Dental practitioners and ill health retirement: a qualitative investigation into the causes and effects

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IN BRIEF

- This was a qualitative study using semi-structured interviews.
- A purposive sampling technique was used to recruit the respondents from an insurance company database.
- Depression, stress and anxiety were reported by respondents to be major causes of their retirement.
- Dentists reported both negative and positive comments in relation to support from their health insurance company.

RESEARCH

VERIFIABLE CPD PAPER

Introduction Data published in 1999 from the Government Actuary on the National Health Service Pension Scheme (1989-1994) have indicated that the frequency of ill health premature retirement (IHR) was four times more prevalent among dentists at age 42 years compared with doctors. **Objective** The aim of this project was to determine the factors that contributed to IHR in dental practitioners, and the effects of IHR on their lives. **Method** Semi-structured interviews were carried out during 2007. A topic list was developed, piloted and used to guide the interviewer. A purposive sampling technique was used to recruit the respondents from an insurance company database. A framework approach to data analysis was utilised. **Results** Twenty-three respondents were interviewed, 19 male and 4 female, aged between 39-59 years. Depression, stress and anxiety were reported by respondents to be major causes of their retirement, followed by musculoskeletal disease and premature disability caused by trauma. This is illustrated by the following: *'...just went straight into general practice but with some regrets. Practice was so depressing'* (GDS/NHS); *'I withdraw, I don't engage ... I found it more and more difficult and one morning... I collapsed in tears at the practice'* (GDS/NHS). Dentists reported both negative and positive comments in relation to support received from their health insurance company. **Conclusions** The main causes of IHR were depression, musculoskeletal disease and specific skin conditions. Respondents expressed concern regarding the level of support available to dentists in distress. Respondents to this study found that continuing to work had a positive impact on their health.

INTRODUCTION

Musculoskeletal disorders and stress-related illnesses are among the factors most frequently implicated in ill health retirement (IHR) of dentists.[1,2] Sources of stress experienced by general dental practitioners have been identified by Blinkhorn as being the payment system, a feeling of being undervalued and the feeling of being trapped in a practice until retirement.[2] How much stress a person can tolerate varies. Stress tolerance decreases if the person is ill or has not had adequate rest. During major life changes, (for example divorce, birth or death), people's ability to cope with stress reduces. However, the word 'stressed' is often referred to in a negative sense, particularly in dentistry. Dentists perceive dentistry as being more stressful than other professional occupations.[3] Dunlap and Stewart found that 38% of dentists surveyed were always or frequently worried or anxious. Moreover, 34% of dentists stated that they always or frequently felt physically or emotionally exhausted, and 26% had headaches or backaches always or frequently.[4] These symptoms may be signs of anxiety or depression. Several factors related to dentistry have been reported to increase stress, these being time management, anxious or unco-operative patients, the workload, government changes and constant drive for technical perfection.[1,5–8]

Stress-related problems associated with dentistry may arise from the work environment and the personality types of the people who choose the profession. Lang-Runtz considered that dentistry usually attracts people with compulsive personalities, who often have unrealistic expectations and unnecessary high standards of performance and who require social approval.[6] The operatory is usually small, and the dentist's focus is on an even smaller space. Dentists are required to sit still for much of their workday, making very precise and slow movements with their hands, while their eyes remain focused on a specific spot. Isolation from other dentists is also common.

Stress can also be thought to result in a spectrum of medical problems, as well as feelings of low self-esteem, anxiety, feelings of hopelessness and depression, with the latter thought to explain the high suicide rate in the profession compared to the general population.[9] Such disorders may also be a common cause of early retirement in the dental profession, and work-related stress has been shown to relate to job dissatisfaction and poor working relationships.[10] Osborne and Croucher[11] have

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assessed levels of burnout among dental practitioners in South East England, concluding that general dental practice had characteristics which were likely to produce high levels of job-related stress, with 11% of practitioners exhibiting high overall burnout levels.

