)	57.7 (11.4)	28.5 (15.6)

expectations of the professional and the reality of professional work. Professional status is associated with autonomy, collegiality, and self-realization through stimulating and varied work. The Australian podiatrists reported that their work was routine, lacking variety, and boring. Professionals can experience these types of emotions when faced with bureaucracy, routine work schedules, and professional isolation.[30] Furthermore, professionally qualified practitioners, particularly newly qualified practitioners with a full range of professional skills, will want recognition from their patients of their abilities; however, the patients may only have a stereotypical understanding of the podiatrist's role. Cherniss[29] also suggests that a disturbingly large percentage of patients fail to live up to the professional's ideal as clients. Both of these perspectives accentuate feelings of dissatisfaction. This is an interesting difference between the groups and yet one that is not reflected in the mean scores for emotional exhaustion or in the case distribution. This difference between the two groups may have arisen as a result of Australian podiatrists working in both the private and state sectors. Both groups also suggested that their patients were "overdemanding and complainant," which would also explain the high emotional exhaustion scores reported. Emotional exhaustion is linked to feelings of being under pressure and ill-equipped to deal with the psychological needs of patients. Such feelings are associated with lowered personal accomplishment scores. Both groups reported feelings of not being valued and not being stimulated by their work. The high depersonalization scores reported by both groups suggest the development of negative, callous, and cynical attitudes toward patients. Depersonalized professionals cannot perform adequately because their feelings of compassion and altruism have been eroded in an effort to protect themselves. Although the MBI scores were elevated in both studies, only the Australian podiatrists articulated such feelings through the qualitative data.

Isolation was another important theme reported by both groups, although the Australian podiatrists reported an additional dimension to these feelings. Both groups reported that "lack of professional colleagues," "lack of feelings of collegiality," and "not being part of a team" contributed to their feelings of burnout.[20, 22] This is again contrary to the feelings expected from having professional status. Podiatrists may be more vulnerable to professional isolation because they are more likely to practice in community settings or in environments that are remote and solitary. This is particularly relevant to the Australian podiatrists, who work mainly in the private sector. Another work by Mandy and Mandy[31] reported similarities in expressions of isolation by dentists who work in clinical environments similar to those of podiatrists, particularly those in small private practices. This work also indicates that isolation is a key factor in the development of burnout. The Australian podiatrists added a further dimension in suggesting that they felt geographically isolated as a result of the size of Australia and the distances between towns and cities. These feelings were also closely linked to the perceived lack of postgraduate education and the difficulty in accessing such education. Several respondents reported that there were only a few universities that offered postgraduate education, and for some the sheer size of the country was a barrier to obtaining such education. For the UK and the Australian podiatrists, the need to demonstrate continuing professional development will be increasingly important if it becomes a requirement for registration to practice. The development of distance education and of professional Internet forums can help decrease such feelings of isolation. The Internet, through the development of virtual communities, has led to a redefinition of the term *community* and has offered important alternative means of linking distant groups.

The results indicating such high levels of burnout are particularly interesting in light of the length of time the podiatrists had been qualified. This study specifically investigated podiatrists qualified for 3 years or less. It has been suggested that burnout develops over time. Cherniss,[22] in a 12-year follow-up study of professionals, found that "most new professionals lost their idealism over time" and that such a change caused a reduction in job satisfaction. More recently, Maslach and Leiter[30] suggested that burnout represented an erosion of values, dignity, spirit, and will, eventually "putting people into a downward spiral from which it's hard to recover." Burnout is occurring at a much earlier stage in UK and Australian podiatrists, and this may be a contributing factor to the high rate of attrition in the profession. The number of practitioners registered with the Health Profession Council has not increased significantly in relation to the number of students educated. Between 1980 and 1990, 2,821 students qualified, but only 1,474 were placed on the professional register. The pattern was repeated from 1990 to 2000, when 4,502 podiatrists qualified but only 2,282 registered for practice. In both decades, the attrition rate was almost 50%. The Australian labor force survey also reported high attrition rates, which would support this suggestion.[18]

The correlations between the MBI and the Work Stress Inventory gave conflicting results in the two

studies. The UK study suggests weak correlations, which were not statistically significant. However, in the Australian study, several correlations were demonstrated; although they were not particularly strong, they did show statistical significance. Correlations were undertaken to further explain the high levels of emotional exhaustion and depersonalization. In the Australia study, no correlations were demonstrated between emotional exhaustion and any of the seven work stress factors on the Work Stress Inventory. However, negative correlations between the personal accomplishment subscale and the seven work factors were demonstrated. This suggests that the podiatrists sampled had developed negative attitudes toward their patients and, as a result, had a reduced sense of personal accomplishment. Reduced personal accomplishment refers to the tendency to evaluate oneself negatively, particularly in relation to work with patients. These trends were particularly illuminated by the qualitative results, which helped contextualize the quantitative data.

