Psychopathological features of a patient population of targets of workplace bullying

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Background A strong association between workplace bullying and subsequent anxiety and depression, indicated by empirical research, suggests that bullying is an aetiological factor for mental health problems.

Aims To evaluate levels of stress and anxiety–depression disorder developed by targets of workplace bullying together with outcome at 12 months and to characterize this population in terms of psychopathology and sociodemographic features.

Methods Forty-eight patients (36 women and 12 men) meeting Leymann Inventory of Psychological Terror criteria for bullying were included in a prospective study. Evaluations were performed at first consultation and at 12 months using a standard clinical interview, a visual analogue scale of stress, the Hospital Anxiety and Depression (HAD) scale, the Beech scale of stress in the workplace and a projective test (Picture-Frustration Study).

Results At first consultation, 81% of patients showed high levels of perceived stress at work and 83 and 52% presented with anxiety or depression, respectively. At 12 months, only 19% of working patients expressed a feeling of stress at work. There was a significant change in symptoms of anxiety while there was no change in symptoms of depression. Stress at work and depression influenced significantly capacity to go back to work. At 12-month assessments, workers showed a significantly better score on the HAD scale than non-workers. Over half the targets presented a neuroticism-related predominant personality trait.

Conclusion Workplace bullying can have severe mental health repercussions, triggering serious and persistent underlying disorders.

Key words Anxiety; bullying; depression; neuroticism; stress; workplace.

Introduction Workplace bullying is a major issue in French occupational medicine. Leymann [1,2] recently pioneered research into the phenomenon and gave a comprehensive description. A strong association between workplace bullying and subsequent anxiety and depression, indicated by empirical research, suggests that bullying is an aetiological factor for mental health problems [3–7]. Recognition of this phenomenon was formalized in French law in 2002, with workplace bullying being defined as ‘repeated behaviour aimed at or resulting in a deterioration in working conditions likely to undermine the rights and dignity of the employee targeted, affect their physical or mental health, or compromise their career path’. The magnitude of this phenomenon together with the lack of epidemiological data led French government authorities to commission four French Occupational Pathology Centers to conduct a 12-month (April 2002–March 2003) multicenter pilot survey with the aim of further characterizing the problem. Preliminary results obtained in 2003 underlined the significant mental health impact of workplace bullying on the 184 patients studied.
particularly in terms of anxiety–depression disorders and suicidal ideation. This paper reports the results of a study conducted at the Clermont-Ferrand Occupational Pathology Center during this pilot survey.

The main objective of this study was to evaluate the levels of stress and anxiety–depression disorder developed by employees referred by their occupational physicians for consultation against a background of presumed workplace bullying. The secondary objectives were to characterize the population counselled at the clinic and to attempt to establish whether the profile of the targets presented any particular sociodemographic or psychological features. We also continued the assessment to 12-month post-counselling in order to observe the course of the disorders identified and the impact of solutions provided.

**Methods**

The study population comprised salaried workers referred to the clinic against a background of presumed workplace bullying and followed-up over a 12-month period. Definition of bullying was based on the Leymann Inventory of Psychological Terror (LIPT) system. Only patients meeting the LIPT criteria [8] and having given written informed consent were included in the study.

The assessment was based on compiling sociodemographic, occupational and clinical data during two interview stages: first, from an interview with a nurse and a psychologist for performing the tests and second, from an interview with an occupational physician and a psychiatrist for providing solutions. The repercussions of the bullying were assessed in terms of perceived stress and symptoms of anxiety and depression. The patients were assessed first time at the clinic (consultation), and then again 1 year later (12-month assessment: M 12).

Bullying behaviour was listed using the LIPT indexing 45 different tactics potentially figuring in the workplace bullying process. These behaviours were classified as tactics designed to prevent the target from expressing themselves, to isolate the target and to ignore them or discredit them in their work. Workplace bullying was defined as repeating one or more of the 45 listed behaviours at least once a week over a 6-month period [8]. Stress was evaluated using the Chamoux-Simard visual analogue scale (VAS). The patient uses this test to evaluate their level of stress by indicating their perceived level of stress at work, at home and in life in general on a horizontal, non-calibrated line, ranging from very low to very high. Patients presenting a VAS ≥ 60 mm were considered as stressed [9].

