Systematic Review Article

## The Causes of Disruptive Behaviors in Nursing Workforce: A Systematic Review

Mahboobeh Afzali<sup>1</sup>, Jamileh Mokhtari Nouri\*<sup>2</sup>, Abbas Ebadi<sup>2</sup>, Seyyed Mohamad Khademolhoseyni<sup>2</sup>, Nahid Reje<sup>3</sup>

#### **Abstract**

The first essential step to addressing disruptive behaviors is to gain an understanding of the causes of disruptive behaviors in healthcare organizations. This review article was conducted to gain an understanding of the causes of disruptive behaviors in the nursing workforce. The University of York center for Reviewers and Dissemination Guidance approach was used for searching five databases (PubMed, PsycINFO, CINAHL, Medline and Science direct) with 3main category key words from 2000 to Nov 2014. Lastly, 12 full texts were analyzed for responding to the research question. The results are explained in four categories; individual, organizational, environmental and social factors. This study showed that disruptive behaviors are a complex phenomenon, and the causes that contribute to disruptive behaviors typically operate at multiple levels and suggested that there are many factors behind a disruptive behavior and the escalation of the situation.

- 1. Nursing Department, Baqiyatallah University of Medical Sciences, Tehran, Iran.
- 2. Nursing Department, Faculty of Nursing ,Baqiyatallah University of Medical Sciences, Tehran, Iran
- 3. Nursing Department, Faculty of Nursing ,Shahed University of Medical Sciences, Tehran, Iran

#### \* Corresponding Author

Jamileh Mokhtari Nouri, Nursing faculty, Baqiyatallah University of Medical Sciences, Tehran, Iran. E-mail: Mokhtari@BMSU.ac.ir

Keywords: Causes, Disruptive Behaviors, Nursing Workforce, Systematic

Received: 2015/05/19 Accepted: 2015/08/11

# Introduction

Review

Disruptive behaviors are an overarching term applied to a wide range of "bad behaviors" that are reported in healthcare literature (1). The American Medical Association defined disruptive behaviors as" Personal conduct, whether verbal or physical, that negatively affects or that potentially may negatively affect patient care" (2). Johnson and colleagues (2007) asserted that verbal abuse prevents effective communications (3). According to the JCAHO "Inadequate communication between care providers or between care providers and patients/families is consistently the main root cause of sentinel events". Sentinel events are unexpected events that happen to patients resulting in death or serious injury (2).

Therefore disruptive behaviors can result in frighten staff, low morale, or increase worker turnover that can threaten the safety and quality of care (4,5). In most cases, individuals are unaware of the clinical consequences of their behaviors and the negative effects on patient care (6). Rogers and colleagues (2009) declared that nursing morale has also been correlated with autonomy, workplace equipment, workplace safety, teamwork, work stress, the physical demand of nursing work, workload, rewards for skills and experience, career prospects, status of nursing and remuneration (7). Simons showed that belittling, punishing, extreme supervision and omission as disruptive behaviors amongst 511 randomly selected registered nurses in the USA. The main finding by Simons was that as these types of behaviors increase, so does the individuals intend to leave the current nursing position (8).

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in the United States has been highlighted disruptive clinician behaviors as a risk to patient safety. Standard LD.3.15 (Leaders create and maintain a

culture of safety and quality throughout the hospital) means that organizations are now required to address disruptive behaviors in the clinical environment (9). While professionals and organizations have tried to self-regulate this behavior through zero-tolerance position statements and code-of-conduct policies, evidence from the literature confirms that disruptive behaviors are still prevalent in healthcare (8, 10-15). Therefore an essential first step to addressing disruptive nurses' behaviors is to gain an understanding of the causes of disruptive behaviors in healthcare organizations that this is the basis for preventing and guiding best practice modelling in the practice setting. The research question in this literature review is 'what are the causes of disruptive behaviors in nursing workforce?"

