

## Characteristics of violence against women in Kairouan, Tunisia, in 2017

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### ABSTRACT

Violence against women represents a serious concern worldwide. In Tunisia, despite an advanced legislative framework, we still receive women victims of violence. This survey aimed to characterize the demographic and clinical profile of women victims of violence in Kairouan, central Tunisia. This survey was designed as a cross-sectional study. It concerned women victims of violence over 18 years old, consulting the emergency department of the University Hospital of Kairouan during 3 months in 2017. We defined violence against women according to the Tunisian protection of gender discrimination law. This survey included 100 Tunisian victims of violence; their median age was 35 (ranging from 18 to 59 years old). This study showed that 58% of victims, CI95% [48.3%, 67.6%], were illiterate or had only a primary level education and that 90%, CI95% [84.1%, 95.8%], had a low or middle socioeconomic level. The Intimate Partner Violence was about 70% among all cases, CI 95% [61.0%, 78.9%]. Most aggressive partners were young (aged between 39 and 51 years old). The most affected part of the body was the face (76%, CI 95% [67.6%, 84.3%]). Alcohol consumption was the primary risk factor of violence in 29.6% of cases, CI95% [20.0%, 37.9%]. Other risk factors were the occupational instability, conflicts with the family in-laws and infidelity. Violence against women remains widespread. Even strict legislations in Tunisia didn't protect women sufficiently from different types of violence. It mostly happens within intimate relationships. Therefore, surveillance and early intervention controlling risk factors are extremely important.

### ARTICLE HISTORY

Received 1 December 2020  
Accepted 19 April 2021

### KEYWORDS

Violence; gender based violence; intimate partner violence; battered women; Tunisia

## 1. Introduction

Violence against women is recognized as a global serious concern and a criminal offence in many countries in the world. It is considered also as one of the most robust and reliable behavioral of sex difference [1,2]. Global estimates published by WHO in 2013 have indicated that over 1 in 3 of women worldwide (35%) have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence in their lifetime [3].

Actually, the Tunisian constitution is considered as the most advanced in providing a formal assurance for women's rights than many other Arab countries [4]. Despite this advanced Tunisian legislative framework, we still receive women victims of violence in our health institutions and the Tunisian legislation empowerment did not prohibit yet all types of discriminatory practices [5]. Examining this multiplex issue, limited updated researches were found in the national and regional context. Addressing these limited data, we designed this cross-sectional survey. It

aimed to describe the epidemiological and clinical profile of women victims of violence.

## 2. Materials and methods

This study was designed as a cross-sectional survey including all women over the age of 18, victims of violence and consulting the emergency department of the Ibn El Jazzar University Hospital in Kairouan (during August-September-October 2017). Kairouan is a UNESCO World Heritage site located in central Tunisia. It had about 187,000 inhabitants in 2014.. The Ibn El Jazzar Hospital is the only University Hospital in Kairouan.

As for patient inclusion, It's important to note that each female patient victim of violence and consulting our emergency department should consult our forensic doctors to objectify the harm and to deliver her the necessary certificates. After receiving certificates, participants have received by their forensic doctor explanations about this study and reassurance about

the anonymity. Then, they were asked whether they accept or not to participate in the study. Therefore, minor patients (under-18 years old), victims of violence who didn't consult a forensic Doctor and patients who did not give their consent were not included.

Violence against women was defined according to the Tunisian protection of gender discrimination law as 'any physical, moral or sexual harm to women, based on discrimination of sex and which results in a physical, psychological, or sexual, suffering or injury whether in public or private life [4]. A pretested questionnaire was used to collect data. The pretest was carried out on 30 healthcare personnel in order to check the suitability of our data collection instrument. Our medical staff (composed of 4 forensic doctors) validated the data collected on a weekly basis.

Participants' information included demographic characteristics of victims as well as their aggressors, type, characteristics and conditions of aggression and aggression implications as well as details assessing conjugal relationships in the case of Intimate Partner Violence (IPV). Socioeconomic status was measured as a combination of education, income, and occupation.

