

EVALUATION OF MEDICO LEGAL ASPECTS AND HIGH RISK GROUPS OF SEXUAL CRIMES

Hoda Sayed Mahmoud¹, Heba H Rohym², Ahmed Abdelmenem¹

¹Forensic medicine and clinical toxicology department, faculty of medicine, Beni-Suef university, Beni-Suef, Egypt.

² Forensic medicine and clinical toxicology department, faculty of medicine, Fayoum university, Fayoum, Egypt.

ABSTRACT

Background: Nowadays, sexual assault is one of the most widespread issues with many bad impacts on physical, psychological, and social health. Estimation of the prevalence of sexual assault has great importance in establishing the measures effective in controlling this crime. This study aimed to evaluate the features of sexual assault in Dakahlia Governorate, Egypt.

Methods: This was a descriptive retrospective study of sexual assault cases. Data were obtained from the records of the Forensic Institute of the Ministry of Justice, Dakahlia Governorate, Egypt. The data obtained included the victim's age, sex, residence, educational and marital status in addition to the victim's mentality, features of the sexual assault, and examination of cases.

Results: The mean age of victims was 14.31 ± 9.81 , most were females 97 (67.4%) and most in urban areas 93 (64.6%). Most cases reported a single assault 133 (92.4%), and many victims 121 (84.0%) showed no relationship with the assailants. The most reported type of assault was rape 73 (50.75%). Only (16.5%) of females showed abrasions in the anogenital region, and (35.1%) showed rupture hymen. Regarding males, the external examination showed that only (14.9%) of cases showed abrasions in the anogenital region, and (25.5%) of cases showed anal fissures; otherwise, all other cases were normal. External examination and injuries were common among young age groups less than 18 years.

Conclusions: The most affected population by sexual assault was young females living in urban areas and unmarried. Delayed presentation for examination is common and usually affects the interpretation of data due to a lack of evidence of injuries.

Key Words: Sexual Assault; Egypt; Rape; Sodomy.

INTRODUCTION

Sexual assault occurs if a person is coerced against his will to be engaged in sexual contact. This contact may happen with part of the assailant's body or any object. Moreover, sexual penetration of the vagina or the anus by the assailant's part of the body or any other objects is considered a severe form of sexual assault (Fleming and Fisher, 2021).

Several types of sexual assaults as rape and sodomy, exist and have a negative effect on all aspects of life. They may lead to severe emotional pain and psychic trauma to the victim, including acute or long-term anxiety, depression, and later

sexual dysfunction. Physically, they may induce several injuries, lead to unwanted pregnancies, and infection with sexually transmitted diseases (Molstad *et al.*, 2021).

Epidemiological studies about sexual assaults have great importance not only for the medical professionals involved in managing rape victims but also for the public health authorities that develop preventive programs in dealing with sexual assaults (El-Din *et al.*, 2015).

Rape cases could be defined according to the sexual offences act of 2003, which defines rape as a person who commits an offence and intentionally penetrates with his penis the vagina,

anus, or mouth of another person, who does not consent to this penetration (McKeever, 2019).

Sodomy is anal intercourse between two males (homosexual sodomy) or between a male and a female (heterosexual sodomy). In this case, it could be referred to as “buggery”. If the passive agent is a child, the condition is called “pederasty” (Khater *et al.*, 2021).

Thus, this descriptive retrospective study was conducted to evaluate the features of sexual assault in Dakahlia Governorate, Egypt, during the period between the start of January 2021 till the end of December 2021.

MATERIALS AND METHODS

This was a retrospective study of cases presented to the Forensic Institute of the Ministry of Justice, Dakahlia Governorate, Egypt, with alleged exposure to sexual assault. Data were obtained from the records between 1/1/2021 to 31/12/2021 after obtaining the approval of the responsible authorities.

We collected data from the records, including the victim’s age, sex, residence, educational and marital status, in addition to the victim’s mentality. Features of the sexual assault were also recorded in the form of time and place of sexual assault, the number of the assailants and their relation to the victim, the type of sexual assault, methods to overcome the resistance of the victim, and the time between the sexual assault and forensic examination.

The cases were examined according to the WHO guidelines, and the reported injuries were recorded and classified as external and internal injuries. Furthermore, the presence of semen and the outcomes of sexual assault were recorded. Data were analyzed statistically using the computer software package SPSS 24. After that, data were organized and tabulated. Quantitative variables were presented as numbers and percentages.

RESULTS

This study included 144 cases presented to the Forensic Institute of the Ministry of Justice, Dakahlia Governorate, Egypt, with alleged exposure to sexual assault between 1/1/2021 to 31/12/2022.

