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The relationship between support and stress in forensic community mental health nursing

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ABSTRACT

Aims of the study/paper

This paper reports the results of a survey of forensic community mental health nurses (FCMHNs) in England and Wales which aimed to ascertain the level of stress and burnout experienced by this group

Background/Rationale

Several studies have identified that mental health nursing is a stressful activity and the relationship between factors such as age, experience, support, caseload size and perceived stress have been explored. However, until recently, no studies have examined the situation of FCMHNs and this paper extends the analysis of studies completed by the main author, considering issues related to coping abilities and support systems.

Design/Methods

The survey involved respondents completing a demographic questionnaire and a range of standardised validated measures (Maslach Burnout Inventory, General Health Questionnaire and Community Psychiatric Nurse Stress Questionnaire). The population for the study was all identified FCMHNs attached to the 26 National Health Service (NHS) Medium Secure Units in England and Wales (n=104)

Results/Findings

A high response rate of 77% (n=80) was achieved. The results identified that a number of respondents were experiencing burnout. Statistically significant associations were found between caseload size and level of stress. The results also suggest that support from managers and colleagues were an important factor in ameliorating the experience of stress and show that individuals in this study experiencing high levels of stress adopted palliative behaviours such as use of alcohol

Conclusions

The paper concludes by suggesting that such findings should be considered when delivering stress management programmes and reinforce the potential benefit of effective clinical supervision as a means of staff support

KEYWORDS: burnout, coping, stress, forensic, mental health, support, community, clinical supervision, caseload

INTRODUCTION

There now exists an evidence-based assertion that people-centred professions are inherently stressful. This has been demonstrated among police officers (Maslach and Jackson 1979), school teachers (Schwab 1986), psychologists (Cushway 1992, Cushway and Tyler 1996) and the various branches of the nursing profession (Moores and Grant 1977, Dolan 1987, Snelgrove 1998). In recent years mental health nursing has been demonstrated to be stressful (Carson *et al.* 1991, Sullivan 1993, Fagin *et al.* 1995).

Factors such as age (Moore and Cooper 1996), experience, shift patterns (Fielding and Weaver 1994), perceived managerial support (Firth *et al.* 1986), sickness absence (Rix 1987), violence or threats of violence by a patient (Whittington and Wykes 1992, caseload size (Carson *et al.* 1996) and job security (Fagin *et al.* 1995) have all been identified as important variables. In some cases, however, the association between variables and occupational stress is less clear. For instance in regard to caseload size while Carson *et al.* (1996) found a positive association between high caseload numbers and occupational stress, Onyett *et al.* (1997) did not find such an association. The reasons for this are not clear and may be related to caseload composition, stability of caseload or factors related to perceived support within the team. This paper extends the analysis of recent research into the occupational stress experiences of forensic mental health nurses (FCMHN) (Coffey 1999, Coffey 2000) and considers issues related to coping abilities and the role of supportive relationships.

Definitions

Research into stress has been prompted by the role it plays in the onset of disease. In researching this area many authors have grappled with concepts of stress which are frequently fundamentally different. Stress is defined separately as a stimulus-based model or agent, a dynamic or response-based agent or a broader psychological-based or transactional model (Cohen and Kessler 1995). It is this transactional model of stress that informs much of the literature on occupational stress and is the core model for the research to be presented here.

Dewe (1987) suggests that definitions of stress should reflect its relationship to adaptive factors. The concept of stress being closely linked with the ability to cope is inherent within Atkinson's (1988 p.58) definition of stress, that is an "excess of demands over the individual's ability to meet them". This definition conceptualises stress as both a dynamic (effect) and as a transaction. The individual's ability to cope with external pressures is dependent upon a cognitive appraisal of the stressor and the coping strategies the person has available to them. Therefore stress is perceived in relation to the person's previous experience, success or failures in dealing with similar situations and their familiarity with the situation (Lazarus and Folkman 1984). Dunn and Ritter (1995) further elaborate this transactional view in suggesting that the person's response to stress will depend on their particular physiological and psychological state in association with their cognitive appraisal of the threat or stress they encounter. It is these individual differences in the appraisal of stress and the person's reaction to it which have made it difficult for researchers to identify causal relationships between the presence of a stressor and its effects on the person experiencing it. However Cox and

Ferguson (1991) have suggested a theory for understanding the process of appraisal of threat which eventually may allow identification of these individual differences. They suggest a process of primary appraisal that takes into account a number of different personal and situational factors and results in the person judging a situation as challenging, anxiety producing or depressing. These factors will not, however, be the same for each person all the time. For instance, a change in a situational factor may make stressors that have previously been seen as challenging become anxiety producing.

The concept of adaptive ability suggests that nurses working in stressful situations may be able to engage strategies, which allow them to reduce the stressfulness of their work environments. These may include the use of appropriate support systems to enhance coping abilities.

Coping in Mental Health Nursing

A number of studies have considered factors which nurses find stressful and the coping skills they employ. Consistent among these studies is the finding that social support is deemed important by nurses themselves when coping with occupational stress.

Melchior *et al.* (1997) conducted a meta-analysis of studies on burnout in mental health nurses and found that a correlation existed between job satisfaction, role conflict, involvement with the organisation, supervisor support and burnout. While Melchior *et al.* (1997) argue that these items are possible risk factors for burnout in mental health nurses, they also suggest that the type of patients the nurse works with may also have an important influence. They conclude that supervisor support and support from colleagues are "very important in reducing or preventing burnout" (p.200).

Studies of stress and burnout frequently advocate the need for improved support of nurses within their work (Firth *et al.* 1986, Fagin *et al.* 1995). Social support may be formal taking the form of clinical supervision and staff support groups or involve the use of informal networks such as support from colleagues in the office or family and friends. It is often postulated but seldom demonstrated that this support, oblivious of its form, will reduce levels of stress and burnout.