As for statistical analyses, the normality of the distribution of all variables was tested using the Kolmogorov–Smirnov test. The normally distributed variables were described as means  $\pm$ SD; non-normally distributed variables were presented as median  $\pm$ [Minimum – Maximum]. In the case of some missing information, we have considered the valid percentage in our statistics.

As for confidential medical information, the interviews were conducted in a confidential manner without the presence of any third person. The anonymity of questionnaire forms was respected. Numeric codes were attributed for questionnaire forms of each participant. An Ethics approval was given to this study by the ethics committee at the University Hospital of Ibn Eljazzar, Kairouan.

### 3. Results

#### 3.1. Socio-demographic characteristics of women victims of violence

Overall, 100 women victims of violence were finally included; Their Median age was 35 years old  $\pm$ [18–59]. The most aggressed women were aged under 40 years old (79%; CI 95% [71.0%, 86.9%]), particularly, between 32 and 45 years old. Origins of victims have also been approached and showed that violence victims recorded in rural areas (47%; CI 95% [37.2%, 56.7%]), were a little lower than city counterparts. We noted that 90% of patients, CI 95% [84.1%, 95.8%], had low or middle socioeconomic levels and that 58% of victims, CI 95% [48.3%, 67.6%], were

illiterate or had only a primary level education. Unemployed patients or housewives represented 69% of total cases, CI 95% [59.9%, 78.0%]. Women have declared repeated violent acts in 90% of cases, CI 95% [84.1%, 95.8%].

#### 3.2. Conditions of aggression

Most assaults occurred at home (67%), at night (52%) and in weekends (79%) (Figures 2, 3). The aggression instrument was mainly the hand (78%) and sometimes a sharp weapon especially a knife (22%). After being aggressed, 90% of women, CI 95% [84.1%, 95.8%], had consulted on the same day, whereas the consultation date was deferred in 10% of cases, CI 95% [4.1%, 15.9%].

#### 3.3. Aggression forms

Physical violence was the primary reason for consultation, but there were no vital function impacts among victims; However, an associated psychosocial impact was reported by 36% of victims, CI 95% [26.5%, 45.4%], and an economic abuse by 8% of cases, CI 95% [2.6%, 13.3%]. Sexual violence was reported in 1% of cases, CI 95% [0.0%, 2.9%]. The Physical aggression resulted in many forms of harm: the bruise was the most frequent harm (60%; CI 95% [50.3%, 69.6%]) and 40% among them were associated with other types of lesions.

Other lesions were found such as hematoma (10%), abrasion (14%), wound and fractures (2%). The most affected part of the body was the face (76%), followed by members (16%) and the scalp (8%).

#### 3.4. IPV and aggressive partners' profile

While the frequency of violence by Close relatives and persons a little distant from the victim was 30%, CI 95% [21.0%, 38.9%], the IPV was about 70% among all battered women, CI 95% [61.0%, 78.9%]. Moreover, 9% of partners, CI 95% [3.3%, 14.6%], have had a psychiatric history and 5%, CI 95% [0.7%, 9.2%], have had even criminal records. It was verified also that: most aggressor husbands were young intimate partners aged between 39 and 51 years old. In addition to that, marriage years were between 2 and 10 years for 78.5% of IPV victims, CI 95% [68.8%, 88.1%]. Couples reported having at least one child together in 67.6% of violence cases, CI 95% [57.7%, 76.2%].

#### 3.5. Causes and triggering factors

Alcohol consumption was the primary cause of violence against women in Kairouan in our study by representing 29.6% of main causes, CI 95% [20.0%,

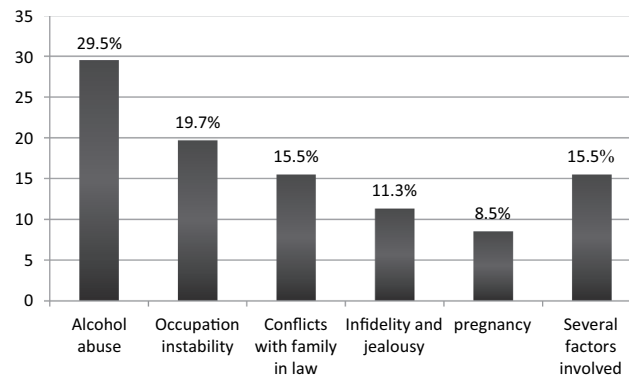


Figure 1. Risk factors of violence against women in Kairouan, 2017.

