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Are Teachers Aware of the Potential Consequences of Their Work-Related-Stress Such as Burnout and Others Main Pathologies?

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1. Introduction

Since the first half of the 1980's, several investigators have focused their attention on the so-called 'burnout syndrome' among teachers (17). By definition, burnout syndrome is the psychological response of vulnerable individuals to stressors occurring in the work environment (18). The personal characteristics/variables that can make a person more vulnerable - or more resilient - to work-related-stress include personality, sex, age, tolerance, professional expectations, susceptibility, cognitive manner, cultural background, race, religion, temper, tenacity, flexibility, resistance, social-economic level, life style, family situation, life-events etc (17).

Burnout syndrome is characterized by four principal elements (17):

- physical and emotional fatigue (emotional exhaustion and fatigue);
- detached and apathetic attitude towards students, colleagues, and in interpersonal relations (depersonalisation and cynical attitude);
- feeling of frustration due to lack of personal accomplishment;
- reduced self-control.

Stressors occurring in the work environment of teachers include the following (14):

- distinctive characteristics of the profession (relationship with students and parents, numerous classes, insufficient pay, lack of resources, temporary employment, conflicts among colleagues, need for constant professional updating);
- social transformation towards a multi-ethnic and multi-cultural reality as a result of globalization (increased number of foreign students);
- continually evolving social values (introduction of new politics in favour of the handicapped and consequent introduction of disabled students in the classes, educational delegation by families to cope with absence of working parents or single-parent families; parent-child alliances damaging the parent-teacher relationship).
- advances in technology (introduction of computer sciences and new technologies of electronic communication);
- constant reform (scholastic autonomy, team work, elevation of the level of compulsory education, younger entrance age to school);

- stress for the loss of retirement privileges (until 1992 – before the so-called ‘baby retirement reform’ – an Italian teacher could retire with only 15 years of seniority);
- little appreciation of teachers’ work in the public opinion.

According to newly introduced Italian legislation on workers’ health protection (art. 28 Decree 81/08), and particularly on work-related-stress in the helping professions (2; 4; 6; 12; 13; 14; 15; 16; 17; 23; 24; 25; 26; 27; 29), schoolmasters are required to: (a) analyze teachers’ stress, (b) prevent their mental damage and (c) counteract any kind of professional disease – including cancer – that may occur to the teachers. The law clearly states that worker’s sex and age must be taken into account while devising prevention plans to minimize and prevent work-related-stress disorders. This is particularly important for teachers who have a median age of 50 years because the 82% of them are female (15) (the two data mean “menopause period” which enhances 5 fold the risk of depressive disorders) (7-8-9-10-11-22).

Psychologists (4) have addressed the ‘burnout syndrome’ several years before physicians had recognized the medical implications of the syndrome (1; 17; 30). Only recently, physicians are slowly starting to recognize and treat teachers’ mental disorders, even those initially diagnosed as “burnout syndrome”. This despite the fact that the “burnout syndrome” is not mentioned in the American DSM IV TR or in the European ICD 10. Moreover, further elements on teachers’ health condition are pointed out in a newer study (15).

The high prevalence of psychological distress among teachers is an international problem. France (5; 12; 20; 29) and Japan (13) have respectively launched a suicide warning among teachers and have registered a dramatic increase of absence due to psychiatric problems. In Bavaria, Germany, the majority of teachers who retired for health reasons had a psychiatric diagnosis (2).

A further warning is given by the greater incidence and prevalence of cancer among teachers compared to the general population (3, 17). The 80% of tumours, according to the prevalent women population, were obviously breast cancers. Studies recently performed in Italy (17) as well as in California on 133.479 teachers (3) came to the same dramatic conclusion.

2. Study rationale

Considering the increasing prevalence of work-related-stress disorders among teachers – including burnout syndrome – we conducted a study to assess the level of awareness of burnout syndrome among Italian teachers. The study had two specific aims. First, to assess the level of awareness, experiences and perceptions of Italian teachers in regards to the risk of developing work-related-stress disorders. Second, to devise prevention programs designed to protect the health of Italian teachers within a new national body of legislation on work-related-stress.

