Review article

Workplace violence in convenience stores

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Workplace violence is a problem that can occur in any occupation and at any operational level. Each occupation has different levels of risks depending on factors including personal factors (i.e. workers and service users), temporal factors, and location factors. Of all workplaces, convenience stores are considered one of the top places with frequent violence. Partially, this is because there are many factors different from other workplaces. Those factors may lead to violence and crimes such as verbal harassment, physical harms, robbery, and murder. The mentioned violence does not only have direct physical effects but also has short-term and long-term mental effects as well as economic and social effects. This article presents the extensive review of the violence at convenience stores. Its contents consist of the introduction, the definition of the workplace violence, the sizes of the violence at the convenience stores, the effects of workplace violence, the factors of the violence at the convenience stores, and relevant studies about convenience stores in Thailand, and conclusions.

Keywords: Workplace violence, convenience store.

Workplace violence is one of the key problems that can happen at any time during work. Each occupation is at risk of violence in different forms and violence is another cause of death, injury, and loss of work and income of workers. Workplace violence is usually overlooked by society or incompletely presented. For example, only one-third of case studies of workplace violence are presented and publicized while the remainders are only in-house reports. Therefore, the size of workplace violence may not have been really examined and 80% of those encountering violence still work at the same place of work and are still at risk of violence. (1)

Each year, societies develop and cultures change by trends and ages. However, workplace violence circumstances barely decrease and it has trended upwards in some occupations. ⁽²⁾ Workplace violence can happen in all professions and all places but violence is not equal due to different factors such as work, service user, location, and organizational factors, etc.

In this report, we searched for data using electronics databases through the library of King Chulalongkorn Memorial Hospital. We checked the accuracy of the reference sources and the relevance to the subject studied for use in writing this article. In Thailand, there is a lot of situational information that is based on searching internet sources on this issue.

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Convenience stores are one of the workplaces at high risk of violence. Data from a number of studies show they were frequently prioritized as the top rank in terms of the number of violent incidents, especially violence that leads to casualties. The reason is that there are many factors in the convenience stores that support violence. (3) Currently, there are many guidelines for violence and crime prevention in convenience stores ie., Preventing Violence to Retail Staff from the Health and Safety Executive (UK); Workplace Violence Preventing Program in Late-night Retail Establishments from the Occupational Safety and Health Administration (USA); and the Crime Prevention Through Environmental Design guidelines (CPTED), and such guidelines have been applied in many countries.

Thailand is one of many countries that has many convenience stores disperse in cities and towns, and even in alleys with more than ten thousand locations nationwide. The rapid growth of convenience stores likely leads to a higher rate of violence.

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Workplace violence

Occupational Safety and Health Administration (OSHA) defined workplace violence as follows: "Workplace violence is violence or the threat of violence against workers. It can occur at or outside the workplace and can range from threats and verbal abuse to physical assaults and homicide, one of the leading causes of job-related deaths."(4) Meanwhile, the European Union Occupational Health and Safety (EU-OHS) identified the definition of workplace violence as "Incidents where persons are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving explicit or implicit challenges to their safety, well-being or health". (5) These meanings can be summarized as workplace violence is verbal usage up to physical abuse until death and such incidents are pertaining to work.

Workplace violence can be categorized in numerous types based on the characteristics of the violence and cause of violence etc. However, the reliable classification of violence referred to by large institutions and a number of research studies was the division based on the relationship of a wrongdoer and a victim. This classification was conducted by the Injury Prevention Research Center, Iowa University, in the United States of America in 2001⁽⁶⁾ saying that workplace violence could be categorized into 4 types, namely:

Type I: violence from intentional crime that has no relationship with a business or employees but he/she just desires to commit a crime or violence.

Type II: violence between an employee and service user (Most common). (7)

Type III: violence between employees from slight violence such as slandering up to threatening, sexual harassment, and death

Type IV: personal violence arises from the violence that has a relationship with a victim but such violence happens in a workplace.