Correlations between depersonalization and quality/quantity of work and level of responsibility/authority were demonstrated. This was reflected in the qualitative data, which reported "not enough time to complete paperwork" and "long waiting lists." An additional work stress identified by the Australian podiatrists was the issue of asking for payment. This was absent from the UK study, which investigated only podiatrists working for state service providers.

The lack of satisfaction reported by both groups in working with patients and as a professional is troubling but can be explained using the link between burnout and the social and interpersonal context of the work made by Buunk and Schaufeli.[32] This is a complex, dichotomous concept based on equity theory. Equity theory suggests that professionals pursue reciprocity in interprofessional, interpersonal, and organizational relationships. The level of investment and gain from a relationship should be proportional to the investment and gain of the other parties. Podiatrists are not experiencing such reciprocity, which is expressed through their comments about the demands made by the patients and their peers and colleagues and is also demonstrated by the high emotional exhaustion scores. Typically, such high levels of emotional exhaustion are dealt with by using distancing tactics with patients, peers, and colleagues and by reducing empathetic concern for patients. Distancing tactics are a coping strategy to restore reciprocity with patients, but this results in the development of dysfunctional relationships with others, which in turn increases the sense of failure and fosters a sense of diminished personal accomplishment,[22] which is clearly expressed in this study.

Cherniss[22] suggests that professionals working in public agencies are faced with increased service demands and declining budgets, which would also explain some of the feelings of work pressure, which is characteristic of the phenomenon of burnout. This could explain the results in the UK study, which investigated only podiatrists working in state systems, but it only partly explains the Australian data, which included podiatrists working in both public and private settings.

Employment usually confers a psychological contract that refers to the expectations held by employees about the nature of their exchange with the organization.[33] In the UK data there was a clear concern about the lack of full-time employment and the use of temporary contracts. Lack of job security can erode the psychological contract and result in high staff turnover and job dissatisfaction.[34] The remaining two minor themes that emerged from the qualitative results were work-related illness and fear of contamination. Both of these are recognized psychological states associated with stressful environments.[33]

There is one additional factor that was not considered in the discussion of status: the nature of podiatric medical care. Abbott[35] suggested that the nature of the practice of a profession is a small contributory factor; however, for professions such as podiatric medicine, the nature of practice may be fundamental in the establishment of status. The care of the feet may be considered to be a low-status profession largely because patients can, and do, undertake self-examination and self-treatment. Such actions undermine professional knowledge, implying that there is not a specialist body of knowledge. There is also a positional dominance afforded to the patient that puts the podiatrist in a subservient position.[36] The complex interaction among the status, nature, and act of practice may provide a further dimension to professional burnout and begin to explain the intraprofessional and interprofessional conflict reported in the UK and Australian studies. It would also help explain the reported lack of job satisfaction expressed by podiatrists.

It must be recognized, however, that the qualitative data were contributed by a discrete group, although respondents from both countries felt a need to articulate their feelings. Further studies may be designed to explore these issues in greater depth. Finally, further work also needs to be undertaken to determine whether there is a mismatch in graduates' perceptions of the work of a podiatrist and the actual work. The literature contains evidence that gradu-

ates perceive that they experience limited exposure to different clinical settings,[37] although podiatric medical educators may disagree with this, and, certainly within the UK education system, the use of external clinical placements is increasing. It could be argued that greater exposure to "real-world" settings might help prepare students for the role that they are expected to fulfill. If there is a mismatch in perceived and actual experience of working as a podiatrist, this could explain the frustration and dissatisfaction reported with the scope of podiatric medical practice. Further research is indicated to explore these issues in relation to professional burnout.

Conclusion

The response rates in the UK and Australian studies are similar and slightly lower than the recommended rates of 50% to 60%. They are, however, equivalent to the response rates in other studies using nondirected questionnaires for health-care professionals.[38]

The results of this study add to the limited psychological literature considering podiatrists, work stress, and burnout. The results of the MBI suggest that the UK and Australian podiatrists studied exhibited high levels of emotional exhaustion and depersonalization and low levels of personal accomplishment, which are synonymous with the burnout syndrome. The mean scores are significantly higher than published normative data and are cause for concern. Qualitative data derived from the Work Stress Inventory revealed themes common to both countries that helped explain the high MBI scores. The themes of lack of professional status and recognition, demands of patients, and isolation are troubling. It would be interesting to replicate this study with US podiatric physicians, whose education and role are considerably different from those of UK and Australian podiatrists. The subjects from each country would need to be matched in terms of the type of work they perform. Further work is indicated to investigate whether students training to be podiatrists have a clear understanding of the nature of the work and role of the podiatrist. Professional expectations are often affected by pretraining exposure to the profession and the route taken by the student in undertaking training in the field. More important, the results need to be considered by the professional bodies, and some of the issues raised by the research must be addressed.

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