#### Methods

We used For this review article the research framework of The University of York Center for Reviewers and Dissemination Guidance approach (16) was used. This approach has seven steps. The first step was formulation research question. The research question of this study was: 'What are the causes of disruptive behaviors in nursing workforce?" The Second step was search strategy. The strategy of the present study was searching for five databases (PubMed, PsycINFO, CINAHL, Medline and Science direct) with searching key words. Three primary search terms were taken from the title, namely disruptive behaviors, causes, nursing workforce. The search terms were divided into three categories to minimize the inclusion of irrelevant papers; terms used for disruptive behaviors (e.g. disruptive behaviors ,bullying, incivility, harassment, horizontal and lateral violence), terms of causes (e.g. antecedent, triggers, factors) and descriptors associated with



the nursing workforce (e.g. nursing staff, nursing personnel, nursing employee). Third step was inclusion and exclusion criteria. The inclusion criteria were: literature during 14 years; literature in English languages; published articles in valid peer-reviewed scientific journals; existence the keywords or equivalent keywords in title or abstract. According to the third step,48409 articles were found including 9497 articles in PubMed, 2112 articles in PsycINF, 1567 articles in CINAHL, 8037 articles in Medline, 27196 articles in Science direct. According to the including criteria, only 81 articles remained in the research process. The fourth step was the quality survey of articles. Furthermore, a check list was designed according to the inclusion criteria and the articles were assessed based on it. The fifth step was the application of the checklist. Moreover, the articles were investigated according to the full text. After investigating the quality of the articles, only 12 articles remained in the research process. The sixth step was deriving the question's responses from the remained articles. The Seventh step was a combination of the derived data in relation to response the question "what are the causes of disruptive behaviors in nursing workforce?"

Figure 1 demonstrated the flowing diagram of selected articles.

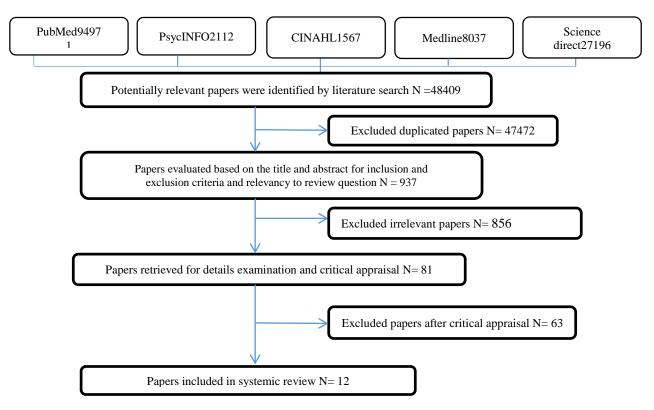
Results: In most studies, the causes of disruptive behaviors are explained in four categories as followed.

Individual factors:

Personality: Disruptive behaviors is a multifaceted problem that cannot be merely explained by the personality of the target and the perpetrators (17). At the individual level the personality of targets and perpetrators have been linked to disruptive behaviors (18). For instance, an Irish study into workplace disruptive behaviors found that targets of disruptive behaviors were identified as introverts, conscientious, neurotic and submissive (19).

Mathieson & Einarsen(2005) found in their study that among three groups of samples including perpetrators, targets and provocative victims, provocative victims had more previous experiences from disruptive behaviors in their past jobs or in their childhood compared to other samples. Samples were compared with trait such as bullying at work, self-esteem, aggressive tendencies, prior experiences of bullying and experiences of role stress. Results showed that perpetrators had a higher level of aggression than the comparison group and the targets. Low level of self-esteem and social competency and a high level of aggressiveness had be seen in provocative victims and low levels of self-esteem and social competency revealed in targets of disruptive behaviors, as well as high level of stress reported in targets, provocative victims and perpetrators (20).

Gender: Hauge (2009) stated that men and women are equally likely to report being bullied at work (21). Milczarek(2010) indicates that the gender of the target and the perpetrator are important factors in whether negative behavior is perceived as disruptive behaviors. In healthcare, men were shown to be targets of disruptive behaviors more often than women.