The incidence of musculoskeletal problems among dentists and their impact has also been reported.[1] However, there is a paucity of information on the predisposing factors which initiate a dentist's decision to retire on health grounds. The aim of this study was therefore to determine the factors which have contributed to the premature ill health retirement (IHR) of general dental practitioners (GDPs). The quantitative findings from a questionnaire distributed to dentists who had taken IHR have previously been presented.[12] The objectives of the present paper were therefore, by means of interviews of ill health retirees:

- To examine the effect of premature retirement upon their lives
- To investigate and identify any potential remediable factors which might have led to their remaining in the workplace
- To assess rehabilitation needs which may not have not been met.

METHODOLOGY

This study used qualitative methodology in the form of semi-structured interviews. A topic list was developed from the results of the quantitative investigation,[7] which guided the interviewer. Participants were encouraged to discuss the causes of early retirement, the effect of IHR upon the health and quality of life, what might have prevented IHR and what support had been used. Interviews were conducted either by telephone or at the School of Dentistry in Birmingham. These were audio recorded and, subsequently, fully transcribed.

Study participants

A database of retirees at Wesleyan Medical Sickness (WMS) who were known to have retired through ill health indicated that 207 (of 594) members were suffering from serious, debilitating or life-threatening illnesses as defined by the insurance arrangements. It was decided jointly between WMS and the research team that it would be inappropriate and insensitive to approach subjects with such illnesses to take part in the study. Accordingly, a letter from WMS requesting participation was distributed, in September 2006, to 387 retired dentists. Of these, 210 replied positively and provided their names and addresses. A questionnaire was sent by post to these dentists, with a reply-paid envelope and a covering letter explaining the aims of the project and asking whether they would be prepared to take part in a telephone interview. Of the respondents who stated that they would be happy to have a telephone interview, 29 were chosen using a purposive sampling technique, with participants being selected to a give a broad range of views and reasons for retirement rather than providing a statistically representative sample. Purposive sampling, a non-probability sampling method, is used to yield the most comprehensive understanding of a research subject, based on knowledge of the research population, its elements and the nature of the research aims. When smaller samples are required, or when sufficiently comprehensive population lists are not available, probability sampling methods cannot be relied upon to provide a sample that represents all elements of the population in an appropriate way, and non-probability sampling methods are employed to ensure the representation of the appropriate elements in the sample.

Data analysis

A framework approach to data analysis was adopted in the manner suggested by Pope *et al.*[13] A preliminary framework, based on the research questions, was developed. The transcripts were read and, following familiarisation with the data, the initial framework was expanded to reflect themes emerging from the interviews. The data were next indexed according to the framework and further refined. To guard against bias, in accordance with the methodology described by Pope *et al.*, the transcripts were analysed independently by another researcher. Subsequently, consensus was achieved on emergent themes and issues.

RESULTS

The demographic details of the participants in the interviews are summarised in Table 1. The interviews took place between August and December 2007 and were of 25-60 minutes duration.

EMERGENT THEMES

Presented here are the emergent themes from the interviews, illustrated, where appropriate, by extracts from the interviews. As with much qualitative research, while the interviews generated rich and compelling data, the size of the sample makes it inappropriate to make comparisons between sub-samples of the respondents. The main themes are expounded below, namely, causes of premature retirement, quality of life following retirement, support before retirement, and future life without dentistry.

1. Causes of premature retirement

Depression, anxiety and stress were reported by 10 of the 23 respondents to be a factor in their retirement, followed by musculoskeletal disease and premature disability caused by trauma or specific skin conditions.

Depression, anxiety and stress

The dentists who had retired due to depression, anxiety and stress reported that they felt this was directly related to pressures from work. They particularly reported staffing issues, constantly changing NHS systems, business problems and uncooperative patients. This is illustrated by the following statements:

'I was about 40 at the beginning of the downward spiral... I began to not to enjoy it and feel the responsibilities and also the changes. The new techniques and things, I did enjoy going on postgraduate courses but not always implementing what I had learnt, I sometimes found that difficult to do, I preferred to stay working the way I had before... the added pressure of change in NHS practice was time, it's OK in a hospital setting.' (GDP [NHS])

'...just went straight into general practice but with some regrets now I wish I taken the house officer job offered to me ... practice was so depressing.' (GDP [NHS])