37.9%], followed by occupational instability and conflicts with the family in-law (Figure 1).

### 3.6. Victims' reaction to violence

Among investigated victims of violence, 39.4% had expressed the wish to break with their partners, ; however, no reaction to the aggressor was expressed in 23.9% of cases (neither the wish to break with their partners nor the desire to file a complaint to the judicial structures).

## 4. Discussion

### 4.1. Main findings

The present study gave a global view of women victims of violence in central Tunisia. In summary, a woman victim of violence is a young woman with a low or middle socio-economic level, of urban origin and who had a low level of education. It happens within her intimate relationships mostly. Alcohol consumption was the primary risk factor for violence. Other risk factors were the occupational instability, conflicts with the family in-laws and infidelity.

The epidemiological and clinical profile of women victims of violence in Kairouan was different from the previous Tunisian profile of victims of violence in 2010 [6] (Table 1).

### 4.2. Urban versus rural women victims of violence

Our study noted a slight predominance of violence against women in urban areas (53.0% Vs 47.0%). The profile of battered women has evolved over the years in Tunisia. In 2010, it was concerning more rural women (67.1%) while in 2017 women of urban origin (53.0%) were rather the most affected. This difference between the origins over the years was statistically significant ( $p < 0.001$ ) (Table 1).

These figures were more evident in France and Morocco with a prevalence rate of 95% and 82%

respectively %, respectively, in urban areas [7,8], on the one hand, this slight difference found in our study compared to the evident difference found in literature may be explained by the isolation of countryside, the difficulty to access support services (poverty, lack of public transport ...) and stigma and shame in small communities. These barriers, without pro-active intervention, will avoid many victims to access support and health care [9–11]. On the other hand, these high rates of violence in urban areas may be explained by a higher sensitivity, a lower tolerance threshold for violence and structural constraints of modern life in the city.

### 4.3. Patterns of injury

Results of this study highlighted that most lesions were of low impact. In fact, bruises and hematomas were the most common lesions (70%). These injury types were preferably located in the face in 76% and limbs in 16%. The majority of previous surveys confirm these findings and had shown that assaults were predominantly over the face and the head [8,12,13]. For instance, in Morocco, craniofacial injuries were the most common injuries, at 47.7%, followed by limb traumatism (26.4%) [8].

These facial injuries may be explained by the fact that the assault consisted of a beating with the hands in over 78% of cases in our study, which was in correlation with previous literature too [14]. The pattern of facial trauma in aggressed women is a significant public health problem costing the health care system 3 USD to 5 USD billion per year, and devastating millions of lives. This amount can reach a possible total cost of more than 7 USD billion when lost productivity due to injury or fatality is considered [15,16].

### 4.4. Aggression schedule

As for aggression schedule, 79% of assaults occurred on weekends, including 87% of cases during afternoons and nights. This finding is in fact similar to

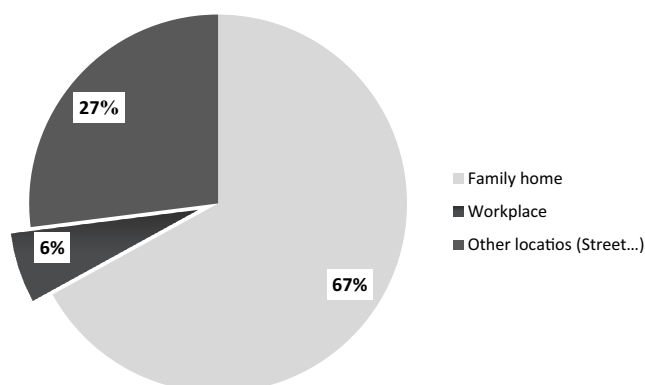


Figure 2. Distribution of violence against women locations, Kairouan, Tunisia. 2017.