**Fig1.** Flow diagram of selected articles Hauge (2009) concluded that age isn't related to engaging in disruptive behaviors (21).

**Other Factors**: The use of alcohol or drugs and poor mental health has been suggested as a cause of increased risk of disruptive behaviors (22). It is important to note that, although some individual factors have been identified in the literature, disruptive behaviors are only likely to occur if the organizational culture and norms allow it (22).

### **Environmental factors:**

unpleasant working environment: It has been shown in Lawoko, et al. (2004) study that among psychiatric staff an unpleasant working environment is a risk factor for disruptive behaviors; particularly, physical working conditions are identified as critical determinants of the occurrence of disruptive behaviors (23). Moreover, other conditions that affect the physical work environment such as poor lighting, poor ventilation, noise, etc. may act as contextual stressors increasing the probability of being abused(22). Mayhew believed that the potential agent for violence may increase at special times of the day or night; on specific days of the week; in places where groups of young males gather or where intoxicated people gather (24). According to the study of Hauge et al. (2009) as well as the study by Vartia(2001) regarding the work environment factors as causes of disruptive behaviors, Milczarek(2010) explained that it is important to notice that not only the targets but the observers of disruptive behaviors experienced their work environment more negatively than those who worked where there was no disruptive behaviors

Other Factors: Illing(2013) in his study according to previous studies described that job demands, role conflicts, role ambiguity and lack of clear goals have been linked with disruptive behaviors. Targets of disruptive behaviors have reported little control over their own work, little encouragement for personal development, uninteresting and unchallenging work, and little work variation. Interestingly, perpetrators of disruptive behaviors have also reported highly stressful environments involving role ambiguity, staff shortages, conflict and a poor social climate. Illing as well as report basis on the other studies that physical characteristics of the workplace may cause discomfort for individuals; for example being noisy, hot, cold, cramped, or isolated. Such factors have been associated with increased attitudes of hostility (25).

## **Organizational Factors:**

The organizational causes of disruptive behaviors can be classified in many ways. Hoel and Salin(2003) explore organizational causes of disruptive behaviors under the following headings: (a) work organization (b) changing nature of work (c) organizational culture and climate and (d) leadership (26). Disruptive behaviors may be the result of factors that are largely determined by the organization. Various work environment factors can be considered to produce or elicit occupational stress, which may increase the risk of conflict and bullying (27).

The organization has considerable power over all employees and whatever action (or lack of) it takes place will ultimately have consequences. In the study of Hauge et al (2007), they showed that there were relationships between stressful work environments and disruptive behaviors among a large sample of the Norwegian

workforce. The analysis showed that role conflicts, interpersonal conflicts and tyrannical and laissez-faire leadership were strongly correlated with disruptive behaviors (28). The relationship between a range of organizational changes and aggression has been explored; for example Baron and Neuman (2011) findings proved that the strongest predictors of aggression were the use of part-time workers, changes in management, and pay cuts or freezes(29, 30).

Different organizational changes, cost-cutting, organizational changes, job (in) security and social change as well as major technological changes and budget cuts have also been found to be associated with aggression and disruptive behaviors. Changes of supervisors or managers have frequently been found to be associated with disruptive behaviors. Furthermore, a nationwide survey in Finland showed that changes at the workplace that change working tasks and bring the threat of unemployment as well as temporary dismissal were connected with an elevated risk for disruptive behaviors at work(22).

Salin(2001) has introduced a model where the organizational causes of disruptive behaviors have been divided into three groups: enabling, motivating, and triggering factors of disruptive behaviors. Enabling factors describe factors which may allow disruptive behaviors to occur in the first place, but which are seldom sufficient to bring about disruptive behaviors on their own. Examples of such enabling factors are a laissez-faire style of leadership, permissive organizational culture, normalization of behaviors, and large disruptive and bureaucratic organizations. Examples of motivating structures and processes are high internal competition and reward systems triggering or precipitating processes include downsizing and re-engineering (31).