As shown in tables (1 and 2), the socio-demographic data of cases revealed that the mean age of victims is 14.31 ± 9.81 , and most were females 97 (67.4%). In all age categories, females were more affected than males, and the most commonly affected age group is those below 18 years. The majority are residents in urban areas 93 (64.6%), unmarried 130 (90.3%), and only 9 (6.3%) are mentally retarded.

Table (1): Sociodemographic characteristics of the studied cases. (no=144)

| Age (mean \pm SD, range: min-max) | | 14.31 \pm 9.81, 97(3-100) | |
|-------------------------------------|------------------|-----------------------------|-------|
| | | Count | % |
| Sex | Female | 97 | 67.4% |
| | Male | 47 | 32.6% |
| Residence | Rural | 51 | 35.4% |
| | Urban | 93 | 64.6% |
| Educational status of victim | Primary | 40 | 27.8% |
| | Unknown | 103 | 71.5% |
| | Secondary | 1 | 0.7% |
| Marital status of victim | Not married | 130 | 90.3% |
| | Married | 14 | 9.7% |
| | Victim mentality | Normal | 135 |
| | Retarded | 9 | 6.2% |

Regarding the circumstances of the assault, table (3) shows that most assaults were reported in the summer 67 (46.5%) season, followed by spring 38 (26.4), and the least number was reported during wintertime 16 (11.1%). The place of assault is the victim’s house in 26 (18.1%). Most cases reported a single assault 133 (92.4%), and the majority of victims 121 (84.0%) show no relationship with the assailants.

Table (2): Association between the different age categories and sex.

| | | Age | | | Total | |
|-----|---------|-----------------|--------------|--------------------|-------|-------|
| | | 0-18 years | >18-40 years | More than 40 years | | |
| Sex | Females | Count | 80 | 16 | 1 | 97 |
| | | % Within column | 65.6% | 80% | 50% | 67.4% |
| | | % Within Row | 82.5% | 16.5% | 1.0% | 100% |
| | Males | Count | 42 | 4 | 1 | 47 |
| | | % Within column | 34.4% | 20% | 50% | 32.6% |
| | | % Within Row | 89.4% | 8.5% | 2.1% | 100% |
| | Total | Count | 122 | 20 | 2 | 144 |
| | | % Within column | 100% | 100% | 100% | 100% |
| | | % Within Row | 84.7% | 13.9% | 1.4% | 100% |

The most reported type of assault is rape 73 (50.75%), followed by sodomy 55 (38.2%), and 16 (11.1%) is mixed rape and sodomy. Physical force was the most reported method to overcome

the victim's resistance 78 (54.2%). The time interval between the sexual assault and forensic examinations was within seven days in most cases 92 (63.9%).

Table (3): Characteristics of the assault circumstances.

| | | Count | % |
|--|---|-------|-------|
| Season | Spring | 38 | 26.4 |
| | Summer | 67 | 46.5 |
| | Autumn | 23 | 16.0 |
| | Winter | 16 | 11.1 |
| Place of the assault | Victim residence | 26 | 18.1% |
| | Unknown | 118 | 81.9% |
| Number of assailants | Single | 133 | 92.4% |
| | Multiple | 11 | 7.6% |
| Relationship of assailants to the victim | showed no relationship with the assailants. | 121 | 84% |
| | Family member | 23 | 16.0% |
| Type of sexual assault | Rape | 73 | 50.7% |
| | Sodomy | 55 | 38.2% |
| | Mixed | 16 | 11.1% |
| | Physical force | 78 | 54.2% |
| Method to overcome the resistance of victim | Armed threat | 6 | 4.2% |
| | Verbal threat | 3 | 2.1% |
| | Unspecified | 57 | 39.6% |
| | < 7 Days | 92 | 63.9% |
| Time between the sexual assault and forensic examination | < 4 Weeks | 19 | 13.2% |
| | > 1 Month | 33 | 22.9% |

Regarding the examination of the victims, table (4) shows that most cases 114 (79.2%) are normal. Concerning females, the external examination reported that only (16.5%) of cases have abrasions in the anogenital region, and (6.1%) of cases have injuries in other parts of the body. Regarding the internal examination, only (35.1%) of cases showed a ruptured hymen, (2.1%) of cases showed an anal fissure, and both

injuries were reported in 4 cases (4.1%). Regarding males, the external examination shows that only (14.9%) of cases have abrasions in the anogenital region, and (8.5%) of cases have injuries in other parts of the body. Concerning the internal examination, (25.5%) of cases showed anal fissures; otherwise, all other cases are normal. External examination and injuries were common among young age groups less than 18

years. Semen was detected in only one case, and the result of assault was unknown in most cases 137 (95.1%).