Anxiety and depression were evaluated using the validated French language version [10] of the Hospital Anxiety and Depression (HAD) scale [11]. The scale comprises two subscales: the first is related to depressive symptomatology while the second is related to symptoms of anxiety [12]. A score ≥ 10 on each of the two subscales indicates pathological disorder [10]. This scale gives reliable indications as to the intensity of manifestations of depression or anxiety in response to life events and provides a good longitudinal assessment of the course of the disorders.

We used the Beech scale of stress in the workplace [13] to screen for neuroticism or excessive emotional sensitivity to adverse life events. This questionnaire, which is widely used for evaluating mental health in the workplace, comprises 53 yes-or-no closed response items. It is used to identify the dominant personality factors involved in the response to stressful life events, particularly neuroticism.

The descriptive analysis of the types of response to everyday life stressors was completed by a Rosenzweig Picture-Frustration Study. This projective test consists of a series of 24 cartoon-like pictures each depicting two anonymous characters in a frustrating situation. Above the frustrated character, the patient provides a reply according to how appropriate or responsive they consider the reaction. These patient responses can be classified into three categories: extrapunitive, intrapunitive or impunitive, according to whether the subject tries to blame the response to frustration onto others, onto themselves or onto unidentified environmental causes [14].

All patients included received a self-questionnaire 12 months after the counselling session in order to assess the impact of the solutions provided, given that most of them had left their former position and undergone a career shift. The questionnaire collated information on both occupational status since the consultation and on clinical course, particularly in terms of suicidal ideation. We also performed a second series of evaluations using the HAD scale, the Beech questionnaire and the Chamoux-Simard VAS. At the 12-month assessment, stress at work was only evaluated for the 23 working patients.

Statistical analysis of relationships between qualitative variables was performed using Pearson's chi-squared test and Fisher's exact test. Pairwise comparisons were performed using the McNemar test. Quantitative variables were compared using a Student's t-test, which was adapted to 'before and after' comparisons as a Student's t-test for pairwise comparisons. The tests were conducted with a type I risk (α risk) set at 0.05. The results of the Rosenzweig Picture-Frustration test were analysed by the department psychologist.

**Results**

During the year of the study, 63 individuals had a psychological consultation. All situations met LIPT criteria for...
workplace bullying. Forty-eight individuals answered the 12-month assessment. Only the individuals having completed the 12-month assessment were included in the study.

The study population was comprised 36 women (75%) and 12 men (25%). Average age for both sexes was 44.9 years old. Sixty-seven per cent (n = 32) were living with their partner, 23% (n = 11) were divorced and 10% (n = 5) were single. Fifty-six per cent (n = 27) had at least one child. Thirty-six per cent (n = 17) had been educated to baccalaureate level or beyond.

At the time of the consultation, the majority of patients (70%) worked in the private sector, and over half (54%) had >10 years seniority in their job. The main occupational groups were administrative staff (29%, n = 14), manual workers and unskilled labour (27%, n = 13) and salespeople (17%, n = 8).

At the time of the consultation, more than half the employees (51%, n = 25) perceived that bullying had continued for >2 years. Around two in three employees (65%, n = 31) considered that the workplace bullying had resulted from changes in their work organization. However, we identified no common personal feature associated with the start of the bullying that was likely to have caused any individual vulnerability. In the majority of cases (79%), the workplace bullying was perpetrated by one person only and most often by men (46%). All the various bullying scenarios were identified: individual (42%), managerial (27%) and mixed (23%). The bullying tactics reported were mainly relational tactics based on power dynamics, task-targeting and persecution or discriminatory tactics. At 12-month post-consultation, only 23 patients still worked.

The solutions provided for the employees consisted in creating distance between bully and target, either by reorganization within the company (n = 13 patients), extended sick leave (n = 12) and termination of employment (n = 13) or by a career shift (n = 10).

Ninety per cent of patients (n = 43) presented no previous clinical history of psychiatric disorder. Seventy-five per cent of patients (n = 36) were life-long non-smokers. None presented previous history of addiction.

The stress evaluations conducted at the first interview showed that 81% of patients (n = 39) presented high levels of perceived stress at work (>60 mm on the Chamoux-Simard scale) whereas only 27% (n = 13) reported high levels of stress in everyday life or at home. At the 12-month assessment, patients who stopped working reported significant higher levels of perceived stress at home and in everyday life than patients who were working (P < 0.01 and P < 0.05, respectively) (Table 1). A feeling of stress at work was only expressed by 19% (n = 4) of still working patients (n = 23).