Ritter *et al.* (1995) have demonstrated the effect of introducing a social support intervention among a group of ward nurses. In their study they found that nurses who attended 6 three-hour sessions on social support had levels of stress and burnout that were less than their pre-intervention scores. Nurses in the two control groups demonstrated little change in their levels of stress and burnout. Although a coping questionnaire was used in this study no findings are presented so it is difficult to gauge if there was any improvement in coping abilities.

Butterworth *et al.* (1999) conducted an evaluation project of clinical supervision on 586 nurses in 23 centres using standardised measures to measure levels of stress, coping and job satisfaction and burnout. This study concluded that it was more stressful to work in the community than in hospital. It also found that job satisfaction was higher amongst community nurses and that different grades of staff find different elements of their roles stressful. This study compared a clinical supervision evaluation project (CSEP) group of nurses with previous studies and demonstrated some interesting differences. For example CSEP nurses had higher levels of personal accomplishment, however it is difficult to attribute these differences to the effect of clinical supervision as the CSEP nurses included nurses who did not have clinical supervision.

While Ritter *at al.* (op cit) did not demonstrate a statistically significant improvement in levels of burnout other researchers have been more successful. In a controlled trial Berg *et al.* (1994) found that nurses who received clinical supervision demonstrated more creativity in their work and experienced less burnout. They hypothesised that the supervision received helped the nurses to feel more supported and hence more likely to innovate in their practice. Berg *et al.* (1994) also suggested that while support in itself may be important it is the targeting of support on the specific work that nurses do that produces benefits. However, this study is limited by the fact that the experimental and control groups were small and baseline measures of burnout were low compared with other studies.

It also appears that the content of clinical supervision is important and more specifically that this should include a reflective element (Atkins and Murphy 1993). Berg and Hallberg (1999) investigated the effects of clinical supervision in a study using a pre-post test design involving a sample of 22 mental health nurses. Although clinical supervision was found to enhance creativity and organisational climate the study was unable to demonstrate any significant reduction of occupational stress through the use of standardised measures.

Carson *et al.* (1999) conducted a randomised control trial to measure the effect of a social support intervention on the stress levels of ward based mental health nurses. The social support intervention (n=27) consisted of five 2-hour facilitated group sessions aimed at improving understanding of social support, its benefits and the individuals' role in achieving social support. The control group (n=26) were given a intervention which consisted of feedback on the study questionnaires which they had been asked to complete as well as a booklet on stress management. Standardised measures were used pre, post and 6 months following the intervention. The social support intervention was found to be no more effective than offering feedback only. The authors acknowledge some of the difficulties encountered in their study including poor attendance at the social support intervention group. They also argue that social support is just one of a range of stress moderators and as such may not have a powerful enough effect by itself to cause changes in perceived stress. However, Carson *et al.* (1999) conclude that while social support is an important factor it may not be possible to distil this into an intervention which can be delivered in a group format.

The above studies were all concerned with inpatient nurses. However Prosser *et al.* (1999) assert that community work is more stressful than working in in-patient services. This finding is further supported by Reid *et al.* (1999) who found that community mental health staff (including but not exclusively nurses) were experiencing high levels of stress.

They also reported that contact with colleagues was seen as one of the most rewarding parts of their work. Similarly they found that contact with patients was felt to be rewarding although staff felt burdened by a sense of being responsible for the clients' actions. (Reid *et al.* 1999). In terms of working with forensic patients in the community these findings would seem very pertinent in that such clients may have a history of criminality as well as often being the focus of external scrutiny (foe example public inquiries).

Findings from the qualitative element of the current study have shown that FCMHNs consider social support an important element in coping with stresses of their work (Coffey 2000). This part of the study reports on the findings of the analysis on the standardised measures to consider a number of questions related to differences between apparently high and low stress groups in FCMHNs.

METHODS

Design

The study consisted of a census of Forensic Community Mental Health Nurses (FCMHNs) through the distribution of a postal questionnaire with attached self-completion psychometric schedules. The Statistical Package for Social Scientists (SPSS) computer program (Norusis 1993) was used to analyze the data.

Population

The population for the study was all identified FCMHNs (n=104) attached to the 26 National Health Service (NHS) Medium Secure Units in England and Wales, which had been identified through the Directory of Forensic Services (Rampton Hospital Authority 1997). Four FCMHNs from the service where one of the authors worked were excluded from the study.

The identified FCMHNs were sent individually by post an introductory letter with the data collection instruments attached, together with a stamped addressed envelope for return of the forms. The letter explained the purpose of the study, gave assurance of confidentiality and sought consent from the FCMHNs. Information was also provided about the purpose of the study and instructions were given in relation to completion of the data collection instruments. The participants were offered a summary of results on completion.

Data Collection

Demographic Questionnaire

A demographic data sheet for background information was included. Respondent characteristics determined by this questionnaire included age, gender, years in mental health nursing, time in present job, number of patients on caseload, working hours and whether the respondents worked in urban or rural environments.

Maslach Burnout Inventory (MBI) (Maslach and Jackson 1986)

This inventory seeks to identify levels of burnout in health care staff. Burnout, as conceptualised by this scale, is a particularly high level of stress which gives rise to a syndrome of emotional exhaustion, depersonalisation (feeling cut off from ones emotions) and reduced self-esteem. As a result the scale has three subscales covering the items emotional exhaustion, depersonalisation and personal accomplishment (as a measure of self esteem). This measure is widely used in studies examining occupational stress and is considered to be a well validated measure (Maslach and Jackson 1981). For mental health workers the "cutoff scores" in terms of high symptomatology in the three subscales are outlined in Table One

Insert Table One

General Health Questionnaire – 28-item version (GHQ-28) (Goldberg and Hillier 1979). This is a commonly utilised validated inventory that measures psychological stress and the likelihood of psychiatric caseness. The version of the scale used in this study has 28 items which were scored binomially for the presence of the item symptom (1=presence, 0=absence). This is the preferred scoring method for non-clinical use where scores are expected to be low and the total score only is used (Goldberg and Williams 1988). The range of scores therefore for this scale is 0-28 with a score of five or above indicating the presence of psychiatric caseness in terms of psychological distress.