'I found that I was being treated for high blood pressure, I found I was driving in on Monday morning, leaving the house feeling fine and I would get closer and closer and I would feel worse and worse

Table 1 Demography of interviewees

Exclusion criteria	IHR dentists who were suffering from serious, debilitating or life-threatening illnesses as defined by the insurance arrangements.	
Number of participants selected for interview	29 participants were selected for interviews. However, only 23 interviews were completed. There was no outright refusal, but four female retirees consented to be interviewed but, although not explicitly changing their minds, made repeated excuses to avoid being interviewed, and were not pursued. *These four females had retired due to musculoskeletal problems. A further two participants, who also retired due to musculoskeletal problems, completed the interviews but subsequently asked for their interviews not to be included in the study for personal reasons.	
Gender	Male 19; Female 4	
Age range at retirement	39-59 years; mean age of IHR - 51 years old	
Years since retirement (range)	1-12 years	
Reported principal reasons for retirement	Depression/psychological illness (stress and or anxiety)	9
	Trauma/accidents	3
	Skin condition	2
	Musculoskeletal conditions	5 (11*)
	Hearing and eye problems	2
	Alcohol abuse	2
Principal position of the retirees at the point of retirement (*includes those who withdrew for the reasons above)	GDP (NHS, practice owner)	10
	GDP (Private, practice owner)	3 (*4)
	GDP (mixed, practice owner)	2 (*4)
	GDP (NHS, non-practice owner)	2 (*3)
	Community dentist (NHS salaried dental practitioner)	1 (*3)
	Military dentist	1
	Academic	1
	Hospital	1
	GDP (50/50 split – Salaried & NHS [GDS])	1
	Prison dentist	1

and I would arrive there and then would have to turn round and come home again.' (GDP [NHS])

'I needed some help medically and my doctor put me on Prozac which I didn't find particularly helpful to be honest but I continued to work and I was probably not aware of my personality change as much as my family. They found that I was much more short-tempered, although I am generally fairly placid, I think it was just that I decided then that I would sell the practice and probably work as an associate for somebody else and take the pressures off the business side of things.' (GDP [GDS])

'I can't breathe and the mask would come off, stop work, I would not be able to finish it, so there were signs that I was struggling, from starting work I would get waves of nausea going into work. I found the business, NHS and patients a great stress. The dentistry was ok... I really enjoyed student life and my early career.' (GDP [NHS])

'For the first time in my life I couldn't bring the needle up to the tissue... my hand started shaking so violently. It was a bit of a shock... I was diagnosed as reactive depression... it was anxiety and fear of it coming back ... I found working very hard and the depression and hand shaking got worst...' (GDP [NHS]) [This respondent's depression become so intense that he attempted to take his own life, as did other respondents, n = 10]

'...whole load of stumbling blocks and just simply in terms of the ways the dental day was structured, the fact that you couldn't spend as long doing a particular job because there was always somebody else in the waiting room and you had to work to make any money.' (GDP [NHS])

Stress

Respondents reported several factors that increase stress, these being time management, anxious patients or unco-operative patients, the workload, government changes, constant drive for technical perfection and changes in the NHS. This is illustrated by the following statements:

'Difficult to pin point because dentistry is basically stressful full stop.' (GDP [NHS])

'Having limited time was dreadful on the NHS. Probably the biggest thing that I found stressful was running behind because you don't know how difficult patients are going to be... I had to send some patients away sometimes, this was very stressful.' (GDP [NHS])

'I did find computers and the new technologies being developed in dentistry very stressful.' (GDP [NHS])

'I was not enjoying dentistry anymore, the feeling of responsibility and also all the changes. The new techniques and things, I did enjoy going on postgraduate courses but didn't always implement what I have learnt ... I just preferred to stay working the way I had been before.' (GDP [NHS])

'I wanted to do NHS dentistry. I think it became apparent as the years went on that you need to do a business management course and the clinical side together. I would put the clinical side first. I wasn't and never have been particularly good on the business side of things.' (GDP [NHS])

