

# Compassion fatigue in diabetes care professionals: Effect of cognitive behaviour therapy

Sanjay Kalra, Komal Chawla, Bharti Kalra

Depts. of Endocrinology and Clinical Psychology, Bharti Hospital, Karnal, India

## ABSTRACT

**Introduction:** Burnout and compassion fatigue are professional hazards that a committed diabetes care professional has to face, and overcome.

**Objectives:** This study was designed as a prospective interventional trial, to assess the incidence and causes of compassion satisfaction, burnout, and compassion fatigue amongst diabetes care professionals.

**Material & Methods:** The Professional Quality of life Scale (ProQoL III)<sup>2</sup> was administered to 15 DCPs. A pretested 5 point Likert Scale was administered to assess the relative contribution of handling various types of patients to overall stress levels. An informal interview was held with the clinical psychologist to find out the contribution of domestic, personal or marital life to professional stress.

The DCPs who scored as significant 'compassion fatigue' cases were given eight weekly sittings of cognitive behaviour therapy and eclectic therapy to help them analyze and reduce professional stress.

**Results:** Six out of 15 (40.00%) workers scored above average on the burnout scale. None scored > 75%ile. Compassion fatigue was more common, however: 10/15 (66.67%) scored above average, of whom 6/15 (40.00%) scored >75%ile. 9/15 (60.00%) DCPs scored highly on the compassion satisfaction scale, of whom 8/15 (53.33%) scored > 75 % ile.

The total number of patients seen was not a major cause of stress, scoring just  $0.85 \pm 0.00$ . Large number of socially advanced patients or patients speaking a different language, working in hot conditions during summer, and handling patients of anxiety/ depression and painful neuropathy caused more stress.

Analysis revealed that attitude towards severity of NIDMM correlated highly positively with burnout ( $r = 0.820$ ) and negatively with compassion satisfaction ( $r = - 0.455$ ). No significant correlation was observed with compassion fatigue ( $r = 0.387$ ).

Burnout score reduced by  $2.33 \pm 6.50$  while compassion fatigue score fell significantly by  $6.00 \pm 5.83$  after 8 weeks of cognitive behaviour or eclectic therapy. On reclassification, only one DCP had significantly high compassion fatigue levels.

**Conclusion:** The burnout rates in DCPs are much lower than observed in other health care professionals. The impact of compassion fatigue can be reduced by limiting the number of socially advanced patients, ensuring temperature regulation in extreme climates, trying to improve domestic environment of workers and providing psychological support to DCPs. [IJEM 2008;12(5):7-10]

**Key words:** DCP [Diabetic care professional], ProQoLIII, NIDDM, Likert scale, compassion fatigue, eclectic therapy.

## INTRODUCTION

Burnout is a commonly noticed phenomenon in patients of diabetes, who often 'get tired' of following difficult and demanding treatment schedules, They simply stop taking drugs or following dietary and exercise advice ,and this impacts their glycemic control as well as quality of

life(1).

Patients of diabetes are also known to have less –than –perfect levels of 'compliance' or adherence to medical regimes. Repeated motivation, requests threats and cajoling by diabetes care professionals (DCPs) has little effect in improving concordance to the suggested management.

### Burnout in diabetes care professionals

Less known, however, and less researched, is the burnout and compassion fatigue that DCPs face in their daily life(1).

Address for correspondence:

Sanjay Kalra, Bharti Hospital, Kunjpura Road, Karnal-132001, India  
Phone: 91-184-2268585 Fax: 91-184-2268484  
Email: bhartihospital@rediffmail.com

The stress of providing constant high quality care, high intensity contact with parents and their families, and the difficulties in juggling 'appropriateness of therapy' with 'accuracy of treatment' all contribute to creating a stressful environment for the DCP.

Patients of diabetes are usually more informed of their disease than other chronic disease sufferers, and hence, tend to have more questions and are more demanding. Diabetes intrudes upon virtually every aspect of a patient's daily life, so people with diabetes ask questions regarding virtually everything under the sun. The incidence of depression is higher in persons with diabetes, and this sometimes rubs off on counselors as well.