The climate and atmosphere in the workplace or organization as well as low satisfaction with leadership, the leadership style or leadership practices have, in qualitative studies, also been found to be associated with disruptive behaviors (22). Interviewed victims of disruptive behaviors have also reported their supervisors to be autocratic, and the working environment competitive, strained and stressful (26)

In recent years, interesting studies have been carried out in Norway on the relationship between disruptive behaviors and destructive leadership and other management styles. The studies have shown a significant correlation between workers' ratings of their managers' low levels of conscientiousness and agreeableness and exposure to disruptive behaviors (32).

Organizational culture is another factor that can contribute to workplace disruptive behaviors. In organizations where there is a general culture of incivility, there tends to be more disruptive (33, 34). In the nursing profession, studies have documented the process whereby student nurses and new hires have become socialized into the culture of disruptive and begin to adopt these behaviors (35). Other organizational factors that researchers have identified as contributing to disruptive behaviors are a chaotic work environment characterized by inconsistent enforcement of policies, organization-wide change, and an overly

competitive work environment (36-38).

Disruptive behaviors is also believed to thrive in organizations such as health care, which emphasize conformity (34). Leadership style has been implicated in the presence or absence of workplace disruptive behaviors in a given workgroup. Autocratic leadership, laissez-faire leadership, and no contingent punishment styles have all been associated with increased workplace disruptive. (39, 40). On the other hand, fair and supportive leadership(28), and transformational and emotional leadership styles(41), have been associated with lower levels of workplace disruptive behaviors. Departments in which managers intervene on the behalf of targets of disruptive behaviors are reported to have fewer incidents of subsequent disruptive behaviors than those with unsupportive managers (36). Furthermore, nurses who have been bullied and who reported that their managers were supportive exhibited lower rates of depression and burnout, and were less likely to state they intended to quit, than targets of workplace bullying who had unsupportive managers (42).

## **Social Factors**

Neuman and Baron (43) discuss the social causes of bullying and aggression; like the norm of reciprocity, injustice perceptions, norm violations, and distributive justice. At social levels, studies suggest differences in the way that organizations are structured in different countries may contribute to workplace disruptive behavior. For example, in Scandinavian countries, prevalence rates for disruptive behaviors have historically been around 3-5%, while prevalence in the United Kingdom (UK) and the US is generally reported to be around 10-12% (44).

Workplaces in the US and the UK have been described as patriarchal and hierarchical, whereas the workplace culture in Scandinavia has been described as more egalitarian and feminist (45). Patriarchal and hierarchical workplaces have been associated with higher levels of disruptive behaviors than those with more participatory governance (39). In addition, it is hypothesized that employees in the US and the UK are expected to be emotionally strong(30).

Therefore, managers and co-workers may not intervene on behalf of targets of disruptive behaviors because they believe he or she needs to toughen up and confront the disruptive behaviors on their own (46).

## **Discussion**

Disruptive behaviors are a global issue and it is clear that this phenomenon is a complex and multi-causal that can rarely be explained by one factor alone. Disruptive behaviors are harmful to organizational culture and nurses' well-being therefore it can result in nursing discontent, increasing drop commitment and absenteeism, intent to leave, and interrupts intra professional communication, and is a crucial component in medical errors and patient outcomes (47). Nowadays, there is quite a lot of research data on the possible causes and antecedents of disruptive behavior at work. The work environment, organizational and social factors and individual characteristics of the target and perpetrator of disruptive behavior have been studied. The literature suggests that the incidence and perception of disruptive behavior depend on individual characteristics of

both perpetrator and target, including personality variables. However, the interpersonal relationship also takes place within an organizational context in which factors such as leadership, organizational change and work design can trigger negative behaviors, which may be perceived as disruptive behaviors by some individuals (25).