Size of violence in convenience stores

The problems of workplace violence can occur in every establishment and with every employee at all levels even with service users. Most workplace violence is verbal violence which accounted for 38.5%, followed by bullying which was 30% of all violence. (8) The proportion of workplace violence in each study was different depending on the populations or the characteristics of the data collected. For instance,

Hye-Eun Lee studying workplace violence in Korea found the prevalence at only 5.8% (9) of all workers while Dan H. examining workplace violence in the United States of America discovered a prevalence of 8%. (1) Additionally, Serpil A. investigated workplace violence in Turkey and found the prevalence to be 44.8%. (8) It is obvious that in different regions, the proportion of violence is unequal; however, overall workplace violence was at a high level and should gain more attention for prevention and resolution.

From the reports of violent circumstances, convenience stores are always one of the places where violence frequently occurs and ranks top of all workplaces. (9, 10, 11) For example, in the United States of America, the statistics from the Ministry of Justice indicated that among approximately 1.5 million victims of the workplace violence, 300,000 people were in convenience stores and accounted for 20%. (10) This was consistent with other literature with the proportion of violence in convenience stores about 18 - 20% of all workplace violence. (11, 12) It is obvious that the problems of violence in convenience stores are substantial and the prevalence in regions all over the world is similar.

Another crucial point of violence in convenience stores that should be emphasized is death in the workplaces. Convenience stores always have the highest death rate or the second in some studies. Deaths in convenience stores are consistent in any periods from when data were collected. National Institute for Occupational Safety and Health examined the proportion of deaths during 1980 - 1989 and the death rate in convenience stores was 37% of all deaths in workplaces. (3) Furthermore, Greg W. investigated the proportion of deaths during 1992 - 1996 and the proportion of deaths in convenience stores was 43%⁽¹⁰⁾ while Kelly K. studied the proportion of deaths during 1994 - 2003 and found that deaths in convenience stores accounted for 51% of all deaths in the workplace. It is clear that the proportion of deaths in convenience stores is not likely to decrease but is instead rising. Most causes of death are violence in the stores. (14)

Impacts of workplace violence

When workplace violence occurs, a person is affected, directly or indirectly. Impacts of violence can be divided as follows:

1. Impacts on victims: violence can physically impact the victims from no injuries, small injuries, disabilities, or up to death. Mostly, violent physical injuries are not severe ⁽¹⁾ but if violence is related to crime, it is highly likely to cause more injuries. Apart from the physical effects psychological impacts are and the impacts can be at different levels, ⁽¹⁵⁾ i.e., anxiety, fear, agitation, attention deficit disorder, decreased self-confidence, insomnia, and stress that may develop to be depression. ^(8, 16) Accordingly, it is clear that apart from visible physical diseases, adverse psychological conditions are hidden and can result in long-term impacts ⁽¹⁵⁾ which lead to behavioral changes such as less attention to work, laziness, lack of motivation, higher business leave, and turnover need.

- 2. Impacts on organizations: for organizations, when violence occurs, they will lose revenue and may lose employees including skilled full-time employees, and part-time employees leading to a turnover of employees. If the organizations have frequent violence, it possibly affects customers and investors that, apart from direct damages arising from such incidents, lead to losses of other revenues such as prosecution costs, training costs for new employees, a remedy for victims and impacts on the reputation of the organizations in the long term. (17)
- 3. Social impacts: workplace violence can widely affect society in different aspects such as public perception, the overall image of a country or even overall income of society. Additionally, in the case of severe violence where the victims cannot work, they may have to resign or have a permanent disability which increases burdens of sectors to provide assistance such as social security and social assistance etc. Previous studies into the estimation of damages of all products lost from violence in establishments showed that the number was 1 3.5% of gross domestic product (GDP). However, the impacts and loss of revenues in each country depend on the healthcare system, management processes, and collaboration from societies in that country.

Workplace violence not only affects physical and health conditions, but it also has impacts on the minds of the victims. These impacts can be extended to colleagues, friends, families, establishments and up to societies and countries.

