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# Is Chappell and Di Martino's interactive model of workplace violence valid? An article analysing workplace violence towards healthcare professionals in Spain

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ABSTRACT

Workplace violence is a phenomenon affecting healthcare professionals. One of its explanatory models is Chappell and Di Martino's interactive model (2006). These authors assert that workplace violence occurs due to the interaction of multiple risk factors and according to these scholars the greater the knowledge of the phenomenon, the greater the likelihood that it can be prevented and, therefore, its incidence diminished. The aim of this article is to analyse the studies on aggression towards healthcare professionals in Spain based on this interactive model and to corroborate whether this model helps explain the phenomenon of workplace violence in Spanish healthcare professionals. For the purpose of this study, 28 studies on workplace violence affecting healthcare professionals were analysed. The obtained results we later compared to Chappel and Di Martino interactive model. The results are not conclusive: they reveal the need to keep studying the phenomenon and to analyse variables related to the model more precisely.

## 1. Introduction

Since 2010, the National Observatory of Aggressions of the Collegial Medical Organisation of Spain (Organización Médica Colegial de España, OMC) (OMC, 2010; OMC, 2011; OMC, 2012; Gascón et al., 2013; OMC, 2014; OMC, 2015) has presented an annual study on the prevalence of aggression towards Spanish doctors. According to this organisation, the number of aggressions towards doctors increased throughout the first two years. After 2011, their prevalence dropped but the seriousness of the acts increased. (Ortega Marlasca, 2014). In all the studies, the patients are the aggressors (Larizgoitia, 2006).

In relation to other countries, the number of studies covering this field is rather low in Spain (Vidal-Martí & Pérez-Testor, 2015b). Nonetheless, the figures they provide are particularly useful in shedding light on a phenomenon that does exist and on ascertaining its frequency (Gómez-Durán, Gómez-Alarcón, & Arimany-Manso, 2012).

There are two models that explain why workplace violence occurs: the model set forth by Neuman and Baron (1998) and the interactive model of Chappell and Di Martino (2006). Neuman and Baron's (1998) model explains workplace aggression based on the interaction of social and situational factors. In contrast, Chappell and Di Martino's (2006) model posits that workplace violence takes place due to the interaction of multiple risk factors. Chappell and Di Martino (2006) argue that preventing and even eradicating the problem is easier if the phenomenon is known by healthcare professionals and other professionals belonging to different fields.

The aim of this article is to analyse the studies on violence against healthcare workers in Spain based on Chappell and Di Martino's (2006) explanatory model, as it is both explanatory and predictive, and to corroborate whether this model helps explain the phenomenon in the particular case of Spanish Healthcare professionals.

### 1.1. Background

Workplace violence, a term used in the scholarly literature to define acts of aggression and/or violence that take place at work, began to be studied in the 1980s (Arnetz & Arnetz, 2000; Beech & Leather, 2006; Vidal-Martí & Pérez-Testor, 2015a). In the past two decades, surveys have been performed demonstrating that professionals working in caregiving services have a high risk of exposure to this type of violence (Sharipova, Hogh, & Borg, 2010; Lanctôt & Guay, 2014). Chappell and Di Martino (2006) are two of the authors who corroborated this finding and added that hospitals, emergency services, mental health services and senior citizen homes are the services where workplace violence is

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more prevalent.

Healthcare professionals is one of the groups that runs the highest risk of workplace violence (Toscano & Weber, 1995; Arnetz, Arnetz, & Petterson, 1996; Cooper & Swanson, 2002; Gerberich et al., 2004; Camerino, Estryn-Behar, Conway, Van Der Heijden, & Hasselhorn, 2007; Erkol, Gökdoğan, Erkol, & Boz, 2007; Belayachi, Berrechid, Amlaiky, Zekraoui, & Abouqal, 2010; Magnavita, 2013; Campbell, Burg, & Gammonley, 2015). It is estimated that approximately 50% of these professionals have suffered from some act of aggression during their career (Cooper & Swanson, 2002) perpetrated by patients, family members, companions or colleagues.

Cal/OSHA (1995) was the first government institution to establish different categories of workplace violence (Bowie, Fisher, & Cooper, 2005; Peek-Asa & Howard, 1999). They defined 4 types (I, II, III and IV) which differ in terms of the relationship between the agent perpetrating the violence and the victim. This article focuses on type-II workplace violence, which includes any violent act the patients and their milieu (companions, family members, etc.) perpetrate against the professional taking care of them.

Neuman and Baron (1998) and Chappell and Di Martino (2006) have studied the phenomenon of workplace violence, and both posited theories to explain why this phenomenon occurs. These two theories, which study the same issue yet with different approaches and foundations, were the seed of subsequent explanatory models. In our view, Chappell and Di Martino's (2006) interactive model is particularly useful because it defines workplace violence as the confluence of different risk factors, both individual and/or related to the workplace, rendering it possible to prevent and predict the phenomenon.

### 1.2. Chappell and Di Martino's interactive model

Chappell and Di Martino (2006) believe that the interaction of potential risk factors fosters workplace violence (Fig. 1).