'The pressures got more and more psychologically and although I had now got the practice virtually as I wanted it ... The business side of pressures were huge ... I never liked the NHS interference... I still liked the clinical side of work. I came to dread going into work because I did not know what the problems would be today... staffing problems and all sorts of things.' (GDP [NHS])

'Well the stresses... well first of all trying to earn enough money to keep the wolves from the door and then you know building it up and secondly I was just working too hard I just had too many patients... I was seeing 50+ patients in one day... I was definitely on the dental treadmill.' (GDP [NHS])

Effects of depression on health

Major depression is an illness that involves the body, mood and thoughts. It affects the way people eat, sleep and feel about themselves and about things. These symptoms were reported by all our respondents to some degree. Table 2 illustrates the comments.

Support needed for younger dentists

The goal of coping with stress is to offset the negative effects of stress by using appropriate coping strategies. All respondents (n = 23) suggested that appropriate stress management training should be given to undergraduate and postgraduate students and that continual professional development (CPD) courses should concentrate on dealing with stress in dental practise. Respondents suggested that undergraduate training should also involve financial and business management, and communication skills in dealing with conflict and confrontation. More emphasis should be placed on managing difficult or anxious patients. They also suggested that practising dentists could also benefit from using stress management techniques such as breathing exercises, relaxation, meditation, time management workshops and developing social support systems. Respondents also suggested that the profession could do more to help stressed dentists, by having professional help or counselling services.

Table 2 Symptoms reported by dentists

Mood changes	Frequent mood changes and reduced interest in what was going on around them. *'People around me would constantly ask me what was wrong... I thought I was fine!'*
Sleep disruption	This may be either sleeping all the time or periods of insomnia. *'I would get home from work and want to sleep and not wake up... I found concentrating at work very difficult because I just wanted to sleep.'* *'I could not switch off... I would go to bed and not sleep... I would worry who was coming to see me tomorrow, would the staff be ok, what if I had made a mistake and so on... all night.'*
Fatigue or loss of energy	Respondents reported that they felt very tired during the working day and had no energy. *'I did not want to do anything... I was always knackered.'* *'I could not see as many patients as I used to... which impacted on my earnings.'*
Worthlessness or guilt	Respondents reported feeling guilt when they had long periods of time away from work. Most thought *'just pull yourself together and get on with it.'* Depression to the respondents was not an illness: *'people are always saying they are depressed... I always thought they were making it up, until I could not get out of bed and dreaded going to work.'*
Indecisiveness	Respondents reported that they found treatment diagnosis difficult and would often put off treatment decisions for many visits. One respondent commented that *'I would watch teeth for many appointments; I knew the patients needed treatment but I dreaded taking on that much work.'*
Suicidal thoughts	Ten of the 29 respondents who were interviewed had suicidal thoughts. Some had tried to commit suicide by taking a drug overdose. *'I was suicidal for a number of years, tried a few times but luckily never succeeded.'*

Musculoskeletal disease

Respondents who reported suffering from musculoskeletal disease had continued to work in dentistry for a number of years following the onset of symptoms. The most reported problem area was hands and back. Some respondents reported that the pain had led to depression and even to attempts of suicide:

'I can be absolutely precise about the day my neck pain started in 1988. I woke up one morning and I couldn't get my head off the pillow, I didn't have any warning signs, I turned over and got up backwards, it just completely locked and I couldn't move, it was quite amusing for a while, because it wasn't initially desperately painful, it just got progressively more painful over the subsequent years. Fortunately I was good with mirrors so backing the car and things wasn't too difficult but I think probably a lot of the problem seemed to centre around depressive illness which I'm still under care for. I look back and think about when the loss of interest started and things started to trip, it was such a slow transition, you notice yourself changing, I just put it down to age but I just sort of dropped interests and became more sort of bitter and twisted I suppose about the work.' (GDP [NHS])

'I started to develop numbness of the fingers as well and my hands... I still have a problem carrying a cup of tea.' (GDP [NHS])

'By Friday... I would have severe pain from my whole body, muscles and joints everything and I needed painkillers and after the weekend I would be fine... suddenly the pain would come back ... this pain was caused by dentistry.' (GDP [NHS])