Factors of violence in convenience stores

Convenience stores are one of the workplaces that usually have violence, especially robbery and theft, which are at the highest rates in convenience stores and lead to severe injuries. The reason why violence often occurs in convenience stores is that in the past has been examined by studies into the different factors relating to violence in convenience stores and they could be categorized as follows:

Personal factors

- 1. Part-time employees: the studies discovered that part-time employees were more likely to suffer workplace violence than full-time employees for 2.38 times (odds ratio, OR) = 2.38, 95% Confidence interval (CI) = 2.01 2.84). (9) It may be caused by part-time employees having no experience dealing with the workplace violence before.
- 2. Young employees: Kimberly investigated risk factors of robberies and injuries of employees in convenience stores and found that the workers with ages lower than 24 years were highly likely to experience violence than older workers by 2.3 times (Relative risk or RR = 2.3, 95% CI = 1.2 4.3). (12) Furthermore, the study by Corinne Peek Asa found that employees aged below 20 years were at higher risk of death in convenience stores more than those with different ages (2.08 times OR = 2.08, 95% CI = 1.76 2.44). (18) Young employees are not skillful enough to control their emotions and have experience in problem management. However, some literature discovered that older employees were likely to have more violence.
- 3. Female employees are at higher risk than their male counterparts (2.92 times OR = 2.92, 95% CI = 2.64 3.22)⁽¹⁸⁾ The characteristics of violence in different sexes are distinct. That is, male employees are most at risk of physical violence while female employees are at higher risks of verbal violence, sexual harassment, bullying than males. (8) It has been shown that different types of violence have different prevalences in each gender.
- 4. Foreign employees: (18) in some countries, employees with many different nationalities are together and in some areas, race discrimination can trigger violence whether from employees or service users. (19) However, such factors may only slightly affect employees in Thailand where racial discrimination is less than in other countries.
- 5. Employees are not trained to handle violence. Therefore, when violence occurs, they do not know how to deal with it and they are at higher risk of injuries. (3,20) Opposition of employees towards violence causes even more injuries than normal situation (9.7 times RR = 9.7, 95% CI = 5.6 16.7)⁽¹²⁾ and the

employees do not realize the importance of preparing to deal with potential violence. (20, 21) Moreover, the fact the stores do not have a policy of cash loss or surrender for employees to cope with such a situations may cause more severe violence.

6. Intoxicated offenders are highly likely to be more violent. This factor originated because the service users are intoxicated and have less consciousness leading to higher violence (RR = 1.70, 95% CI = 1.19 - 2.43). (11) Intoxicated offenders can not control their emotions and thoughts which is a common factor in any workplace violence incident.

7. Few employees or only those in a store are easily at risk of violence, especially crime-related violence. (3, 20) When there are fewer employees, viewing and surveillance are not thorough, even if there is a crime, the perpetrator is aiming at a shop that has fewer employees.

Time factor

1. Working for a long time or for many consecutive days can cause fatigue, stress, less emotional control and management which is a part of violence. Studies have found that a workplace with employees working more than 60 hours/week higher had workplace violence than normal (1.83 times OR = 1.83, 95% $CI = 1.45 - 2.31)^{(9)}$

2. Violence mostly happens during night shifts more than day shifts. (3,9) Each research study had different times of working in each country; for example, Corinne Peek-Asa examined the work period after 10 PM to 6 AM and found that violence occurred more than other periods (1.79 times RR = 1.79, 95% CI = 1.40 - 2.29)(11) or working after 8 PM was likely to see more violence (2.56 times OR = 2.56, 95% CI = 2.39 - 2.74)(18) Each work studied different times but the data were consistent in terms of periods after work hours or sunset. (13)

Factors of places and environments

1. Convenience stores with small sizes and fewer than 20 employees are at higher risk of violence than larger stores (1.20 times OR = 1.20, 95% CI = 1.12 - 1.29). (18)

2. A workplace located in areas where the crime rate is high or violence recurs $^{(3)}$ or a workplace located in areas where few people around is at risk of crime (RR = 2.4, 95% CI = 1.2 - 4.6) $^{(12)}$, and the reason why the convenience stores or shops are targeted for

criminal activity is that these places provide cash exchange which makes it easy to commit larceny.⁽³⁾ 3. A workplace with a non-standard security system; for example, when the security system does not cover areas, is at risk of violence and crime. ⁽³⁾ In addition, a shop with one exit or too few exits can have an increased risk (3.9 times RR = 3.9, 95% CI = 1.1 - 4.7). ⁽¹²⁾ Standardized security systems will lead to better prevention of crime, especially violent, such systems are common in stores in Europe or USA but there is still no such standard in Thailand.