Table (4): Results of the examination of the victim.

| | | Count | % |
|--|---|-------|-------|
| External examination and injuries among females (n=97) | Normal | 78 | 80.4% |
| | Abrasions or bruises in anogenital region | 13 | 16.5% |
| | Injuries on the body | 6 | 6.1% |
| Internal examination of females (n=97) | Normal | 54 | 55.7% |
| | Rupture hymen | 34 | 35.1% |
| | Anal fissure | 2 | 2.1% |
| | Anal fissure and rupture hymen | 4 | 4.1% |
| | Bleeding and bruises | 3 | 3.1% |
| | Total | 97 | 100% |
| External examination and injuries among males (n=47) | Normal | 36 | 76.6% |
| | Abrasions or bruises in anogenital region | 7 | 14.9% |
| | Injuries on the body | 4 | 8.5% |
| Internal examination of males (n=47) | Normal | 35 | 74.5% |
| | Anal fissure | 12 | 25.5% |
| | Total | 47 | 100% |
| Presence of semen (n=144) | Not detected | 143 | 99.3% |
| | Detected | 1 | 0.7% |
| Result of the assault (n=144) | Pregnancy | 7 | 4.9% |
| | Unknown | 137 | 95.1% |

Table (5) shows that all reported types of sexual assault are common in the age category less than 18 years. Sodomy was common in males, reported in 47 cases (85.5%) compared to 8 (14.5%) in females. Rape was reported in 73 females. Other than the sex and the method to overcome resistance, there was not a statistically significant relation between the type of sexual assault and other variables in the study.

Tables (6) and (7) show that external examination has no significant difference among all types of sexual assault. However, internal examination shows a significant difference between the three types. Fissure and hymen rupture is associated with mixed cases of assault. The correlation between external examination and age groups found that abrasions and bruises are more common in younger age groups less than 18 years.

Table (5): Association between type of sexual assault studied variables (demographics and assault characteristics):

| | | Type of sexual assault | | | | | | Chi-square | P-value |
|--|--------------------|------------------------|--------|--------|-------|-------|--------|------------|---------|
| | | Rape | | Sodomy | | Mixed | | | |
| | | Count | % | Count | % | Count | % | | |
| Age | 0-18 years | 57 | 78.1% | 50 | 90.9% | 15 | 93.8% | 5.78 | 0.216 |
| | >18-40 years | 14 | 19.2% | 5 | 9.1% | 1 | 6.3% | | |
| | More than 40 years | 2 | 2.7% | 0 | 0.0% | 0 | 0.0% | | |
| Sex | Female (97) | 73 | 100.0% | 8 | 14.5% | 16 | 100.0% | 90.89 | 0.000 |
| | Male (47) | 0 | 0% | 47 | 85.5% | 0 | 0.0% | | |
| Residence | Rural | 25 | 34.2% | 20 | 36.4% | 6 | 37.5% | 0.096 | 0.953 |
| | Urban | 48 | 65.8% | 35 | 63.6% | 10 | 62.5% | | |
| Educational status of victim | Primary | 13 | 17.8% | 22 | 40.0% | 5 | 31.3% | 8.53 | 0.074 |
| | unknown | 59 | 80.8% | 33 | 60.0% | 11 | 68.8% | | |
| | Secondary | 1 | 1.4% | 0 | 0.0% | 0 | 0.0% | | |
| Marital status of victim | Not married | 68 | 93.2% | 47 | 85.5% | 15 | 93.8% | 2.36 | 0.307 |
| | Married | 5 | 6.8% | 8 | 14.5% | 1 | 6.3% | | |
| Victim mentality | Normal | 66 | 90.4% | 54 | 98.2% | 15 | 93.8% | 3.23 | 0.199 |
| | Retarded | 7 | 9.6% | 1 | 1.8% | 1 | 6.3% | | |
| Place of the assault | Victim residence | 13 | 17.8% | 12 | 21.8% | 1 | 6.3% | 2.03 | 0.361 |
| | others | 60 | 82.2% | 43 | 78.2% | 15 | 93.8% | | |
| Relationship of assailants to the victim | Not Relative | 62 | 84.9% | 44 | 80.0% | 15 | 93.8% | 1.83 | 0.399 |
| | Family member | 11 | 15.1% | 11 | 20.0% | 1 | 6.3% | | |
| Time between the sexual assault and forensic examination | Days | 44 | 60.3% | 40 | 72.7% | 8 | 50.0% | 8.04 | 0.090 |
| | Weeks | 8 | 11.0% | 9 | 16.4% | 2 | 12.5% | | |
| | Months | 21 | 28.8% | 6 | 10.9% | 6 | 37.5% | | |
| Number of assailants | Single | 70 | 95.9% | 49 | 89.1% | 14 | 87.5% | 2.65 | 0.264 |
| | Multiple | 3 | 4.1% | 6 | 10.9% | 2 | 12.5% | | |
| Method to overcome the resistance of victim | Physical force | 30 | 41.1% | 37 | 67.3% | 11 | 68.8% | 15.81 | 0.015 |
| | Armed threat | 2 | 2.7% | 4 | 7.3% | 0 | 0.0% | | |
| | Verbal threat | 3 | 4.1% | 0 | 0.0% | 0 | 0.0% | | |
| | Unspecified | 38 | 52.1% | 14 | 25.5% | 5 | 31.3% | | |