Theoretical approaches have explained how some causes may lead to disruptive behavior (e.g. social learning theory). More recently, researchers have attempted to compare different approaches into broader theories and models that describe the interactions between individual, group and organizational processes (25). The work environment hypothesis, which states that stressful and poorly organized work environments may give rise to conditions resulting in disruptive behavior, is nowadays shared with many researchers and practitioners (48). The features of the work environment most commonly found to be associated with disruptive behavior have been role conflicts, poor social climate or interpersonal conflicts at the workplace, and leadership style (22).

Different theoretical frameworks may explain the associations between the stressful work environment and disruptive behavior. One is the frustration-aggression hypothesis (49), that emphasizes the role of external circumstances in causing aggression by negative effect. Another hypothesis is the social-interactionist perspective (50), which maintains that stressful events affect aggression indirectly through their effect on the target's behavior.

Moreover, for the employers, the issue of individual causes of disruptive behavior is an irrelevant question. The employer has the responsibility to stop any disruptive behavior. There cannot be disruptive if the organization does not allow it; therefore attention should be paid to take care and to develop leadership and management practices, organizational culture, and work environment factors.

As a summary of the causes of disruptive behavior, it has been suggested that in most of the cases of disruptive behavior at least three or four of the following can be found: (i) problems in work design (e.g. role conflicts); (ii) incompetent management and leadership; (iii) a socially exposed position of the victim; (iv) negative or hostile social climate; and (v) a culture that permits or rewards disruptive behavior in an organization(51). Organizational culture and the leadership behavior of the immediate supervisor are always related to the onset and escalation of disruptive behavior at work and, therefore, the role and actions of supervisors and management are, in many ways, crucial to the onset as well as the prevention and management of disruptive behavior at work. Development of the work environment and organizational factors behind disruptive behavior is the best and, at the same time, the 'easiest' strategy to prevent and decrease disruptive behavior at work(39, 51).

## Conclusion

Disruptive behaviors are a persistent problem in many organizational contexts, including in the health care settings. Explaining the occurrence of disruptive behaviors is a complex effort, and is likely to involve four factors

**Table 1.** Summary of the results

Theme	Subtheme
Individual factors	Personality, Age, Gender, Other factors
Environmental factors	Unpleasant working environment, Other factors
Organizational factors	Work organization, Changing nature of work, Organizational culture and climate, Leadership, Other factors
Social factors	Norm of reciprocity, Injustice perceptions, Norm violations, Distributive justice

Table2. Summary of selected articles in last step

No	Author	Abbreviated title	Methodology	Samples	Main Results
1	Johnson S. L.	An Exploration of Discourses of Workplace Bullying of Organizations	Qualitative study	fifteen hospital nursing unit managers	Bullying was characterized as an interpersonal issue attributable to both the target and the perpetrator
2	Milczarek .M	Workplace Violence and Harassment	literature review	EU Countries	The results show need for increased, scientifically sound knowledge, and recognition of the risks and antecedents of violence and harassment at work
3	Matthiesen S.B & Einarsen S	Perpetrators and targets of bullying at work: Role stress and individual differences	Descriptive study	A total of 2215 employee	Micro political behavior may be an important antecedent of workplace bullying
4	Illing J.C, Carter M and et al.	Evidence synthesis on the occurrence, causes, consequences, prevention and management of bullying and harassing behaviors	Evidence synthesis and realist review	175 articles	Synthesized evidence on Interventions focused on the prevention and management of bullying
5	Lawoko, S Soares, J. J. F Nolan, P	Violence towards psychiatric staff:	Descriptive study	301England psychiatrists nurses and 745Sweden	Interventions thus need to be sensitive to gender differences, societal context, professional roles and interactions between them
6	Haugea L.J Skogstada.A Einarsena S	Relationships between stressful work environments and bullying	Analytic descriptive	2539 of the Norwegian workforce	Hence, bullying is likely to prevail in stressful working environments characterized by high levels of interpersonal friction and destructive leadership styles
7	Vartia, M	Consequences of workplace bullying with the respect to	Descriptive study	949employees	Victim history was associated with feelings of low self-confidence. The targets of bullying used sleep-inducing drugs and sedatives more often than did the respondents who were not bullied.
8	Soares,J.J.F, Lawoko,S Nolan, P.	The nature, extent and determinants of violence against psychiatric personnel	Descriptive study	731psychiatric nurses and 320psychiatrists	Results identifies personal factors associated with violence that have received little attention in the literature (e.g. lack of respect for the organization of care)
9	Laschinger,S and etal	Workplace empowerment, incivility, and burnout:	Analytic descriptive	612 Canadian staff nurses	Nurses' perceptions of empowerment, supervisor incivility, and cynicism were strongly related to job satisfaction, organizational commitment, and turnover intentions.
10	Agervold, M	The significance of organizational factors for the incidence of bullying	Descriptive study	898 persons	Results support the assumption that organizational factors such as changes in one's position, pressure of work, performance demands, autocratic management and role conflict and lack of role clarity, as well as a poor social climate can contribute to the emergence of higher incidences of bullying.
11	Hauge, L. J., Einarsen, S., etal	Leadership and role stressors as departmental level predictors of workplace bullying	Descriptive study	10,000 employees	Bullying will be prevalent within unfavorable working environments.
12	Ayoko, O. B & Callan, V. J.	Teams' reactions to conflict and teams' task and social outcomes.	experimental	97 teams	Results also revealed that higher levels of inspiration and communication of vision by leaders were directly associated with lower levels of bullying by team members. The findings were discussed in terms of the important role that leaders need to play in managing conflict, emotions and their consequences for team performance.