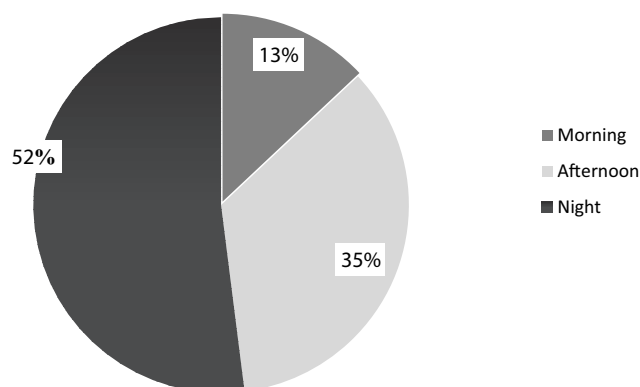


Figure 3. Overall schedule of violence against women in Kairouan, Tunisia. 2017.

Table 1. Violence against women in Kairouan, Tunisia: comparison of the profile characteristics between 2010 [6] and 2017.

Characteristics	In 2010 <sup>a</sup> N = 3873 n (%)	In 2017 N = 100 n (%)	p value
Urban areas	1274 (32.9)	53 (53.0)	< 0.001
Rural areas	2599 (67.1)	47 (47.0)	
age<40	2013 (52.0)	79 (79.0)	< 0.001
age>40	1860 (48.0)	21 (21.0)	
Illiterate/primary education	2285 (59.0)	58 (58.0)	0.840
Higher education	1588 (41.0)	42 (42.0)	
Unemployed/housewives	3203 (82.7)	69 (69.0)	< 0.001
Working women	670 (17.3)	31 (31.0)	
Psychosocial impact	2343 (60.5)	36 (36.0)	< 0.001
Economic abuse	573 (14.8)	8 (8.0)	0.057

<sup>a</sup>NOFP, SAIDS. National survey on violence against women in Tunisia cooperation project "promotion of gender equity and prevention of violence against women". 2010; 1–98.

the majority of other countries, in which a significant increase in the incidence rate on weekends, evenings and holidays was always notified [17]. These results can be explained by the cumulative stress during the week, the prolonged contact between couples and the increase in alcohol consumption in these periods of the week.

#### 4.5. Domestic and intimate partner violence

According to the present study, 67% of women were aggressed at home. Several surveys in this context have shown that the violence is rather at home [6]. Domestic violence is the most common and it makes

sense since the aggressor was in most cases the intimate partner, family member or relatives. However, at the European level, violence against women has become increasingly common in the workplace [18]. As for IPV, it is defined, in general, as a process in which a person uses force to impose hierarchical relationships and domination over his/her partner, so much so that she reaches the partner in his physical and psychic integrity and in his autonomy [19].

The present survey has shown that the intimate partner was the perpetrator of violence in 70% of cases, CI 95% [61.0%, 78.9%]. Rates found in our context remain still high in Tunisia. In fact, since 2010, over 60% of violence acts were committed by an intimate partner [6]. The alarming figures of IPV

found in our study were similar to international data which claim that almost one-third of women worldwide are abused by their partners [3]. This can be explained by life under isolated family roof where the law is least involved and violence against the weakest beings is observed mainly in relation to women. Moreover, in sometimes it is difficult to agree on the concept of violence, which can be considered under the authority of the family headship. It is important to note also that IPV remains a taboo subject whose statistics are still underestimated. This reluctance to file a complaint against the husband's violence can be explained by family pressure, fear of reprisals from the husband and fear of scandal.

#### 4.6. Young aggressive intimate partners

It was verified also that most aggressors were young intimate partners. The mean age of these aggressive partners was 40 years old and 60% of them were aged between 25 and 40 years old.

In this context, a study was conducted in central Tunisia in 2015 which has shown that the mean age of violent partners was 37 years old (age range: 30 to 56). In Canada, Zimbabwe and Kenya, also, people aged 20 to 24 had the highest rate of intimate partner violence and the risk of violence was negatively correlated with age (It decreases as age increases [20–22]). It is clear so that young partners tend to be more violent and more supportive of women beating in marital context than older ones.

#### 4.7. Young aggressed women

In the same context of young aggressor partners, we noted also that the median age of the battered women was 35 years old and that most affected victims (79.0%) were aged under 40 years old; in the previous literature in Tunisia, 2010, 52% of women victims of violence were aged between 18 to 40 years old.