The HAD questionnaire evaluation of symptoms of depression and anxiety conducted at the first interview revealed that 52% (n = 25) and 83% (n = 40) of patients presented depression and anxiety disorders, respectively (Table 2). The main clinical signs observed were dysphoria, insomnia, anhedonia, reduced libido and a feeling of alienation. At 12 months, the follow-up HAD questionnaire showed no significant change in the proportion of patients presenting symptoms of depression (40%) (Table 2). The proportion of patients presenting symptoms of anxiety several months after initial consultation had decreased significantly from 83 to 60% (P < 0.05) (Table 2). There was a significant difference between workers and non-workers, with average depression scores at 12 months of 6.43 for workers compared to 10.88 for non-workers (P < 0.01) (Table 3). Following the pattern for depressive disorders, manifestations of anxiety were more moderate among workers, with average HAD questionnaire anxiety scores at 12 months of 9.35 for workers compared to 12.8 for non-workers (P < 0.05) (Table 3).

Workers and non-workers at 12 months were compared in their perception of stress and HAD score during the consultation assessment (Tables 4 and 5). There was a significant difference in perceived stress at work and in depression score at the consultation assessment between workers and non-workers at 12 months (respectively, P < 0.01, Table 4; P < 0.05, Table 5).

At the initial consultation, one in four patients reported suicidal ideation. At 12 months, there was no significant change in the number of patients presenting suicidal ideation.

At 12-month post-consultation, 25 of the 48 patients (52%) reported a deep fear of returning to or approaching their workplace, even though they were no longer at work due to long-term sick leave or termination of their contract on medical grounds.

Many patients reported various persistent somatic symptoms or disorders at 12-month post-consultation: weight gain, appetite disorders, digestive disorders, palpitations, angina, migraines, giddiness and poorly systematized arthralgia or muscular pain.

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<th>Table 1. Workers and non-workers at 12 months: comparison of Chamoux-Simard VAS at 12-month assessment</th>
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*p < 0.05; **p < 0.01.*
In terms of personality traits, the Beech questionnaire completed at the initial interview identified 88% of patients ($n = 42$) presenting a high neuroticism score. This score was considered pathological ($\geq 9$) for 23 of these patients or inconclusive (between 6 and 8) for the remaining 19 patients. At 12-month post-consultation, there was no significant change in these test results since the neuroticism score was only normal for 25% of patients. One-way analysis of the Rosenzweig test performed at the initial consultation showed that a majority of patients (60%) presented an inappropriate (excessive) reaction to their frustration, associated with largely impulsive blame.

Lastly, at the 12-month assessment, 52% of patients ($n = 25$) reported a feeling of shame and 46% ($n = 22$) a feeling of guilt for having experienced workplace bullying. Fifty-six per cent ($n = 27$) presented with a loss of self-confidence while 62% ($n = 30$) expressed the feeling that their work was not appreciated at its true worth.

### Discussion

A key result of this study is the severity of the mental health repercussions of workplace bullying, leading to serious psychiatric pathologies in people who previously presented no significant psychiatric history. Moreover, targets of workplace bullying mostly presented predominant neuroticism personality trait characterized by excessive emotional sensitivity to adverse life events. However, while results reported here appear to be consistent, the patient population was not large enough to be able to establish a definitive conclusion.

The concept of workplace bullying is part of a wider concept of violence in the workplace [15]. In this study,
targets of bullying were characterized using the LIPT [2,8], which identified a specific group of patients that, although limited, met a set of well-defined criteria for workplace bullying. Disorders were characterized using the HAD scale, which is a well-validated and commonly used measure [10,11], and the Chamoux-Simard and Beech questionnaires, which are commonly used in occupational mental health settings [9,13]. The Rosenzweig Picture-Frustration test was used to obtain complementary evidence, and we elected to report the test results in this paper since they underline the features identified by the Beech questionnaire.

In our study population, 75% of patients were women, most commonly in the 46- to 55-year age bracket. Women represent ~42% of the labour force in our region. There is as yet no clear explanation for this predominance of female targets, which has been echoed in other studies [16,17].

The occupational distribution of our study is comparable to others studies and appears consistent with the occupational and demographic structure of our region [16].

The literature describes or reports the use of a wide range of systems for typing what are considered to be bullying tactics or behaviour [2,16]. In this study, the most commonly observed type of bullying was individual. More than half of the bullying cases reported here had been continuing for >2 years before the consultation. A previous study conducted in Norway cited an average of 18 months [18]. Gasparo and Pezé [16] and Bensefa et al. [18] also reported an average duration of >1 year.