'I had multiple arthritic problems which would not have been helped by the sort of job I was doing and when I qualified we were becoming more aware of posture and the working positions have got better... I don't know what else I could have done.' (GDP [NHS])

Trauma and skin conditions

Two respondents reported retiring due to trauma; one was injured in a car accident and retired at age 50 and one through the loss of a thumb at age 39. Comments included:

'I was doing some wood work for the kids and I had a Black and Decker saw that was in the days when they didn't have any safety catches and I had it sitting on the garage floor and my thumb went into the saw, it didn't actually cut it off it actually macerated it' (GDP [NHS]). This respondent reported that he had been very happy in dentistry and was devastated that he could no longer practice but at the age of 39 he could not sit at home and do nothing. He retrained as a pilot and worked until the official retirement age, and was very positive about his career in dentistry and the support he had been given.

'I sort of blacked out... went off the road... I got a head injury and my arm was crushed above the elbow and I had a punctured lung... I did not know anything for about 2-3 weeks... I had been taking anti-depressants before the accidents and was finding dentistry to be quite stressful... I didn't really look after myself' (GDP [NHS]). This respondent had a very mixed dental career and found some aspects very enjoyable but had also experienced personal stress which was related to dentistry.

2. Quality of life following retirement

Respondents reported that they felt depressed and despondent with dentistry following retirement. Also, the loss of professional status and position in society were difficult to deal with. Due to the administrative restrictions imposed by the NHS pension arrangements and Wesleyan Medical Sickness (WMS), most respondents did not find alternative employment as it was not financially viable. In this respect, the monies that are earned are subtracted from the monthly pension payment, which gave respondents no incentive to find alternate employment: *'I am working for nothing'* (GDP [NHS]). Some found the lack of a career had a negative impact on their health and reported their need to work, even with the disincentives from the pension arrangements. Some respondents completed other degrees (n = 6) and attempted to retrain (n = 7). Only two went into further employment, one as a commercial pilot and the other as a social worker. However, most of those who had retired expressed a wish to have been able to continue working in some form. The following statements illustrate this:

'I felt completely worthless, which doesn't help the depression and I look back on my life and I think what have I achieved absolutely nothing as far as I can see... but it just seems like a complete waste of a life.' (GDP [NHS])

'I felt I had no position... and worthless, it took about two years to build my confidence after retirement.' (GDP [private])

'After retirement, I did not know what to do with my time... I had enjoyed dentistry... but now felt very depressed and actual went on anti-depressants... you have no professional status or standing in the community... it did not help because I was working in a small community and was very young.' (GDP [NHS])

3. Support before retirement

All respondents felt that more support should be given to dentists who retire prematurely. Most found the process involved in retiring from the NHS very difficult to deal with. A few (n = 4) respondents had contacted the British Dental Association or the General Dental Council, which may suggest that these dentists were unaware of the support available to them via expert advice or support. Respondents who had retired due to depression found the process stressful and believed that people did not understand the condition: *'I think they think I am making it up, just to retire'* (GDP [NHS]). This was also reported when respondents were dealing with WMS. This is illustrated by the following:

'Lack of information because having been through that [developing the condition] *and obviously it's a one off process. It's very different from a usual process having to prove that you are incapacitated.'* (GDP [private & NHS])

'I found that very stressful and difficult. The NHS wasn't too bad because the Consultant was adamant that I could not work... but WMS were difficult to deal with... however I couldn't have survived without them... I also felt there were niggles that they didn't believe me and that made it difficult. If things weren't bad enough they constantly wanted more and more information...' (GDP [NHS])

'I had sickness and life insurance and WMS were quite good... lots of interviews and information requests that made it very stressful... obviously they have to be sure that you are not trying to get money off them.' (Salaried)

4. Future life without dentistry

Most respondents found the first two to three years after IHR difficult to cope with, even those dentists who had not retired due to depression. After working 40 to 50 hours a week, filling the time was problematic. Respondents suggested that a support group would have helped to the initial stage after IHR. Respondents reported carrying out voluntary work in the local community, taking up hobbies or looking after young children as a way of occupying time.