Community Psychiatric Nurse Stress Questionnaire –revised (CPNSQ-r) (Carson et al. 1991)

This inventory consists of 48 items that are statements of potential stressors in CPN work. The respondents are asked to rate each item on a 5-point Likert scale ranging from '0 = no stress' to '4 = extreme stress'. The range of possible scores is from 0-192. Scores can be compared against the standardisation sample of 250 CPNs (Fagin *et al.* 1995). Brown *et al.* (1995) report that the scale has good validity and reliability.

RESULTS

Respondent Characteristics

The demographic questionnaire and the inventories were returned by 80 of the FCMHNs representing a response rate of 77%, which can be considered a good response rate for a postal questionnaire (Bowling, 1997). 77 (96.254%) of the respondents completed the GHQ with 79 (98.75%) completing both the MBI and CPNSQ. The mean age of the respondents was 37.8 years (s.d 6.28) with 53.8% (n=43) of the respondents being male and 46.3% (n=37) being female. Detailed demographic information is presented elsewhere (Coffey 2000).

The Results of the General Health Questionnaire

When the sample was examined for "caseness" according to the GHQ, 31.2% (n=24) were identified as exhibiting some degree of psychiatric distress. When the characteristics of these individuals were compared against individuals demonstrating "non-caseness" size of caseload appeared to be a statistically significant difference between the two groups with the caseness group having a larger caseload (15.33 in comparison to 12.20, **Mann-Whitney, U=421, Z=-2.178, p=0.029**). Whilst not statistically significant a higher percentage of the caseness group were female (54.2% (n=13)) than in the non-caseness group (41.5% (n=22)). Factors that appeared to be associated with caseness were children living at home (caseness 73.9% (n=17), non-caseness 56.6% (n=30)), perceived job security (caseness 58.3% (n=14), non caseness 74% (n=37)), and attitude of line managers (75% (n= 18) of the caseness group found their manager either supportive or very supportive in comparison to 94.2% (n=49) of the non-caseness group). As regards health related behaviours, in the caseness group there were higher rates of drinking more than 3 units of alcohol daily (45.8% (n=11) compared to 24.5% (n=13) in the non-caseness group), lower rates of smoking (41.7% (n=10) in comparison to 57.7% (n=30) in the non-caseness group) and lower rates of perceptions of fitness (58.3% (n=14) compared to 67.9% (n=36) of the non-caseness group).

The Results of the Maslach Burnout Inventory

In relation to the subscales of the MBI, 44.3% (n=35) of the respondents were rated as experiencing high levels of emotional exhaustion with 26.6% (n=21) being rated as experiencing high levels of depersonalisation and 26.6% (n=21) experiencing low levels of personal accomplishment. According to the procedure defined by Maslach and Jackson (1986), seven individuals (10.9% of the respondents who completed the MBI) who had scored high on both the emotional exhaustion and depersonalisation subscales as well as low on the personal accomplishment subscale were classified as suffering "high burnout". By adopting a converse procedure four individuals (6.25%) were identified as experiencing "low burnout". The age of members in the "high" and "low" burnout groups were similar (means ages of 35.71 and 33.5 respectively), although members of the "high" burnout group seemed to have been in post longer than the low burnout group (3.179 years in comparison to 1.875 years). The largest difference between the groups appeared to be in relation to caseload size, with the "high" burnout group having a mean caseload size of 13.43 in comparison to a mean caseload size in the "low" burnout group of 7.75, although statistical significance cannot be demonstrated because of the low numbers in each condition.

Differences between the respondents demonstrating high and low levels of emotional exhaustion

When the respondents who demonstrated high levels of emotional exhaustion (n=35) were compared with those who demonstrated low levels of emotional exhaustion (n=29), caseload size was seen to be a significant difference between these groups. The mean caseload size in the high emotional exhaustion group was 15.53 compared to 9.81 in the low emotional exhaustion group (**Mann Whitney, U=283, Z=-2.525,** p=0.012). The low emotional exhaustion group appeared to have a higher rate of perceived job security (77.8% (n=21) compared with 61.8% (n=21) in the high emotional exhaustion group). Only one individual (3.6%) in the low emotional exhaustion group found their manager

unsupportive in comparison to eight (22.9%) members of the high emotional exhaustion group and rates of alcohol consumption were significantly higher in the high emotional exhaustion group (48.6% (n=17) in comparison to 17.2% (n=5), **chi-square-6.901, *df=1,*** *p*=0.008).

Differences between the respondents demonstrating high and low levels of personal accomplishment

The members of the low personal accomplishment group (n=21) were on average older than the respondents in the high personal accomplishment group (n=41), with mean ages of 39 and 35.55 respectively. They also had been in psychiatric nursing longer (means of 16.32 and 14.19 years respectively), in post longer (means of 4.627 and 3.324 years respectively) although the size of caseload between these two groups was very similar (means of 13.90 and 13.76 clients respectively). The only statistically significant difference between these groups related to whether they were smokers, with 31.7% (n=13) of the low accomplishment group being smokers compared with 76.2% (n=16) of the high personal accomplishment group (**Chi-square=11.038, *df*=1,** *p*=0.001). Although not statistically significant, a larger percentage of the low personal accomplishment group had children living at home with them (67.5% (n=27)) than the high personal accomplishment group (47.6% (n=10)).