4. Violence usually occurs outside the workplaces more than inside the places (2.01 times RR = 2.01, 95% CI = 1.57 - 2.58) such as robbery or ambush in front of stores, etc. This is because inside convenience stores there can be other customers and employees, but outside, such as the storefront, there are fewer people. Exit doors and security systems are less likely to cause greater risk of violence.

Convenience stores in Thailand and Bangkok

A convenience store is a type of small-sized retail shop located in accessible areas, in communities or gas stations. This store distributes routine consumer products to facilitate persons who desire to purchase products 24 hours a day. They emphasize convenience and rapidity, and most distributed products are convenience goods. The convenience store is a kind of retail business in Thailand that is highly popular and has expanded quickly with many branches.

Currently, routine living requires quickness and convenience; therefore, a number of convenience stores have emerged. The rate of convenience store users in Thailand nationwide is approximately 12 million persons/day. According to data of establishments, current convenience stores in Thailand that provide 24-hours services with approximately 12,000 stores i.e. Seven-Eleven, Family Mart, Tesco Lotus Express and Lawson, etc. 44% of these branches are in Bangkok and vicinity, and 56% in communities nationwide.

The workplace violence situation of convenience stores in Thailand, according to a report of the Metropolitan Police Bureau in 2015, and only in Bangkok, there were 48 robberies in a convenience stores that year. The only part of the workplace violence was reported, there is still a lot of violence in the workplace that has not received attention and is not presented.

Research data about convenience stores in Thailand

In Thailand, there have been few studies about convenience stores although the number of convenience stores in Thailand have increased continuously in every community. However, the studies on convenience stores were focused on economic relationships such as purchase behavior (22), shop selection, service usage, or even attitudes towards the convenience stores. (23) Knowledge about the occupational medicine in the context of Thailand is still in substantial shortage, especially for violence that happens unceasingly. Furthermore, important data are still unavailable, such as the size of violence, prevalence, and relevant factors to be extended in the determination of violence prevention measures for convenience stores in Thailand in the future.

In Thailand, convenience stores have only a few forms of market dominance, i.e., from large companies so it is difficult to access the information. Therefore, if studying workplace violence, it must start with access to information from the companies to study the insights in each convenience store that has a history of violence accessing such information is another challenge for those who want to study this issue.

Conclusion

After a literature review, violence in convenience stores is an essential problem and violence can easily happen in different forms. However, violence may be overlooked or only partially presented. There should be more studies on various aspects of workplace violence in order to plan how to reduce the risk of harm to employees. The reason why convenience stores have violence more frequently than other workplaces is due to various factors including personal factors, time, places and environments at risk of violence. The outcomes of violence possibly cause effects extensively to victims, organizations and up to economies and societies. The studies on the safety of employees in Thailand are still considered sparce. Data about workplace violence incidents are rarely available, especially in convenience stores as well as measures to be implemented in Thailand, the context of which needs to be further studied.