The individual risk factors are related to sociodemographic variables, personality traits, health conditions and individual characteristics associated with the job. The risk factors related to the person who is perpetrating the violence are differentiated from the one's of the victim. With regard to the perpetrator of the violent act, the risk factors are the following: being male, being young, having a history of violent behaviour, having had a difficult childhood, suffering from a severe mental illness, having difficulties interacting with others and having access to weapons.

In comparison to the risk factors at the workplace, two kinds are to be distinguished: those related to the working environment and those related to the job that is performed. On the one hand, the risk factors regarding the working environment are the physical location, organisation, management's attitude, workplace culture and permeability of the outside environment. On the other hand, those related to the job that is performed are working alone or being in contact with the public, with valuable objects and with particularly vulnerable groups and/or situations.

The first risk factor related to the environment is the physical location. Professionals who work in unstable economies run a higher risk of suffering from workplace violence. Furthermore, organisations that continuously promote worker uncertainty and insecurity foster workplace violence. Rigid and authoritarian management styles that use intimidation as a leadership strategy (ILO, 2002) are risk factors contributing to workplace violence as well. Inadequate staffing where there are not as many workers as there should be, heavy and constant pressure, unexpected workplace redundancies, organisational changes,

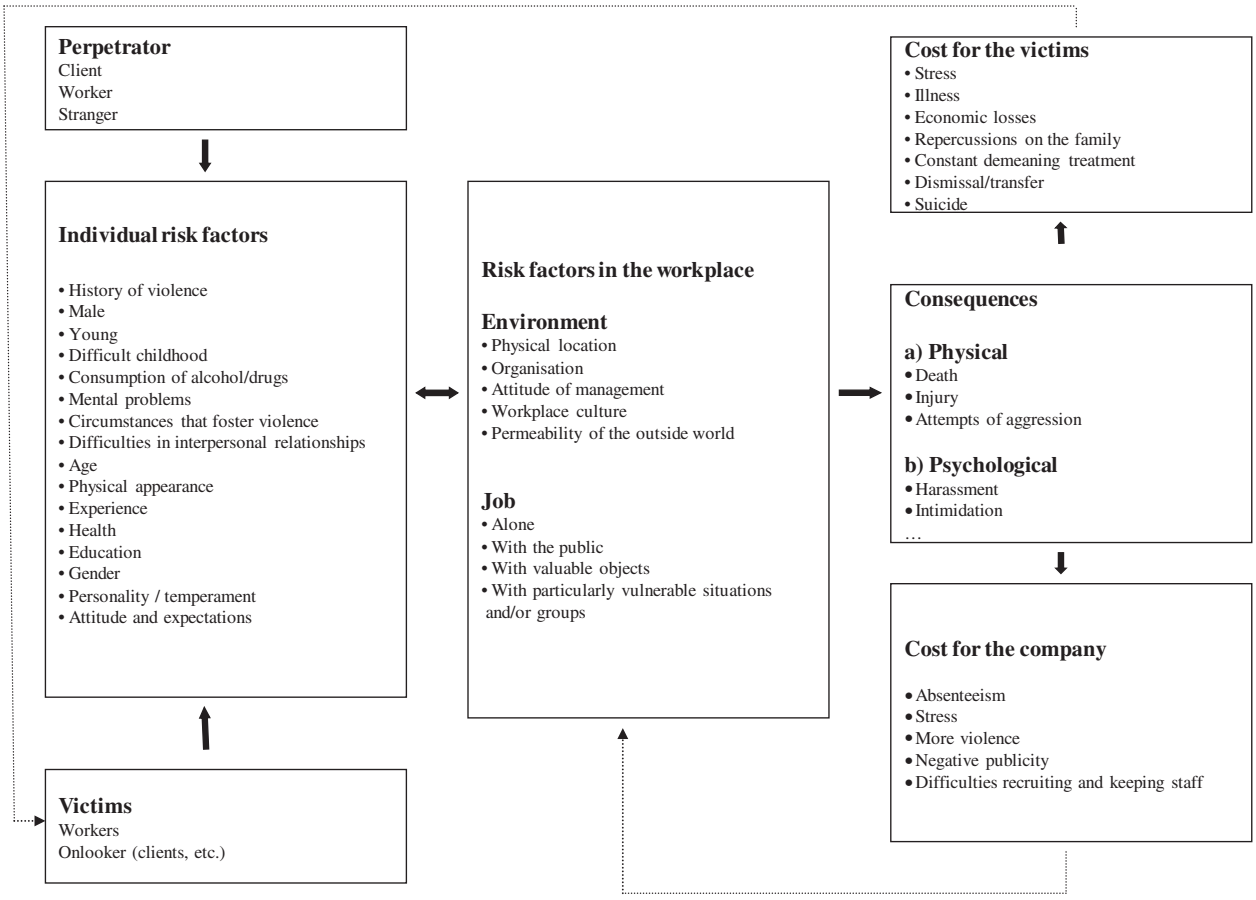


**Fig. 1.** Graphic depiction of Chappell and Di Martino's interactive model (2006).