Other French cohort studies [16,18,19] as well as international cohort studies [3–7] have also highlighted the severity of the mental health repercussions of workplace bullying. Boudet et al. [20] in a study designed to investigate the effects of physical activity on perceived stress at work reported a level of perceived stress at work of 38 mm compared to 75 mm at the initial consultation interview in our patient population (P < 0.01).

Manifestations of anxiety and depression and suicidal ideation are consistent with Bensefa et al. [18] who, in addition, reported that 6.5% of their patient population had attempted suicide. At 12-month post-consultation, the percentage of patients presenting manifestations of anxiety had decreased significantly (Table 2). This relative favourable course may be related to the solutions deployed to counter the bullying, such as leaving the conflict-generating work environment. However, the 12-month assessment showed no significant change in manifestations of depression, and a quarter of the patients still presented suicidal ideation. These serious profiles can be underpinned by unstable social situations or by a persistently negative experience of the workplace bullying [21,22]. They could also be related to the worker’s own personality. It is interesting to consider that perception of stress and HAD score during the consultation assessment differ between workers and non-workers at 12 months (Tables 4 and 5). Moreover, there is a significant difference in the HAD scores between workers and non-workers at 12 months. These significant differences suggest that psychological repercussions of bullying lead to a propensity to leave or incapacity to go back to work for markedly ill patients as Quine [23] proposed in her large study of the prevalence of bullying.

The high prevalence of somatic disorders observed in our study population was underlined in a cross-sectional study conducted by Chiaroni and Chiaroni [24].

Targets of workplace bullying mostly presented predominant neuroticism personality trait characterized by excessive emotional sensitivity to adverse life events. This personality trait branches back to a set of reactions to stressful life events or adversity, including being inclined to protest, an inability to cope with emergencies and a tendency to conceive of all events as stressful [25]. There are also grounds for overlap with ‘conflict avoidance’ and ‘reaction to stress’ [20,25,26]. Boudet et al. [20] on a French general working population identified either inconclusive or pathological neuroticism in 30% of cases compared to 85% in our patient population (P < 0.001). Although the assessment of neuroticism depends on a wide range of specific factors, particularly mood-related factors [27], it can be used as a personality trait and remains one of the most commonly used anxiety trait markers [28]. Neuroticism has also been interpreted as a marker of psychobiological vulnerability affecting the risk of onset of depressive episodes on exposure to stressful events [29–31]. Furthermore, Appelberg et al. [32] had previously identified neuroticism as being strongly associated with work disability during interpersonal conflict in the workplace, thus leading to an inability to resolve these conflicts.

Many authors do not implicate the target’s own personality but rather the personality of the bully, which they have attempted to characterize [33,34]. Admittedly, it is probably an exaggeration to talk about predetermined victims, and other factors can also play a role, such as defence mechanisms [1]. Nevertheless, we believe that certain employees are more vulnerable to bullying tactics. Finally, the psychological decompensation is apparently not triggered by outside events but by the accumulation of work-related conflicts since we were unable to identify specific personal features associated with the start of bullying that were likely to cause any particular vulnerability.

The existence of vulnerability traits remains a contentious subject. The seriousness of the bullying situation may itself be enough to induce long-term mental health repercussions.

This study characterized the high frequency of manifestations of anxiety and depression in a population of targets of workplace bullying. In this population, we were also able to identify a high percentage of patients presenting neuroticism-related personality trait marked by
a strong tendency to avoid direct conflict and inadequate stress response strategies. This common personality trait may explain an underlying vulnerability to employment-led bullying situations and the resulting mental health repercussions. Workplace bullying does not always appear to be related to an ‘organized’ workplace strategy or a form of staff management, but is rather the result of individual attitudes. This makes effective prevention difficult. Employees should be better informed on the subject and occupational physicians should encourage them to talk about it. What is clear is that, given the potential medical and social consequences, complaint management and support to targets, particularly within the workplace itself, have to be improved. General screening questionnaires for identifying psychiatric disorders should enable at-risk patients to be screened. Occupational physicians could be more implicated in detection of workplace bullying and preventive strategies. Further studies will be required in order to establish the screening criteria for workplace bullying and the suffering it causes.

Key points
- Workplace bullying does not always appear to be related to an organized workplace strategy or a form of staff management, but is rather the result of individual attitudes.
- Workplace bullying can have severe mental health repercussions.
- Targets of workplace bullying presented a predominant personality trait characterized by excessive emotional sensitivity to adverse life events (neuroticism).

Conflicts of interest
None declared.

References