This notion of young women being aggressed was not very evident previously. Thus, in 2010, only 53.0% of Tunisian aggressed women were aged under 40 years old. This change in age profile over the years was statistically significant ( $p < 0.001$ ). Besides that, a study conducted in Morocco in 2006 showed that 39% of battered women were aged between 30 and 40 years old [8–22]. Similar findings were also observed according to WHO international estimates, in all settings except Japan and Ethiopia: One in three women aged 15 to 49 had experienced physical and/or sexual violence, especially those aged between 15 and 19 years, were at higher risk of 'current',

compared to only 6% of older women [3,23]. Young age would thus be a predictor of violence against women for both within and outside the context of intimate partner relationships.

These findings may reflect that younger men tend to be more violent than older men, and that violence tends to start early in many relationships. Moreover, older women would have greater status than young women and may therefore be less vulnerable to violence [24].

#### 4.8. Risk factors

This study showed that alcohol consumption was considered the primary leading cause of violence in 29.6% of cases, followed by occupational instability (19.7%), infidelity and jealousy (11.3%). To better understand this interplay, the WHO often uses the ecological model which proposes that violence is a result of factors operating at four levels: individual, relationships, community and societal [24,25]:

**Individual factors** are mainly represented by young age; harmful use of alcohol and drugs; low levels of education; experiencing violence as a child and personality disorders.

**Relationship factors** were essentially represented by conflicts, male dominance in the family and also the economic stress.

**Community and societal factors** are mainly represented by gender-inequitable social norms, low social and economic status of women and high levels of general violence in society

#### 4.9. Actualities related to the new legislative framework in Tunisia

the Tunisian constitution is considered as more advanced than many other Arab countries in providing a formal assurance for women's rights [4]. In addition to that, in August 2017, a new Tunisian legislative framework was established, and it went into effect on the 1<sup>st</sup> of February 2018. It has created a whole social framework for the protection of women. By broadening the definition of violence against women, and punishing severely most forms of violence against women [26]. Moreover, this law had established a whole social framework for the protection of women against violence. In particular, the article 13 relative to the main public areas of support for victims against violence and the article 14 which is establishing an exemption from confidential medical information by health care professionals. In fact, this article is allowing them to report such violence by guaranteeing the anonymity even without the consent of the victim.



#### 4.10. Role of health care professionals

The health care professionals have an important part to play in the primary prevention. In fact, respecting health care programs in this context is essential. Moreover, performing a screening for violence against women should be regularly performed and results should be reported publicly [27]. As for secondary prevention, the role of health care personnel is to give supportive care for aggressed women. This supportive care should provide the treatment for different implications of violence, such as mental health disorders or sometimes substance addiction. They should also be attentive to possible symptoms and to avoid victim-blaming attitudes. That's why implementing trainings in 'violence against women' in health care curricula should become a standard [27,28].

#### 4.11. Strengths and limitations

This study was exhaustive by including all the women, victims of violence, consulting our emergency department for 3 months; however, the relatively small sample size (N = 100) represented the major limit to be able to generalize our results. Some other limitations should also be noted; they were related to the reporting and memory bias. Indeed, some victims may try to hide their true thoughts for social reasons or fear of reprisals. Moreover, the psychological impact of violence was not studied given the lack of a psychologist in our emergency department.

Finally, despite these limitations, our study presents several strengths; it was performed in a context of limited updated national data. It collected data prospectively and analysed the situation of violence pattern in order to adapt subsequent strategies.

### 5. Conclusion

Violence against women remains widespread even if it is still underestimated and remains a taboo subject. The profile of aggressed Tunisian women has changed a lot over the years and this mainly occurs in intimate relationships, especially with young couples. Alcohol consumption, occupational instability, infidelity and jealousy were considered the primary leading causes of violence causing suffering and misery to the victims as well as their families. Therefore, surveillance as well as early interventions controlling risk factors are extremely important.

#### Disclosure statement

The authors declare neither potential nor real conflicts of interest.

#### Funding

This research didn't receive any specific funding or grant.

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