including individual, organizational, environmental and social factors. Therefore disruptive behaviors are likely to be the result of a combination of the causes at four factors. Given the complex nature of disruptive behavior, the development and application of successful interventions may also need to reflect this complexity by addressing multiple components as opposed to isolated factors where both action and reaction should be understood within the social context in which they take place. By recognizing the negative impact which these behaviors have on staff relationships and patient outcomes of care, we can't afford to look the other way and organizations need to provide, support and enforce the necessary policies and procedures to address the issue head on.

## References

- 1. Walrath, J. M., Dang, D., & Nyberg, D. (). Hospital RNs' experiences with disruptive behavior: A qualitative study. Journal of Nursing Care Quality. 2010; 25(2):105-116.
- 2.Www.Joint Commission. Sentinel Events. Retrieved January 16 flw, jointcommission.org/SentinelEvents. 2010.
- 3. Johnson CL, Martine SL, Markle-Elder S. Stopping verbal abuse in the workplace. AMJ Nurs. 2007;107(4):32–4.
- 4.Stagg SJ, Sheridan D, Jones R A & Speron KG. Evaluation of a workplace bullying cognitive rehearsal program in a hospital setting. Journal of Continuing Education in Nursing.2011; 42(9): 395-401.
- 5.Cortina LM, Magley VJ, Hunter WJ, Day LR. Incivility in the workplace:incidence and impact. Journal of Occupational Health Psychology. 2001;6:64-80.
- 6.Rosenstein AH. Managing disruptive behaviors in the health care setting: focus on obstetrics services. American Journal of Obstetrics & Gynecology.2011; 204:187–192.
- 7.Rogers C, Pearce S, Cameron M. Management of disruptive behaviour within nursing work environments: a comprehensive systematic review of the evidence. 2009;7(15):615-78.
- 8.Simmons S. Workplace bullying experienced by Massachusetts registered nurses and the relationship to intention to leave the organization. ANS Adv Nurs Sci. 2008;31(2):48–59.
- 9. Www.joint Commission. Behaviors that undermine a culture of safety. Sentinel Event Alert. http://www.jointcommission.org/; July 9, 2008.
- 10.Rosenstein AH, O'Daniel M. Managing disruptive physician behavior: Impact on staff relationships and patient care. Neurology. 2008;70(17):1564–70.
- 11.Pfifferling JH. Physicians' disruptive behavior: Consequences for medical quality and safety. AMJ Med Qual. 2008;23(3):165–7
- 12.Stanley KM, Martin MM, Nemeth LS, et al. Examining lateral violence in the nursing workforce. Issues Ment Health Nurs. 2007;28(11):1247–65.
- 13.Rosenstein AH, O'Daniel M. A survey of the impact of disruptive behaviors and communication defects on patient safety. Jt Comm J Qual Patient Saf. 2008;34(8):464–71.
- 14.Www.Joint Commission. Defusing Disruptive Behavior.A Workbook for Healthcare Leaders. The Joint Commission Resources, 2007.
- 15. Felbinger DM. Incivility and bullying in the workplace and nurses' shame responses. J Obstet Gynecol. 2008;37(2):234–42.
- 16.Higgins JP, Green S. Cochrane handbook for systematic reviews of interventions. Wiley Online Library. 2008.
- 17. Johnson SL. An Exploration of Discourses of Workplace Bullying of Organizations, Regulatory Agencies and Hospital Nursing Unit Managers: PhD thesis. University of Washington; 2013.