Differences between the respondents demonstrating high and low levels of depersonalisation

The mean ages of members in both the high (n=21) and low depersonalisation (n=36) groups were similar (36.45 and 38.06 years respectively) as were the mean size of their caseloads (12.05 and 12.71 clients respectively). Members of the low depersonalisation group appeared to have been in post longer (mean of 4.210 years in comparison to 2.526 years in the high depersonalisation group). There were no statistically significant differences between the two groups, although the high depersonalisation group contained a higher percentage of men than the low depersonalisation group (71.4% (n=15) and 50% (n=18) respectively). A lower percentage of individuals rated their fitness as either good or excellent in the high depersonalisation group (51.7% (n=12)) than in the low depersonalisation group (75% (n=27)) and a higher percentage of members of the high depersonalisation group were smokers compared to the low depersonalisation group (61.9% (n=13) and 44.4% (n=16)).

The Results of the CPNSQ(r)

In order to try and identify particular factors associated with level of perceived stress amongst the respondents, the results of the CPNSQr were used to define a "high stress" group (HICPN) and a low stress group (LOCPN). The 25 respondents with the highest scores on this scale were allocated into HICPN (CPNSQr score of 66 or above) and the 25 lowest were allocated into LOCPN (CPNSQr score of 40 or lower). The mean ages of members in the HICPN and LOCPN groups were similar (36.40 and 37.38 years respectively) and there was no appreciable difference in the mean number of years in psychiatric nursing (15.76 and 16.40 years respectively) or mean numbers of patients in caseload (12.84 and 12.96 years respectively). The mean number of years in present post was slightly higher for the LOCPN

group (4.352 years compared with 3.308 years in the HICPN group. Women constituted a higher percentage in the HICPN group than in the LOCPN group (56% (n=14) and 36% (n=9) respectively) and there was a lower rate of perceived job security in the HICPN group **(58.3% (n=14)**) than in the LOCPN group **(75% (n=18)).** All members of the LOCPN group found their line managers at least supportive and felt that they were able to discuss work problems with work colleagues. In comparison, 28% (n=7) of the HICPN group found their managers unsupportive and 20% (n=5) felt that they could not discuss work problems with colleagues.

Results of whole sample compared against GHQ, CPNSQr and MBI

The median values of the continuous data collected by the demographic questionnaire (age, years in psychiatric nursing, days of sick in the last year, time in present job and number of patients on caseload) were calculated and used to compare the overall sample against the results of the GHQ, CPNSQr and subscales of the MBI. For each of these variables, the respondents whose scores equalled or were higher than the relevant median value were compared against those whose scores were less than the median value (see Table Two)

Insert Table Two

Statistically significant differences were obtained for age against CPNSQ r, days off sick in the last year against emotional exhaustion, and time in present job against personal accomplishment. However numbers of patients in caseload appeared to have the highest impact on the respondents, with those with caseloads lower than the median achieving significantly lower scores for the GHQ and emotional exhaustion scales. Interestingly this group also showed a significantly lower score on the personal accomplishment scale. The results of comparing the remaining nominal data from the demographic questionnaire against the GHQ, CPNSQr and subscales of the MBI are shown in Table Three.

Insert Table Three

In relation to health related behaviour, individuals who drank more than three units of alcohol a day achieved significantly higher scores on both the GHQ and emotional exhaustion scales than those who drank less than three units, whilst smokers had a significantly higher level of personal accomplishment in comparison to non-smokers. However the factors that appeared to have the greatest impact on the respondents appeared to be related to the level of support they received in their work environment. Respondents who weren't able to discuss work problems with their colleagues scored significantly higher on both the CPNSQr and the emotional exhaustion scales. Similarly respondents who found their line managers at least unsupportive scored significantly higher on the GHQ, CPNSQr and emotional exhaustion scales.

Discussion

Type and not size of caseload may be more important in determining effects of caseload on nurses although Brown and Leary (1995 p.130) found that quantity of patients on caseload determined stress levels. In the current study we have found that those nurses who demonstrate caseness on the GHQ have higher caseloads compared with those who had non-caseness scores. This finding was statistically significant at the p=0.029 level. There was a similar relationship in respect of those with high burnout on the MBI having higher caseloads although due to the small numbers involved we could not demonstrate statistical significance. However, when we examined the emotional exhaustion subscale scores we found a statistically significant difference between high and low burnout scores on this subscale. This is in keeping with purpose of this subscale which is to "describe feelings of being emotionally overextended and exhausted by one's work" (Maslach and Jackson 1986 p.7). This suggests that higher caseloads may lead to a feeling that one is stretched beyond one's capabilities of coping. Those with caseloads lower than the median value achieved statistically significant lower scores for the GHQ as well as the emotional exhaustion and personal accomplishment subscales of the MBI. With average caseload size for the whole sample in the range suggested for intensive case management of the serious mentally ill in the community (Harris and Bergman 1988) and lower than a recent study has found (Brooker and White 1997) this is perhaps a surprising result. However the value for the mean caseload size may have been affected by the fact that whilst some of the respondents were carrying caseloads of up to 80 patients, others working in court diversion roles had no caseloads (Coffey 2000). Factors that may be important to nurses in terms of caseload include mix of patients and the perception of a constantly increasing caseload. For instance, managing potentially violent situations in the community or coping with a self-harming client and the fear of being held personally responsible for such incidents are important factors (Coffey 2000). Caseload size remains an important consideration in regional forensic services where FCMHNs often cover large geographical areas making it difficult logistically to see as many patients as generic community mental health nurses (Coffey & Chaloner 1997).