Many sincere DCPs feel that their motivation and commitment to managing the disease is not matched by the patient herself, and lose interest in their work.

The onus of achieving concordance between physician prescriptions and patient acceptance lies on diabetes counselors, and they end up getting the worst from both sides. Added to this is the heavy workload, especially in under-served areas, that DCPs face. All these factors lead to burnout or professionals stress in DCPs.

Much work has been done on burnout in various classes of health professionals, including nurses. No objective study, however, has focused on quantitating burnout in DCPs.

## EFFECT ON DIABETES CARE PROFESSIONALS

### Burnout

Burnout has been defined as feeling of hopelessness and difficulties in dealing with work or doing one's job effectively. These negative feelings usually have a gradual onset. They can reflect the feeling that one's efforts make no difference, or they can be associated with a very high workload or a non supportive work environment(2).

### Compassion satisfaction

Compassion satisfaction is about the pleasure one derives from being able to do one's work well. One may feel that it is a pleasure helping others, or one may feel positively about colleagues and one's ability to contribute to the work setting or greater good of society. Compassion satisfaction is related to the ability to be an effective care giver(2).

### Compassion fatigue

Compassion fatigue, or secondary trauma, is about one's work-related, secondary exposure to extremely stressful events. For example, a DCP might get stressed if a long standing, friendly patient develops renal failure, or complains of erectile dysfunction. The symptoms of compassion fatigue are acute in onset, and associated with a particular event or patient(2).

The DCP may feel afraid of a particular event, social situation or diabetic complication, and try to avoid the particular stress or, even try to escape patients with the complication(2).

## MATERIAL AND METHODS

This study was designed as a prospective interventional trial, to assess the incidence and causes of compassion satisfaction, burnout, and compassion fatigue amongst diabetes care professionals working in a busy endocrine centre located in an underserved area of northern India

It was also designed to assess if burnout and compassion fatigue had any correlation with diabetes attitude of the DCPs. Intervention in the form of cognitive behaviour therapy and eclectic therapy was offered to assess the causes, and try to improve burnout.

The Professional Quality of life Scale (ProQoL III)(2), originally developed by Figley, and modified by Stamm, was administered to 15 DCPs of various classes (2 doctors, 2 physiotherapists, 1 dietician, 5 counselors, 1 laboratory technician and 4 nurses) to assess the incidence of burnout, compassion satisfaction and compassion fatigue. A pretested 5 point Likert Scale was administered to assess the relative contribution of handling various types of patients to overall stress levels. An informal interview was held with the clinical psychologist to find out the contribution of domestic, personal or marital life to professional stress.

The Diabetes Attitude Scale developed and validated by the Michigan Diabetes Research and Training Centre(3,4), was administered to all 15 DCPs to find out their attitudes towards the disease. This scale quantifies attitudes in five domains: Need for Special Training, Seriousness of NIDDM, Value of Tight Control, and Psychological Factors in Diabetic management and Patient Autonomy(3).

The DCPs who scored as significant 'compassion fatigue' cases were given eight weekly sittings of cognitive behaviour therapy and eclectic therapy to help them analyze and reduce professional stress.

These DCPs were read ministered the ProQoL III scale and the Diabetes Attitude Scale after completion of therapy.

## RESULTS

Fifteen DCPs took part in this prospective, interventional study after giving informed consent. They included two doctors, two physiotherapists, one dietician, five diabetes counselors, one laboratory technician and four ward nurses working in an endocrine centre located in North India. This centre handles about eighty OPD patients daily and has average indoor day care occupancy of 3-4 patients daily.

The DCPs included 5 male and 10 female workers. All except one were aged from 21 to 35 years. 10/15 (66.67%) had been working in the same centre since its inception 3½ years ago, while the other five had work experience of 1 year each.