'I think firstly, I live in a village and I would see nobody and I can go days when I only speak to the family so initially for the first two-three years I was just driving around from town-to-town, wandering around trying to find something to do.' (GDP [NHS])

'I did a bit of voluntary work at the children's panel to start with and then realised that social work was the way to employment again.' (GDP [NHS & private])

'I was not a workaholic but I was definitely somebody who believed in the work ethic and did work hard and there was the guilt thing about it as well when you stop working... you feel guilt about not working. I took on things like a computer course and playing a little bit more golf which I never had time for before and my wife is still working... I became a house husband as well.' (Salaried)

DISCUSSION

Research has indicated that dentistry is a stressful occupation, with studies from as far afield as Denmark,[14] the United States,[15] Israel,[16] the United Kingdom[1–5] and southern Thailand[17] confirming this. A lack of career perspective has been found to be a stress factor most related to burnout in

a survey of Dutch dentists.[18] The present study indicates that dentistry in the UK has a number of stress factors, including business, stressful patients and changes to the NHS systems. Most people find changes at work difficult to deal with and positively fight against change.[18] Some respondents suggested that a factor that may have contributed to their stress was the NHS payment system. Respondents suggested that *'Working on NHS is like being on a treadmill... you can't get off.'*

Depression and anxiety were reported by 16 respondents, even if this was not the cause of their IHR. Respondents believed that dentistry was becoming increasingly stressful, due to business pressures, staffing issues and patients. Ten of the interviewees had contemplated suicide as the only way to escape the pressure. Interestingly, these ten GDPs worked in solely NHS practices and directly equated their stress to working in the NHS system. These respondents suggested that the undergraduate course should include stress management, business skills and career advice for when things go wrong.

A possible consequence of stress, anxiety or depression is professional burnout. This is defined by three main characteristics: first, the person is exhausted mentally and physically; second, the person develops negative attitudes towards their patients and co-workers; and finally, there is a tendency to feel dissatisfied with their accomplishment and to evaluate themselves negatively. This study found all three characteristics in the respondents, particularly dissatisfaction with their accomplishments: *'When you look back over your career how do you feel?' 'I felt completely worthless, which doesn't help the depression and I look back on my life and I think what have I achieved, absolutely nothing as far as I can see... but it just seems like a complete waste of a life'* (GDP [NHS]). One respondent summed up his feelings towards patients before he retired: *'Mrs Jones syndrome... you start off in early practice and you look at your list of patients and you see Mrs Jones and think oh God she's in again but it had reached a stage where they had all become Mrs Jones... so it was high pressure.'* (GDP [NHS])

Burnout may be described as the erosion of the person. Gorter *et al.*[18] found that certain aspects of dentistry, such as time management, patient-related pressures, management of staff and the lack of a clear career pathway, were all relevant stressors which could lead to professional burnout. This was also found in this study, with additional reported stressors being changes to the organisational (NHS) structure. Interestingly, healthcare professionals who burnout early in their careers adopt a more flexible approach to life and work.[19] This study found that dentists continued to work in practice while suffering from clinical depression and it was not until after retirement that respondents reported that their approach to life had changed.

Dentists may develop stress disorders early in their career. In this respect, two studies conducted in the UK indicated increasing levels of stress-related problems in young dentists and dental students.[20,21] Stressors in the early years of practise come from the combined effects of patients, financial problems, not knowing what is expected of them, fear of litigation, and making mistakes and demanding patients. These studies also found that a higher proportion of dental students and young dentists drank excessively and experimented with drugs.[14,15] The respondents in this study reported enjoying their undergraduate training, some suggesting *'this is the best part of my career ... although it was stressful you had a social support with your mates, which you don't have in practice'*. Respondents in this study reported excessive drinking during training, which continued into professional life. One respondent reported *'I moved the practice to my home, so I could drink between patients.'* All respondents felt loss of professional status after retirement and that this increased their depression, even those who had not retired due to anxiety or depression.