The increase in role demands of the FCMHN has been acknowledged within the profession (Friel & Chaloner 1996). Court diversion and latterly custody diversion have seen FCMHNs expand their practice into new areas (Hillis 2000). With this expansion of role come extra pressures for the individuals involved. Without adequate support from senior staff it can be assumed that nurses would experience increased levels of stress. Firth *et al.* (1986) found that support from senior staff was correlated with higher scores on the MBI. We have found some evidence in the current study to support Melchior *et al.*'s (1997) assertion that managerial and colleague support are important factors. Of those nurses demonstrating caseness on the GHQ, 25% found their managers unsupportive compared with 6% of those in the non-caseness group. This finding was further supported by similar findings in scores on the emotional exhaustion subscale of the MBI and high scorers on the CPNSQr. Respondents who found their manager unsupportive had statistically significant higher GHQ, CPNSQr and emotional exhaustion subscale scores. In a profession which is relatively new and which is expected to expand practice into new areas this lack of support would appear crucial in the experience of occupational stress by FCMHNs. Firth *et al.* (1986) suggest that respect and empathy are important elements of supervisor support but these may not be sufficient on their own. Specialist expertise and in-depth understanding of the area may also be required to provide the advice and support nurses feel is necessary to do their job well. What Firth *et al.* (1986) also make clear is that the ability to offer empathic attention to more junior

colleagues is strongly associated with the personal respect one receives from one's seniors. As such it would seem that supportive managers create supportive teams.

While many studies of occupational stress and burnout often advocate improvements in support for nurses from managers it is worth noting that in a relatively small field such as community forensic mental health nursing the expertise may not exist to provide this support. That is to say with nurses moving into new areas of work such as liaison with the criminal justice system there may be few senior nurses with clinical knowledge of this area who can provide the advice and support which nurses feel they require. It may be that managers as well as nurses will require training. It should, however, be noted that the vast majority of nurses in this study perceive their line manager as being either supportive or very supportive. This is a positive and reassuring finding and may have important implications in terms of staff retention.

Most nurses in this study felt able to discuss problems with colleagues. However we have found that those nurses who could not discuss work problems with their colleagues were more likely to have higher scores on the emotional exhaustion subscale of the MBI and higher scores on the CPNSQr. It has previously been demonstrated that the coping strategy reported most frequently by FCMHNs was peer support (Coffey 2000). Peer support is therefore an important coping strategy for FCMHNs and some nurses are finding it difficult to draw on this support. The findings of this study support previous findings which suggest that work-related support is a significant factor in predicting stress and burnout among nurses (Cronin-Stubbs and Brophy 1985, Dewe 1987, Boyle *et al.* 1991). Given that social support is such an important predictive factor of work stress and burnout it would seem pertinent for nurses to be aware of the need for increasing this type of support during particularly stressful periods.

To a large extent this study reaffirms findings elsewhere that nurses are somewhat dependent upon others (colleagues, managers, friends) to enable them to cope with stress at work. That is, the source of coping is frequently external rather than internal to the nurse themselves. It may be that these nurses fail to recognise that individual characteristics such as self-esteem, mastery and personal control, emotional stability and physiological release mechanisms may be important mediating factors over which some control can exercised (Carson and Kuipers 1998).

Health related behaviours

Those nurses in this study who were drinking more than 3 units of alcohol a day had significantly higher GHQ and emotional exhaustion scores. It would seem that some of those with high levels of stress are coping by using strategies that are palliative. Plant *et al.* (1992) have previously found such an association. It is of course not possible to infer a causal relationship from this information. The individuals in this group who drink more alcohol may do so regardless of occupational stress but this remains an interesting finding. Dewe (1987) found that smoking more was one of a

range of strategies nurses used to cope with work stress. Interestingly in our study found that smokers had a higher level of personal accomplishment although we are at a loss to explain this finding.

LIMITATIONS OF THE STUDY

The study can be seen as having several limitations. Firstly, despite achieving a response rate of 77%, the small size of the population (n=104) means that statistical significance was hard to demonstrate when completing analytical procedures such as examining the characteristics of individuals with burnout (as identified by the MBI). Secondly the absence of information in relation to the non-responders means that that the generalisability to the population of the results obtained from the achieved sample cannot be accurately determined. Thirdly the results may well have been affected by oversensitivity of the standardised measures used (Dolan 1987) or over-reporting/underreporting by the respondents leading to subsequent bias.

CONCLUSION

The results of this study suggest that there is a relationship between the caseloads of FCMHNs and their psychological wellbeing as measured by the MBI, GHQ and CPNSQr. Whilst this relationship is demonstrated to be affected by caseload size, other factors such as the diversity of workload and changing roles may well be contributing factors. Whilst the majority of respondents felt able to discuss problems with their colleagues and perceived their managers to be supportive, the results confirm the assertion made by Melchior *et al.* (1997) that support from colleagues and managers are important ameliorating factors in reducing burnout. The argument can therefore be advanced that effective structures for clinical supervision are a necessity for this group of health workers, along with the provision of appropriate education aimed at preparing individuals for the evolving changes in the role of FCMHNs. The finding that there was an association between FCMHNs experiencing high levels of stress and the use of potentially harmful palliative behaviours such as use of alcohol and smoking should also be considered when developing future strategies for maintaining staff welfare.

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References

Atkins S. and Murphy K. 1993. Reflection: a review of the literature. *Journal of Advanced Nursing***. 18**(1):188-1192.

Atkinson J. 1988. *Coping with Stress at Work*. Thorsons. Wellingborough.

Berg A., Welander Hansson U., Hallberg I.R. 1994. Nurses' creativity, tedium and burnout during 1 year of clinical supervision and implementation of individually planned nursing. *Journal of Advanced Nursing*. **20**(4): 742-749.