References

 Hartley D, Doman B, Hendricks SA, Jenkins EL. Non-fatal workplace violence injuries in the United States 2003 - 2004: a follow back study. Work 2012;42:

- 125-35.
- Edwards JA, Buckley P. Customer-perpetrated workrelated violence: prevalence and trends in Britain. Occup Med (Lond) 2016;66:522-7.
- 3. The National Institute for Occupational Safety and Health. Preventing homicide in the workplace [Internet]. 1995 [cited 2018 Jan 15]. Available from: https://www.cdc.gov/niosh/docs/93-109/default.html.
- U.S. Department of Labor Occupational Safety and Health Administration. What is workplace violence? [Internet]. 2002 [cited 2018 Jan 15]. Available from: https://www.osha.gov/OshDoc/data_General_Facts/ factsheet-workplace-violence.pdf.
- European Agency for Safety and Health at Work. Workplace violence [Internet]. 2010 [cited 2018 Jan 15]. Available from: https://oshwiki.eu/wiki/Workplace_ violence.
- The University of Iowa. Workplace violence report to the nation [Internet]. 2001 [cited 2018 Jan 15]. Available from: https://www.dgs.pt/departamentoda-qualidade-na-saude/observatorio-da-violencia/ estudoint2-pdf.aspx.
- Konda S, Tiesman HM, Hendricks S, Gurka KK. Non-robbery-related occupational homicides in the retail industry, 2003 - 2008. Am J Ind Med 2014; 57:245-53.
- Aytac S, Bozkurt V, Bayram N, Yildiz S, Aytac M, Akinci FS, et al. Workplace violence: a study of Turkish workers. Int J Occup Saf Ergon 2011;17: 385-402.
- 9. Lee HE, Kim HR, Park JS. Work-related risk factors for workplace violence among Korean employees. J Occup Health 2014;56:12-20.
- Warchol G. Workplace Violence, 1992 96: special report. NCJ 168634. Washington, DC: U.S. Bureau of Justice Statistics; 1998.
- 11. Peek-Asa C, Casteel C, Kraus JF, Whitten P. Employee and customer injury during violent crimes in retail and service businesses. Am J Public Health 2006;96: 1867-72.
- 12. Faulkner KA, Landsittel DP, Hendricks SA. Robbery characteristics and employee injuries in convenience stores. Am J Ind Med 2001;40:703-9.
- 13. Gurka KK, Marshall SW, Runyan CW, Loomis DP, Casteel C, Richardson DB. Contrasting robbery- and non-robbery-related workplace homicide: North Carolina, 1994 2003. Am J Prev Med 2009;37:17-23.
- 14. The U.S. Bureau of Labor Statistics. National census of fatal occupational injuries in 2016 [Internet]. 2017 [cited 2018 May 15]. Available from: https://www.bls.

- gov/news.release/pdf/cfoi.pdf.
- De Puy J, Romain-Glassey N, Gut M, Wild P, Mangin P, Danuser B. Clinically assessed consequences of workplace physical violence. Int Arch Occup Environ Health 2015;88: 213-24.
- Piquero NL, Piquero AR, Craig JM, Clipper SJ. Assessing research on workplace violence, 2000-2012. Aggress Violent Behav 2013;18:383-94.
- 17. Hoel H, Sparks K, Cooper CL. The cost of violence/ stress at work and the benefits of a violence/stressfree working environment. Geneva: The International Labour Organization; 2001.
- 18. Peek-Asa C, Erickson R, Kraus JF. Traumatic occupational fatalities in the retail industry, United States 1992 1996. Am J Ind Med 1999;35:186-91.
- 19. Menendez CC, Konda S, Hendricks S, Amandus H. Disparities in work-related homicide rates in selected

- retail industries in the United States, 2003 2008. J Safety Res 2013;44:25-9.
- Runyan CW, Bowling JM, Schulman M, Gallagher SS.
 Potential for violence against teenage retail workers in the United States. J Adolesc Health 2005;36: 267.e1-5.
- 21. Smith CR, Gillespie GL. Do adolescent employees perceive the risks of workplace violence? A mixed methods study. J Nurs Educ Pract 2016;6:116-24.
- 22. Deelieb S, Klinhom V. The factors related to consumers' purchasing behavior on the convenience stores and the traditional retail stores in Thasala District, Nakhon Si Thammarat Province. WMS J Manag 2016; 5:56-67.
- 23. Marauthorn T. Marketing factors affecting buying behaviors of customers at max value supermarket [Thesis]. Bangkok: Bangkok University; 2015.