3. Methods and analysis

The two aims of the study were explored with the use of a semi-structured questionnaire specifically developed for the current investigation (**Table 1**). The questionnaire consisted of 15 open-ended questions. Questions 1 to 8 directly dealt with psychological distress and burnout. Question 9 explored the teacher’s perception of the most important source of education for students. Questions 10 and 11 focused on teachers’ opinion and knowledge on legislation. Questions 12 to 15 dealt with teachers’ medical knowledge, prevention practices

and their thoughts about the awareness of health-care professionals in regards to work-related stress among teachers.

<ol style="list-style-type: none">1. Have you ever dealt - in your career - with colleagues affected by psychiatric disorders?2. Do you think your job may lead to psychophysical stress, mental disorders, cancer?3. Did you ever lose self control at school with your students?4. What is the main cause of your work-related-stress?5. What relationship is the most stressful in your job? Students, parents, schoolmaster?6. Do you generally feel comfortable when you start your lessons?7. Do you generally share your problems with colleagues/friends or you prefer to face them on your own?8. Have you ever been victim of mobbing by students, schoolmaster, colleagues or others?9. Among family, friends, school and technologies which are, in your opinion, the most important sources of education for students?10. Are you aware of the rights and duties the new legislation gives you to protect workers' health?11. What do you think about the proposed increase of the retirement age of female teachers to 65 years?12. Do you think depressive disorders arise much easier during menopause?13. Do you regularly undergo screening tests for cancer?14. Do you think general practitioners (GPs), psychiatrists and other physicians are aware of burnout, psychophysical stress, mental disorders and cancer in teachers?15. Have you ever given days off and/or psychoactive drugs by your GP for health reasons? <p>Procedure: Teachers participating on compulsory seminars on burnout syndrome throughout Italy were asked to fill out the semi-structured questionnaire before the start of the seminar. A total of 85 seminars were held in 14 of the 20 Italian region¹ (Piemonte, Lombardia, Friuli Venezia Giulia, Emilia Romagna, Veneto, Toscana, Lazio, Puglia, Sardegna, Abruzzo, Sicilia, Campania, Calabria, Liguria).</p>

Table 1. Semi-structured questionnaire

4. Results

Participants: The study was conducted from October 2008 up to March 2011. A total of 6.132 grade school to high school teachers (4.998 female and 1.134 male teachers) were invited to complete the questionnaire. 6.022 teachers answered to at least 10 out of 15 questions. These 6.022 questionnaires were considered valid for final assessment.

¹ The burnout seminars took place in the following cities/town: Padova, Biassono, Pontassieve, Caserta, Pozzuoli, Pula, Sarroch, Domusnovas, Dolianova, Cagliari (8), Bari, Trani, Villanova d'Asti, Milano (5), Legnano (3), Rho, Bergamo, Brescia, Mortara, Torino, Darfo, Pontevico, Ariccia, Cerveteri, Sabina, Roma (8), Civita Castellana, Francavilla a Mare; Reggio Emilia, Palermo (2), Altofante, Cefalù, Vicenza, Udine, Poggio Mirteto, Arpino, Barletta, Falcone di Acri, Vibo Valentia, Acri, Oppido Mamertina, Catania (2), Oliena, Ozieri, Pattada, Buddusò, Villamar, Milazzo, Abbiategrasso, Belgioioso, Alessandria, Tivoli, Subiaco, Altamura, Grottaglie, Rimini, Biella, Porto Torres, Enna, La Spezia, Genova, Sesto Fiorentino, Campi Bisenzio.

Eighty one point five percent of participants were female – a figure that is superimposable (82%) to the sex distribution among Italian teachers (15). The mean age of female teachers was 46.5 years and that of male teachers was 46.9. Forty percent of female participants were in the perimenopausal period (45-55 years). Forty six point five percent of participants had been teachers for more than 20 years; 29.3% had been teachers for 10-to-20 years and 24.2% had been teachers for less than 10 years.