Berg A. and Hallberg I.R. 1999. Effects of systematic clinical supervision on psychiatric nurses' sense of coherence, creativity, work-related strain, job satisfaction and view of the effects from clinical supervision: a pre-post test design. *Journal of Psychiatric and Mental Health Nursing*. **6**: 371-381.

Bowling A. 1997. *Research Methods in Health: Investigating Health and Health Sciences.* 1st ed. Open University Press, Buckingham.

Boyle A., Grap M. J., Younger J. and Thornby D. 1991. Personality hardiness, ways of coping, social support and burnout in critical care nurses. *Journal of Advanced Nursing.* **16**: 850-857.

Brooker C. & White E. 1997. *The Fourth Quinquennial National Community Mental Health Nursing Census of England and Wales*. The University of Manchester and Keele University, Manchester.

Brown D. and Leary J. 1995. Findings from the Claybury study for community psychiatric nurses in Carson J., Fagin L. and Ritter S. (eds) *Stress and Coping in Mental Health Nursing*. Chapman and Hall. London. pp.115-138.

Brown D., Leary J., Carson J., Bartlett H. and Fagin L.1995. Stress and the community mental health nurse: the development of a measure. *Journal of Psychiatric and Mental Health Nursing*. **2**: 9-12.

Butterworth T., Carson J., Jeacock J., White E. and Clements A. 1999. Stress, coping, burnout and job satisfaction in British nurses: findings from the Clinical Supervision Evaluation Project. *Stress Medicine*. **15**(1): 27-33.

Carson J., Bartlett H. and Croucher P. 1991. Stress in community psychiatric nursing: a preliminary investigation. *Community Psychiatric Nursing Journal*. **11**(2): 8-12.

Carson J., Brown D., Fagin L., Leary J. and Bartlett H. 1996. Do larger caseloads cause greater stress in community mental health nurses. *Journal of Clinical Nursing*. **5**(2): 133-134.

Carson J. and Kuipers E. 1998. Stress management interventions In Hardy S., Carson J. and Thomas B. (eds) *Occupational Stress: Personal and Professional Approaches*. Stanley Thornes. Cheltenham. pp.157-174

Carson J., Cavagin J., Bunclark J., Maal S., Gournay K., Kuipers E., Holloway F. and West M. 1999. Effective communication in mental health nurses: Did social support save the psychiatric nurse? *NT Research.* **4**(1): 31-42.

Coffey M. and Chaloner C. 1997. Out-of-hours working: a survey. *Mental Health Nursing*. **17**(6): 6-9.

Coffey M. 1999. Stress and Burnout in Forensic Community Mental Health Nurses: an investigation of its causes and effects. *Journal of Psychiatric and Mental Health Nursing.* **6**(6): 433-444.

Coffey M. 2000. Stress and Coping in Forensic Community Mental Health Nurses: demographic information and qualitative findings. *NT Research*. **5**(1): 5-16.

Cohen S. and Kessler R.C. 1995. Strategies for measuring stress in studies of psychiatric and physical disorders in Cohen S., Kessler R.C. and Gordon L.G. (eds) *Measuring Stress: A guide for health and social scientists.* Oxford University Press. New York. pp.3-26.

Cox T. and Ferguson E. 1991. Individual differences, Stress and Coping in Cooper C.L. and Payne R. (eds) 1991. *Personality and Stress: Individual Differences in the stress process*. Wiley. Chichester.

Cronin-Stubbs D. and Brophy E.B. 1985. Burn-out: can social support save the psych nurse? *Journal of Psychosocial Nursing in Mental Health Services*. **23**(7): 8-13.

Cushway D. 1992. Stress in clinical psychology trainees. *British Journal of Clinical Psychology*. **31**: 169-179.

Cushway D. and Tyler P. 1996. Stress in Clinical Psychologists. *International Journal of Social Psychiatry*. **42**(2): 141-149.

Dewe J. 1987. Identifying strategies nurses use to cope with work stress. *Journal of Advanced Nursing*. **12**: 489-97.

Dolan N. 1987. The relationship between burnout and job satisfaction in nurses. *Journal of Advanced Nursing*. **12**: 3-12.

Dunn L.A. and Ritter S.A. 1995. Stress In Mental Health Nursing: A review of the Literature in Carson J., Fagin L. and Ritter S. (eds) 1995. *Stress and Coping in Mental Health Nursing*. Chapman and Hall. London. pp.29-45.

Fagin L., Brown D., Bartlett H., Leary J., and Carson J. 1995. The Claybury Community Psychiatric Nurse stress study: is it more stressful to work in hospital or the community? *Journal of Advanced Nursing*. **22**(2): 347-358.

Fielding J. and Weaver S.M. 1994. A comparison of hospital and community-based mental health nurses: perceptions of their work environment and psychological health. *Journal of Advanced Nursing*. **19**(6): 1196-204.

Firth H., McIntee J., McKeown P. and Britton P. 1986. Interpersonal support amongst nurses at work. *Journal of Advanced Nursing*. **11**: 273-82.

Friel C. and Chaloner C. 1996. The developing role of the Community Forensic Nurse. *Nursing Times*. **92**(29): 33-35.

Goldberg D.P. and Hillier V.F. 1979. A scaled version of the General Health Questionnaire. *Psychological Medicine***.** 9: 139-145.

Goldberg D. and Williams P. 1988. *A users guide to the General Health Questionnaire*. Windsor. NFER-Nelson.

Harris M. and Bergman H.C. 1988. Misconceptions about the use of Case Management services by the chronically mentally ill: a utilization analysis. *Hospital and Community Psychiatry*. **39**: 1276-80.

Hillis G. 2000. Diversion from the criminal justice system in Chaloner C. and Coffey M. (eds) *Forensic Mental Health Nursing: Current Approaches*. Blackwell Science. Oxford. pp.191-207.