- 18.Einarsen S, Hoel H, Zapf D, Cooper CL. 'The concept of bullying at work', in Einarsen S, Hoel H, Zapf D and Cooper C. L.Bullying and emotional abuse in the workplace: International perspectives in research and practice.2003. 3–30.
- 19.Coyne I, Seigne E, Randall P. Predicting workplace victim status from personality. European Journal of Work and Organizational Psychology. 2000;9(3):335-49.
- 20.Matthiesen SB, Einarsen S. Perpetrators and targets of bullying at work: Role stress and individual differences. Violence and Victims. 2007; 22(6).735-53.
- 21.Hauge LJ, Skogstad A, Einarsen S. 'Individual and situational predictors of workplace bullying: "Why do perpetrators engage in the bullying of others?". Work & Stress Jou. 2009;23(4): 349 58. 22.Milczarek M. Workplace Violence and Harassment:a European Picture. European Agency for Safety and Health at Work, EU-OSHA. 2010.
- 23.Lawoko S, Soares JJF, Nolan P.Violence towards psychiatric staff: a comparison of gender, job and environmental characteristics in England and Sweden. Work & Stress. 2004; 1:39–55.
- 24. Mayhew C. 'Occupational violence: types, reporting patterns, and variations between Health Sectors'. Working paper. New South Wales Department of Health, Australia (http://www.docs.fce.unsw.edu.au/orgmanagement/WorkingPaper s/WP139.pdf).2001; 139.
- 25.Illing JC, Carter M, Thompson NJ, Crampton PES, Morrow GM, Howse JH, et al. Evidence synthesis on the occurrence, causes, consequences, prevention and management of bullying and harassing behaviours to inform decision making in the NHS. NIHR Service Delivery and Organisation programme. 2013.
- 26.Hoel H, Salin D. Organisational antecedents of workplace bullying', in Einarsen S, Hoel H, Zapf D and Cooper, C. (eds), Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice. London, Taylor & Francis, ed.2003:203–18.
- 27. Soares JJF, Lawoko S, Nolan P. The nature, extent and determinants of violence against psychiatric personnel. Work & Stress. 2000;14:105–20.
- 28.Hauge LJ, Einarsen S, Knardahl S, Lau B, Notelaers G, Skogstad A, et al. Leadership and role stressors as departmental level predictors of workplace bullying. International Journal of Stress Management. 2011;18(4):305–323.
- 29.Brown RB, Brooks I. Emotion at work: Identifying the emotional climate of night nursing. Journal of Management in Medicine. 2002;16:327-44.
- 30.Neuman JH, Baron RA. Social antecedents of bullying: A social interactionist perspective. In Einarsen S, Hoel H, Zapf D & Coope C L. Bullying and harassment in the workplace. editor: New York: CRC Press; 2011.
- 31.Salin D. Prevalence and forms of bullying among business professionals: A comparison of two different strategies for measuring bullying'. European Journal of Work and Organisational Psychology. 2001;10 (4): 425–41.
- 32.Matthiesen SB, Einarsen S. Perpetrators and targets of bullying at work: Role stress and individual differences. Violence and Victims. 2007;22(6):735–53.
- 33.Laschinger S, Leiter MP, Day A, Gilin D. Workplace empowerment, incivility and burnout: impact on staff nurse recruitment and retention outcomes. Journal of Nursing Management. 2009;17(3).20-28.
- 34.Salin D, Hoel H. Organizational causes of workplace bullying. In Einarsen S,Hoel H , Zapf D & CooperCL. Bullying and harassment in the workplace. New York: CRC Press. 2011:227-43.
- 35.Hutchinson M, Jackson D, Vickers M, Wilkes L. Workplace bullying in nursing: towards a more critical organisational perspective. Nursing Inquiry. 2006;13:118–26.