Responses to questions 1 to 8: Psychological distress and burnout

- **Q1:** 42.5% of responders had met colleagues affected by mental disorders.
- **Q2:** Most participants (84%) had heard of teachers' burnout during their career, yet only 19% was aware that work-related-stress could cause burnout and it can increase the risk of mental disorders and cancer; 8% thought that teaching was associated with no health risks. Seventeen percent of participants was convinced that burnout is the only work-related health risk for teachers and 38% was convinced that burnout plus mental disorders are the only two work-related health risks for teachers. Both groups were unaware of the risk of cancer. Finally, 18% did not answer the question.
- **Q3:** 27% of responders admitted to have lost self-control while teaching in at least one occasion.
- **Q4:** 73% of participants stated that work-related-stress was severely (50%) or moderately (23%) worse than stress experienced in their private life. The remaining participants (27%) thought that stress in their private life was severely (13%) or moderately (14%) worse than work-related-stress.
- **Q5:** The major perceived sources of stress were the students (26%), their parents (20%), colleagues (20%) and the schoolmasters (2%). A substantial minority of responders (32%) stated that students and their parents, colleagues and schoolmasters were all equally responsible for causing stress.
- **Q6:** 27% of responders felt comfortable with their job; 59% felt concerned and 13% reported high levels of anxiety. Only 1% reported no concerns whatsoever.
- **Q7:** 65% of responders stated that they shared their problems with their colleagues; 35% preferred to face their problems on their own.
- **Q8:** 22% of responders was convinced that they had been victims of mobbing by the hands of colleagues or schoolmaster in the past; 1% was convinced to be victims of mobbing at present.

Responses to question 9: Most important sources of education

- **Q9:** The vast majority of responders (84%) considered the family as the students' most important source of education. This was followed by technologies (12%) and friendships (3%). Surprisingly, only 1% of responders considered school as the students' most important source of education.

Responses to questions 10 and 11: Teachers' opinion and knowledge of legislation

- **Q10:** The large majority of teachers (98%) – and schoolmasters² – were completely unaware of the legislation that mandates teachers' evaluation by government medical commission in case of health concerns.

² In a study conducted by the author in 2008 on 1.452 schoolmaster (16) showed that less than 1% perfectly knew the legislation on appealing to the Medical Commission to protect workers' health. The research was presented on the 21st May 2008 in the Italian Parliament.

- **Q11:** 48% of respondents were against the increase of the retiring age for women to up to 65 years; 38% were ready to consider the reform only if the health risks of the category were assessed beforehand. Only a minority (6%) of responders agreed to the increase in the retirement age with no preconditions. Finally, 8% suggested that it should be left to the teachers the decision whether to work until age 65 or not.

Responses to questions 12 to 15: Teachers' medical knowledge, prevention practices and thoughts about the awareness of health-care professionals in regards to the work-related-stress of teachers

- **Q12:** Only 35% of responders knew that compared to the fertile period the risk of depressive disorders increases 5 fold during menopause; 42% did not know of this risk and 22% denied any association between menopause and depression.
- **Q13:** 58% of female responders reported undergoing screening for cervical cancer (Pap smear) and 52% of them reported undergoing screening for breast cancer (mammogram); 27% of male responders reported to undergo screening for prostate cancer and 32% of them reported to undergo screening for colon cancer. The 13% of male and 12% of female responders stated that they were not old enough to require cancer screening.
- **Q14:** 40% of responders thought that general practitioners are totally unaware of teachers' burnout; 8% thought that general practitioners are aware of it and 13% did not answer the question. A total of 39% of responders thought that only psychiatrists are aware of the psychiatric risks associated with the teaching profession.
- **Q15:** 51% of responders stated that they felt no need to take days off for health reasons. A conspicuous minority (36%) declared they had taken no days off for health reasons, yet they thought it would have been useful to do so. Few teachers reported having taken days off for health reasons 'periodically' (1%), 'rarely' (4%) or 'one time only' (8%). Female responders reported more absences for health reasons than male responders (14% versus 9%). Most male and female responders (75%) denied taking any psychoactive medication for mental disorders; 17% reported taking psychoactive medication only 'as needed' and 7% reported taking psychoactive medications daily. Female responders used more psychoactive medications than male responders (25% vs. 23%).

5. Discussion

This is the first large cross-sectional investigation focused on the perception and understanding of work-related-stress and comorbidities among Italian teachers. The study has five major findings. First, a large proportion of teachers were aware of burnout and experienced work-related-stress, but only few of them knew that work-related-stress could cause mental disorders and could increase the risk of cancer. Second, nearly one fourth of teachers felt mobbed at work. Third, most participants were not aware of the legislation regulating workers' health care (including the psychological well-being of teachers). Fourth, most participants did not recognize the association between menopause and increased risk of developing depression. Fifth, despite of stress related work increases burnout, cancer and mental disorders in teachers, retiring age is going to be moved to 65 years of age (apparently against the new law protecting workers' health). Sixth, many participants rightly thought that physicians are totally unaware of teachers' burnout.