Lazarus R.S. and Folkman S. 1984. *Stress, Appraisal and Coping*. Springer. New York.

Maslach C. and Jackson S.E. 1979. Burned-out cops and their families. *Psychology Today*. **12**(2): 59-62.

Maslach C. and Jackson S.E. 1981. The measurement of experienced burnout. Journal of Occupational Behaviour. **2**: 99-113.

Maslach C. and Jackson S.E. 1986. *Maslach Burnout Inventory Manual (2nd edition)* Consulting Psychologists Press. Palo Alto.

Melchior ME.W., Bours G.J.J.W, Schmitz P. and Wittich Y. 1997. Burnout in psychiatric nursing: a meta-analysis of related variables. *Journal of Psychiatric and Mental Health Nursing.* **4**(3),193-201.

Moores B. and Grant G.W.B. 1977. Feelings of alienation among nursing staff in hospitals for the mentally handicapped. *International Journal of Nursing Studies.* **14**: 5-12.

Moore K.A. and Cooper C.L. 1996. Stress in mental health professionals: a theoretical overview. *International Journal of Social Psychiatry*. **42**(2) 82-89.

Norusis M.J. 1993. *SPSS for Windows. Base systems User's Guide. Release 6.0*. SPSS. Chicago.

Onyett S., Pillinger T. and Muijen M. 1997. Job Satisfaction and burnout among members of community mental health teams. *Journal of Mental Health*. **6**(1): 55-66.

Plant M.L., Plant M.A. and Foster J. 1992. Stress, alcohol, tobacco and illicit drug use amongst nurses: a Scottish study. *Journal of Advanced Nursing*. **17**: 1057-67.

Prosser D., Johnson S., Kuipers E., Dunn G., Szmukler G., Reid Y., Bebbington P. and Thornicroft G. 1999. Mental health, "burnout" and job satisfaction in a longitudinal study of mental health staff. *Social Psychiatry and Psychiatric Epidemiology.* **34***:* 295-300.

Rampton Hospital Authority. 1997. *The Forensic Directory: National Health Service and Private Forensic Psychiatric Facilities in England, Scotland, Wales and Northern Ireland* (2nd Edition). Rampton Hospital Authority. Nottinghamshire.

Reid Y., Johnson S., Morant N., Kuipers E., Szmukler G., Thornicroft G., Bebbington P. and Prosser D. 1999. Explanations of stress and satisfaction in mental health professionals: a qualitative study. *Social Psychiatry and Psychiatric Epidemiology.* **34**: 301-308.

Ritter S.A., Tolchard B. and Stewart R. 1995. Coping with Stress in mental health nursing In Carson J., Fagin L. and Ritter S. (eds) *Stress and Coping in Mental Health Nursing*. Chapman and Hall. London. pp.161-179.

Rix G. 1987. Staff sickness and its relationship to violent incidents in a regional secure unit. *Journal of Advanced Nursing*. **12**: 223-8.

Schwab R.L. 1986. Burnout in education (special supplement) in Maslach C. and Jackson S.E. 1986. *Maslach Burnout Inventory Manual* (2nd edition) Consulting Psychologists Press. Palo Alto.

Snelgrove S.R. 1998. Occupational Stress and Job Satisfaction: a comparative study of health visitors, district nurses and community psychiatric nurses. *Journal of Nursing Management*. **6**: 97-104.

Sullivan P.J. 1993. Occupational stress in psychiatric nursing. *Journal of Advanced Nursing*. **18**: 591-601.

Whittington R. and Wykes T. 1992. Staff strain and social support in a psychiatric hospital following assault by a patient. Journal of Advanced Nursing. **17**: 480-486.

Table One – Cutoff scores for the MBI inventory (**Maslach and Jackson 1986)**

Subscale	**High**	**Low**
Emotional Exhaustion	21 or above	13 or less
Depersonalisation	8 or above	4 or less
Personal Accomplishment	28 or less	34 or more

Table Two – Comparison of Respondent Characteristics (continuous data) against GHQ, CPNSQr and MBI

	GHQ	CPNSQ	Emotional exhaustion	Depersonal - isation	Personal Accomplishment
Age Median value 36 years =>36 years (n=42) < 36 years (n=34) *t* test	 3.27 s.d 4.51 *4.36* *s.d 6.71* p=0.405	 48.46 s.d 22.63 *61.88* *s.d 29.85* **p=0.03**	 19.31 s.d 9.98 *18.91* *s.d 10.76* p=0.868	 5.4 s.d 4.24 *5.82* *s.d 4.6* p=0.681	 34.00 s.d 5.76 *31.71* *s.d 6.55* p=0.109
Years in psychiatric nursing Median value 15 years => 15 years (n=42) *< 15 years (n=37)* *t* test	 3.37 s.d 4.65 *4.31* *s.d 6.65* p=0.471	 49.81 s.d 28.10 *59.59* *s.d 24.50* p=0.115	 18.64 s.d 10.07 *20.14* *s.d 10.28* p=0.517	 5.40 s.d 4.01 *5.92* *s.d 4.66* p=0.60	 32.86 s.d 6.51 *33.16* *s.d 5.97* p=0.829
Days off sick in the last year Median Value = 2 days => 2 days (n=45) *> 2 days (n=34)* *t* test	 4.66 s.d 6.36 *2.67* *s.d 4.39* p=0.127	 57.71 25.88 *49.85* *s.d 27.81* p=0.219	 21.31 s.d 10.57 *16.74* *s.d 9.01* **p=0.046**	 6.16 s.d 4.28 *4.97* *s.d 4.32* p=0.228	 32.62 s.d 5.76 *33.50* *s.d 6.84* p=0.538
Time in present job Median value = 2.25 years => 2.25 years (n=39) < 2.25 years (n=40) *t* test	 5.05 s.d 6.46 *2.59* *s.d 4.51* p=0.055	 52.92 s.d 25.34 *55.38* *s.d 28.45* p= 0.692	 20.82 s.d 11.25 *17.90* *s.d 8.81* p=0.202	 4.97 s.d 3.98 *6.30* *s.d 4.56* p=0.173	 34.72 s.d 5.85 *31.33* *s.d 6.18* **p=0.014**
Number of patients on caseload Median value=11 patients => 11 patients (n=40) < 11 patients (n=38) *t* test	 5.08 s.d 6.12 *2.50* *s.d 4.86* **p=0.048**	 57.37 s.d 27.52 *52.11* *s.d 25.53* p=0.394	 22.63 s.d 10.47 *16.29* *s.d 8.55* **p=0.005**	 5.95 s.d 4.45 *5.47* *s.d 4.16* p=0.627	 34.05 s.d 5.55 *31.66* *s.d 6.62* **p=0.087**