The results of the ProQoL scale are shown in Table 1. A comparison with the findings noted by the original author is included(2).

6/15 (40.00%) workers scored above average on the

**Table 1:** Burnout/fatigue scores in diabetes care professionals

	Mean $\pm$ S.D (range)	Number <25%ile (%)	Number <25%ile (%)	Number <25%ile (%)	Number <25%ile (%)
Burnout	22.67 $\pm$ 4.67 (4-26)	8 (53.33%)	1 (6.67%)	6 (40.00%)	0
Compassion satisfaction	42.33 $\pm$ 4.67 (31-47)	2 (13.33%)	4 (26.67%)	1 (6.67%)	8 (28.44%)
Compassion fatigue	14.33 $\pm$ 7.91 (7-32)	1 (6.67%)	4 (26.67%)	4 (26.67%)	6 (40.00%)

burnout scale. None scored  $> 75$  %ile. Compassion fatigue was more common, however: 10/15 (66.67%) scored above average, of whom 6/15 (40.00%) scored  $>75$ %ile. All these six were female workers (one doctor, two counselors, two nurses and a physiotherapist). 3/6 (50.00%) had been working in the centre for 3 years while the rest had been connected to it for 1 year. Three were unmarried, two married and one divorced.

9/15 (60.00%) DCPs scored highly on the compassion satisfaction scale, of whom 8/15 (53.33%) scored  $>75$  % ile.

The average compassion satisfaction scores favorably with the mean published by the authors (42.33  $\pm$  4.67 vs. 37;  $p > 0.01$ ). Mean burnout and compassion fatigue scores were similar to those reported earlier (burnout: 22.67  $\pm$  4.67 vs. 19); compassion fatigue: 14.33  $\pm$  7.91 vs. 13) No comparisons are available, however, with DCPs from other centres.

The DCPs were asked to rate various clinical situations as to the burnout caused to them on a 5 point scale. The types of patients who cause burnout or stress are mentioned in descending order of importance in Table 2.

**Table 2:** Stress caused by various types of patients

Category of patient	Stress score (range 1-5)
VIP Patients	3.13 $\pm$ 1.77
Domestic Stress	2.40 $\pm$ 1.76
Working in summer	2.26 $\pm$ 1.91
Anxiety/depression patients	1.73 $\pm$ 1.22
Difficulty in travel to work	1.53 $\pm$ 1.41
Painful neuropathy patients	1.07 $\pm$ 1.63
Elderly patients	0.93 $\pm$ 1.39
Male patients	0.87 $\pm$ 1.06
Scolding by boss	0.85 $\pm$ 0.00
High number of patients	0.85 $\pm$ 0.00
Foot ulcer patients	0.67 $\pm$ 1.34
Type 2 patients	0.60 $\pm$ 0.51
Female patients	0.47 $\pm$ 0.92
Pediatric patients	0.40 $\pm$ 0.74
Pregnancy patients	0.20 $\pm$ 0.41

The total number of patients seen was not a major cause of stress, scoring just 0.85  $\pm$  0.00. Large number of socially

advanced patients or patients speaking a different language, working in hot conditions during summer, and handling patients of anxiety / depression and painful neuropathy caused more stress. A major cause of stress at work was transference of negative thoughts from home environment to the workplace.

The least stress was experienced while working with pregnancy- related diabetes (0.20  $\pm$  0.41) and pediatric diabetes (0.40  $\pm$  0.74) patients, perhaps because both these groups do not tend to resist insulin. Dealing with female patients was less stressful than handling male diabetics (0.47  $\pm$  0.92 vs. 0.87  $\pm$  1.06;  $p < 0.05$ ), perhaps a based finding due to the large number of female DCPs.

The Diabetes Attitude Scale revealed highly positive attitudes toward Need for Special Training and Patient Autonomy. Attitudes were low as far as Severity of NIDDM was concerned.