- 36.Hodson R, Roscigno V, Lopez S. Chaos and the Abuse of Power. Work and Occupations. 2006;33(4):382-416.
- 37. Hutchinson M, Jackson D, Wilkes L, Vickers MH. A new model of bullying in the nursing workplace organizational characteristics as critical antecedents. Advances in Nursing Science. 2008;31(2):60-71.
- 38.Keashly L, Neuman JH. Faculty experiences with bullying in higher education. Administrative Theory & Praxis. 2010;32(1): 42-70.
- 39.Agervold M. The significance of organizational factors for the incidence of bullying. Scandinavian Journal of Psychology. 2009;50(3):267-76.
- 40. Hoel H, Glaso L, Hetland J, Cooper CL, Einarsen S. Leadership styles as predictors of self-reported and observed workplace bullying. British Journal of Management. 2010;21(2):453-68.
- 41. Ayoko OB, Callan VJ. Teams' reactions to conflict and teams' task and social outcomes: The moderating role of transformational and emotional leadership. European Management Journal. 2010;28(3):220-35.
- 42.Laschinger SK, Wong CW, Grau AL. Workplace empowerment, incivility, and burnout: impact on staff nurse recruitment and retention outcomes. International Journal of Nursing Studies. 2012;49(10):1266-76.
- 43. Neuman J, and Baron, R. Social antecedents of bullying: A social interactionist perspective, in Einarsen S. et al. (eds), Bullying and emotional abuse in the workplace: International perspectives in research and practice: Taylor & Francis, London and New York. 2003.
- 44.Zapf D, Escartin J, Einarsen S, Hoel H, Vartia M. Empirical findings on the prevalence and risk groups of bullying in the workplace In Hoel H, Einarsen S, Zapf D & Cooper CL. Bullying and harassment in the workplace developments in theory, research and practice .editor: New York: CRC Press.; 2011.
- 45.Beale D, Hoel H. Workplace bullying, industrial relations and the challenge for management in Britain and Sweden. European Journal of Industrial Relations. 2010;16(2):101-18.
- 46.Gaffney DA, Demarco RF, Hofmeyer A, Vessey JA, Budin WC. Making things right: Nurses experiences with workplace bullying: A grounded theory. Nursing Research and Practice. 2012. doi:10.1155/2012/243210
- 47. Hansen AM, Hogh A, Persson R, Karlson B, Garde AH, Orbaek P. Bullying at work, health outcomes and physiological stress response. Journal of Psychosomatic Research. 2006; 60:63–72.
- 48. Hauge LJ, Skogstad A, Einarsen S. Relationships between stressful work environments and bullying: Results of a large representative study. Work and Stress. 2007;21(3):220–42.
- 49.Berkowitz L. The Frustration Aggression Hypothesis: An Examination and Reformulation. Psychological Bulletin. 1989;106:59–73.
- 50.Felson RB. Explanations of the relationship between stress and interpersonal aggression violence. The Sociological Quarterly. 1992;33(1):1-16.
- 51. Einarsen, S. 'Organisational risk factors of bullying'. paper presented at the second meeting of the Nordic network on bullying at work. 10–11 November, Reykjavik, Iceland. 2008.