6. Conclusions

The teaching profession is associated with increased risks for the physical and psychological well being of teachers. Unfortunately, despite these increased health risks, a pervasive misconception in the public opinion is that teachers have a pampered (part time) work, peppered with many more holidays than in any other profession. Few comparative studies on workers' health, conducted among different professions, demonstrate a higher prevalence of mental disorders and cancer among teachers (1; 2; 3; 13; 15; 17). A worrisome trend in this regard is the worsening of teachers' health reported in last few decades in many countries including France (5), Japan (13), Germany (2) and Italy (1-17-30). Factors that may be responsible for this disturbing trend include the weakness of the family as educational agency and the ageing of teachers: the median age of teachers is approximately 50 years. In female teachers - which represents the overwhelming majority of teachers - this is a particularly vulnerable period as a result of physiological changes (menopause) which have been associated with depression.

This study, as well as other recent investigations conducted in Italy (15; 16; 17;30), shows the critical need of educating teachers about the health risks (including mental disorders and cancer) associated with their profession. This objective can be reached by fostering the participation of teachers to "damage prevention" seminars and workshops. These "damage prevention" programs should be focused on specific issues such as:

- work-related-stress in "helping professions";
- increased risk of depression in menopause;
- cancer risks and cofactors (genetic, diet, etc);
- importance of screening-test in cancer prevention;
- positive and negative coping strategies for mental disorders;
- appropriate legal knowledge (rights and obligations) of laws designed to protect workers' health.

"Damage prevention" seminars and workshops, should be followed by two additional initiatives namely: "damage repair" and "damage management". "Damage repair" consists in the care of teachers, who are victims of work-related-stress and allied conditions, by physicians who are conversant with the diagnosis and treatment of work-related-stress in helping professions. "Damage management", consists of supporting and advising schoolmasters faced with teachers suspected to be victims of work-related-stress disorders. According to the current Italian law, schoolmasters are mandated to refer these teachers to an ad-hoc medical commission. This commission, in turn, has to visit the worker to assess if the teacher is able to continue his job or has to stop for a while or forever. If considered "not able" the worker has to be assigned to another office in his/her school.

The results of this study suggest that it is critical to assess the real health condition of the teacher population, on national basis. Such assessment is the necessary foundation needed by those health-care professionals who are interested in designing programs that address teachers' risks of mental disorders and cancer. For their part, legislators must understand that increasing the retirement age of (female) teachers to 65 years is a mistake unless specific steps are taken to prevent the negative health consequences associated with this helping profession. In the absence of those specific steps, any increase in retirement age would be at odds with the recent Italian law focused on the protection of workers' health (Decree 81/08).

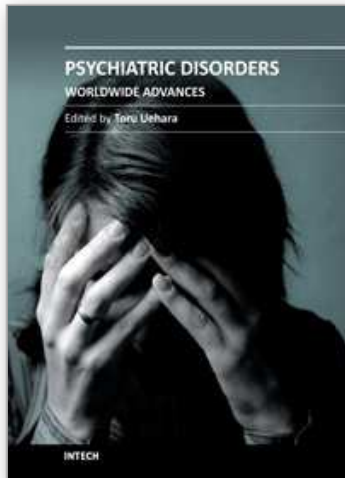
Finally, an effort should be made to inform physicians on the risks of helping professions and to restore the teacher's image and dignity in the public's opinion eyes through adequate mass media campaign.

July 7, 2011

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A psychiatric disorder is defined as any complex condition that involves the impairment of cognitive, emotional, or behavioral functioning. Aside from knowing the physical organic factors, its causal pathology has remained a mystery. Regarding recent advances in psychiatry and neurosciences, psychiatric disorders have been closely associated with socio-cultural, psychological, biochemical, epigenetic or neural-networking factors. A need for diverse approaches or support strategies is present, which should serve as common knowledge, empathetic views or useful skills for specialists in the field. This book contains multifarious and powerful papers from all over the world, addressing themes such as the neurosciences, psychosocial interventions, medical factors, possible vulnerability and traumatic events. Doubtlessly, this book will be fruitful for future development and collaboration in "world psychiatry".

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