Analysis revealed that attitude towards Severity of NIDMM correlated highly positively with burnout ( $r = 0.820$ ) and negatively with compassion satisfaction ( $r = -0.455$ ). No significant correlation was observed with compassion fatigue ( $r = 0.387$ ).

No significant correlation was observed between any of the other diabetes attitude domains and burnout, compassion fatigue or satisfaction (Table 3).

**Table 3:** Various attitude domains

Domain	All DCPs/ mean $\pm$ S.D (n=15) DCPs	Non- compassion fatigue/ (n=6)	Compassion fatigue/DCPs mean $\pm$ S.D (n=9)
Need for special training	23.27 $\pm$ 1.65	23.67 $\pm$ 1.22	22.67 $\pm$ 2.25
Seriousness of NIDDM	20.2 $\pm$ 4.26	21.22 $\pm$ 5.45	18.67 $\pm$ 1.50
Value of tight control	22.87 $\pm$ 3.36	22.11 $\pm$ 3.26	24.0 $\pm$ 3.79
Psychological factors in Diabetic management	22.87 $\pm$ 3.22	22.88 $\pm$ 3.26	24.33 $\pm$ 3.14
Patient Autonomy	31.8 $\pm$ 3.91	31.14 $\pm$ 5.12	31.5 $\pm$ 1.97

The six DCPs with high levels of compassion fatigue were offered 8 weekly sittings of cognitive behaviour therapy (2 DCPs) or eclectic therapy (4 DCPs) as deemed appropriate by the clinical psychologist. Both Pro QoL III and Diabetes Attitude Scales were administered at the end of eight weeks.

Burnout score reduced by  $2.33 \pm 6.50$  while compassion fatigue score fell significantly by  $6.00 \pm 5.83$ . On reclassification, only one DCP had significantly high compassion fatigue levels. Compassion satisfaction in the intervention group rose insignificantly by  $0.67 \pm 3.83$ .

There was no significant change in Diabetes Attitude among the six DCPs studied after 8 weeks.

## DISCUSSION

This study, though small in size, highlights a few important points. Compassion fatigue is very common amongst DCP. In this hospital, it was not significant enough to cause burnout.

The degree of compassion fatigue or burnout was not related to type of work done /paramedical qualification, age, marital status, years of experience in diabetology, or years of work at centre. The latter observation is borne out by the fact that the centre enjoys a low rate of attrition as far as its employees are concerned.

Compassion fatigue was much commoner in women ( $6/10 = 60.00\%$ ) than men ( $0/5 = 0.00\%$ ). This may be due to the multiple pressures of domestic and professional life that working women have to face in an undeserved economy. This fact was revealed during interviews with the burnout cases. All of them experienced transference of negative emotions from domestic or marital environment to work.

Compassion satisfaction levels were relatively high in most (10/15) DCPs, This explains the high level of employee retention of the centre, and the fact that all DCPs wanted to continue the same profession and job description.

Cognitive behaviour therapy and eclectic therapy succeeded in 5/6 patients (83.33%) in reducing compassion fatigue significantly. The one failure was in a married employee with marital disharmony. She and her husband were given couples therapy to bring out the required changes in the domestic environment.

## CONCLUSIONS

The burnout rates in DCPs are much lower than observed in other health care professionals. This should not be cause for complacency, though. One can reduce the impact of compassion fatigue by reducing the load of 'stress producing' patients on each DCP. This includes limiting the number of socially advanced patients, ensuring temperature regulation in extreme climates, and trying to improve domestic environment of workers. Psychological support should be offered to DCPs just as it should be to patients of diabetes(5).

## PRACTICE IMPLICATIONS

Diabetes care professionals exhibit significant compassion fatigue. This impacts their attitudes towards diabetes.

Reduction in compassion fatigue can be achieved by using eclectic therapy, cognitive behaviour therapy and focusing both on professional and domestic environment improvement.

Reducing the number of socially advanced patients that a DCP has to see in one day, improving cooling systems in hot weather and limiting the number of patients with depression or anxiety neurosis are other ways that will help reduce stress at the workplace.

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