Table Three – Comparison of Respondent Characteristics (Nominal Data) against GHQ, CPNSQr and MBI

	GHQ	CPNSQ	Emotional exhaustion	Depersonal - isation	Personal Accomplishment
Gender					
Male (n=42)	3.55	51.46	20.74	6.52	32.45
	s.d 5.53	s.d 25.53	s.d 11.20	s.d 4.91	s.d 6.12
Female (n=37)	*4.11*	*57.37*	*17.76*	*4.65*	*33.62*
	s.d 5.87	*s.d 28.31*	*s.d 8.64*	*s.d 3.30*	*s.d 6.36*
t test	p=0.664	p=0.342	p=0.194	p=0.053	p=0.408
Marital Status					
Married/Partner (n=59)	3.64	54.91	19.51	5.41	33.00
	s.d 5.27	s.d 28.09	s.d 10.26	s.d 4.10	s.d 5.76
Not Married/Separated (n=20)	*4.32*	*51.83*	*18.85*	*6.35*	*33.00*
	s.d 6.84	*s.d 22.85*	*s.d 9.97*	*s.d 4.92*	*s.d 7.58*
t test	p=0.673	p=0.673	p=0.803	p=0.401	p=1.00
Children living at home					
Yes (n=78)	4.32	53.85	18.94	5.02	33.72
	s.d 6.05	s.d 26.57	s.d 9.58	s.d 3.91	s.d 9.58
No (n=29)	*2.90*	*54.54*	*19.58*	*6.61*	*31.65*
	s.d 6.05	*s.d 5.02*	*s.d 11.01*	*s.d 4.81*	*s.d 6.55*
t test	p=0.292	p=0.292	p=0.785	p=0.113	p=0.143
Alcohol					
More than 3 units daily (n=26)	5.83	56.79	24.46	6.12	33.46
	s.d 7.08	s.d 20.03	s.d 10.98	s.d 4.38	s.d 5.72
Less than 3 units daily (n=53)	*2.89*	*52.98*	*16.83*	*5.42*	*32.77*
	s.d 4.67	*s.d 29.54*	*s.d 8.74*	*s.d 4.30*	*s.d 6.49*
t test	**p=0.033**	p=0.568‘	**p=0.001**	p=0.458	p=0.647
Cigarettes					
Smoker (n=41)	2.70	53.89	18.98	6.20	31.29
	s.d 4.04	s.d 28.30	s.d 8.76	s.d 4.37	s.d 6.45
Non-smoker (n=37)	*5.08*	*54.57*	*19.92*	*5.03*	*34.97*
	s.d 6.93	*s.d 26.00*	*s.d 11.63*	*s.d 4.27*	*s.d 5.48*
t test	p=0.068	p=0.915	p=0.685	p=0.237	**p=0.009**
Discuss work problems with colleagues					
Yes (n=72)	3.47	50.87	18.78	5.67	32.94
	s.d 5.28	s.d 24.45	s.d 9.54	s.d 4.27	s.d 6.33
No (n=6)	*8.00*	*92.83*	*27.17*	*5.33*	*34.17*
	s.d 8.81	*s.d 26.85*	*s.d 14.88*	*s.d 5.50*	*s.d 5.53*
t test	p=0.061	**p=0.00**	**p=0.05**	p=0.858	p=0.648
Perceived job security					
Yes (n=51)	3.61	52.22	18.43	5.73	32.96
	s.d 5.77	s.d 27.39	s.d 9.66	s.d 4.29	s.d 6.22
No (n=25)	*4.61*	*59.52*	*21.88*	*5.64*	*33.80*
	s.d 5.73	*s.d 26.21*	*s.d 10.87*	*s.d 4.54*	*s.d 5.90*
	p=0.491	p=0.287	p=0.165	p=0.936	p=0.576
Fitness					
Excellent/good (n=51)	3.48	55.96	17.94	5.12	32.73
	s.d 5.26	s.d 28.94	s.d 8.71	s.d 4.14	s.d 6.74
Fair/poor (n=28)	*4.41*	*50.96*	*21.89*	*6.61*	*33.50*
	s.d 6.38	*s.d 27*	*s.d 12.06*	*s.d 4.52*	*s.d 5.23*
	p=0.496	p=0.441	p=0.097	p=0.143	p=0.600
Attitude of Line Manager					
Very supportive/supportive (n=68)	3.27	50.90	17.82	5.51	33.00
	s.d 5.16	s.d 26.01	s.d 8.95	s.d 4.07	s.d 6.25
Very unsupportive/unsupportive (n=10)	*8.00*	*82.12*	*30.30*	*6.50*	*33.30*
	s.d 7.86	*s.d 18.33*	*s.d 11.74*	*s.d 6.04*	*s.d 6.58*
	p=0.018	**p=0.002**	**p=0.00**	p=0.506	p=0.888