Respondents reported that different methods for dealing with stress and anxiety should be available, these being time management courses, more workshops on stress management, meditation and relaxation. Also, not being afraid to seek professional help or counselling. Respondents would have liked more career guidance when things started to go wrong. Respondents (n = 20) reported not knowing about alternative career choices within dentistry. Rutter, Herzberg and Paice found that dentists who take on teaching or leadership roles with other professionals, in addition to clinical duties, found that it may reduce stress.[22] This study suggested that the reason for this reduction is it lessened isolation and increased self-esteem in response to the attention from dental students. However, not all stressful situations can be eliminated from dentistry. These include stressors such as patients' expectations, seeing increased numbers of patients for financial reasons, earning enough money to meet lifestyles and being perceived as an inflictor of pain. These issues generally require a reassessment of one's own attitude and expectations in the light of whether they are realistic, achievable or rational. For some respondents in this study, their attitude and goals to work and life were unrealistic and they did not reassess them until after IHR.

The respondents who reported retiring primarily as a result of musculoskeletal disorders had continued to work for sometime following the onset of symptoms. They reported problems when trying to retire from the NHS because it was difficult to prove incapacity. Some respondents had to go to extreme measures to convince the NHS and their sickness insurance company to take them seriously, which was reported as contributing to depression and anxiety. The respondents who reported retiring primarily due to skin conditions also experienced difficulties with the NHS and their sickness insurance company. However, respondents had no problems claiming from their sickness insurance in the short-term, but faced problems when trying to retire permanently. This was also a problem for practitioners working outside the NHS.

The results of this study indicate that there is a potential to retain more of the highly skilled dental workforce. Respondents wanted more career advice early in their career and support to change career pathways if things did not go according to plan. Fewer respondents knew who to contact, which, for some, increased anxiety and depression. Some reported that you '*need to have a drug and alcohol problem to get help... anxiety and depression is not considered a real problem.*' Most reported that they had not been offered the opportunity of working part-time or working in other aspects of dentistry. The above discussion

would appear to point to a need to help a substantial proportion of ill health retirees through a difficult period in their lives, beyond which they might be able to function again, even if in a reduced capacity.

Regarding support, most respondents would have liked more support when going through IHR. Completing the paperwork for retirement from the NHS was considered by respondents to be stressful. One respondent was denied his request to retire due to insufficient information. He had to re-apply and seek private consultation to help complete the paper. Respondents who had retired due to anxiety and depression reported that support was completely lacking from the dental profession and their sickness insurance company added to the pressure. They suggested '*every time I receive a letter from the sickness insurance company, I have a major panic attack... will they continue to pay or will they force me back to work... this whole process increases my depression... I don't see the need for it when the consultant has said I should no longer work and the NHS has accepted my retirement.*' However, most did accept that their sickness insurance company were '*only doing their job and without them they could not survive.*'

The present study examined the effects of IHR on a group of dentists who had retired because of illnesses which were not life-threatening. The lesson here is, perhaps, to identify those members of the profession who feel under work-related stress before it results in illness and IHR. Improved occupational support could therefore be considered as a way of avoiding IHR.

Lastly, it was apparent that dentists did not know who might be able to provide them with advice. NHS primary care trusts already provide occupational health services for NHS/GDS dentists, who pay an annual fee which allows them to access these services. The dentists in this study had not opted for this option or were unaware of it. The BDA already have a scheme designed to assist dentists struggling with the work pressures in dentistry. The respondents in the present work may have been unaware of this or too ill to seek help. One recommendation may be to advertise such schemes more to members. Notwithstanding this, it is apparent that more assistance is needed to direct ill dentists to available and trained resources. Younger dentists now are trained in stress management and this is reinforced during their dental foundation year. Only time will tell whether this training has been of value.

CONCLUSIONS

- The main causes of IHR were depression, musculoskeletal disease and specific skin conditions
- Respondents expressed concern regarding the level of support available to dentists in distress, but these are only the views of a few practitioners and not necessarily the views of the profession
- Retired dentists also recommend better training for younger graduates in respect of the causes of stress and business problems
- More career advice is needed to help ill dentists continue to work in the dental profession
- Post-retirement counselling may also be needed to help dentists obtain alternative employment
- Respondents to this study found that continuing to work had a positive impact on their health.

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