Table (6): Association between type of sexual assault and result of the examination among female victims (n=97):

| | | Type of sexual assault | | | | | | Chi-square | p-value |
|-----------------------------------|---|------------------------|-------|--------|-------|-------|-------|------------|---------|
| | | Rape | | Sodomy | | Mixed | | | |
| | | Count | % | Count | % | Count | % | | |
| External examination and injuries | Normal | 58 | 82.9% | 6 | 54.5% | 14 | 87.5% | 6.38 | 0.172 |
| | Abrasions or bruises in anogenital region | 8 | 11.4% | 4 | 36.4% | 1 | 6.3% | | |
| | Injuries on the body | 4 | 5.7% | 1 | 9.1% | 1 | 6.3% | | |
| Internal examination | Normal | 35 | 50.0% | 8 | 72.7% | 11 | 68.8% | 28.08 | 0.000 |
| | Rupture hymen | 32 | 45.7% | 1 | 9.1% | 1 | 6.3% | | |
| | Fissure | 0 | 0.0% | 1 | 9.1% | 1 | 6.3% | | |
| | Fissure and rupture hymen | 0 | 0.0% | 1 | 9.1% | 3 | 18.8% | | |
| | Bleeding and bruises | 3 | 4.3% | 0 | 0.0% | 0 | 0.0% | | |

Table (7): Association between external examination and injuries with different age categories and sex.

| | | External examination and injuries | | | | | |
|------------|--------------------|-----------------------------------|------------|---|------------|----------------------|------------|
| | | Normal | | Abrasions or bruises in anogenital region | | Injuries on the body | |
| | | Count | Column N % | Count | Column N % | Count | Column N % |
| Age | 0-18 years | 97 | 85.1% | 16 | 80.0% | 9 | 90.0% |
| | >18-40 years | 16 | 14.0% | 3 | 15.0% | 1 | 10.0% |
| | More than 40 years | 1 | 0.9% | 1 | 5.0% | 0 | 0.0% |
| Sex | Female | 78 | 68.4% | 13 | 65.0% | 6 | 60.0% |
| | Male | 36 | 31.6% | 7 | 35.0% | 4 | 40.0% |

DISCUSSION

Sexual assault is a global issue, especially among females and other vulnerable persons. The victims of sexual assault may commonly experience rape or any other form of sexual contact. This usually has a negative impact on mental health, with bad psychological outcomes like depression, anxiety, and suicidal thoughts or even lead them to substance abuse (Strauss Swanson and Szymanski, 2021).

This study was conducted at the Forensic Institute of the Ministry of Justice, Dakahlia Governorate, Egypt, to estimate the characters and features of the sexual assault between 1/1/2021 to 31/12/2022.

Regarding the socio-demographic data, the mean age of victims was 14.31 ± 9.81 , and most of them were females (67.4%). In all age categories, females were more affected than males. The most commonly affected age group was the age below 18 years. The majority were residents in urban areas (64.6%), unmarried (90.3%), and only (6.3%) of cases were mentally retarded. Brahimi *et al.* (2022) reported similar results in their study about sexual assault in Kairouan, Tunisia. They revealed that most of the victims were under the age of 18 years, and those living in rural areas represent 56.5% with low socio-economic levels and low educational status. Additionally, 84.3% of victims were single. Furthermore, the study of Mohamed *et al.* (2022) about child sexual abuse in Cairo showed that females were the most affected (59.9 %) in adolescents >12 years.

Due to a lack of awareness at a young age, and most of them not having enough knowledge and the capacity to defend against any assault, they are considered the most vulnerable groups.

In addition, they are weaker and easily deceived, and this age group has increased attractiveness toward sexual activity (Felson and Cundiff, 2014).

The female predominance of sexual abuse in Arab populations could be explained by socio-cultural factors. The male authority in the traditional culture is the most important of these factors. Another important factor is the misuse of religious beliefs and rules (Elghossain *et al.*, 2019).

The low prevalence in rural areas could be attributed to the fact that most of their residents consider that act as a shame, and they may be blamed. Therefore, the report of sexual assault in rural areas may be underestimated (El-Ellemi *et al.*, 2011).

Awareness of married persons and their knowledge about sexual acts make them less vulnerable to sexual assault than unmarried persons, who can be easily deceived and do not take caution (Sherif *et al.*, 2018).

Most of the assaults were reported in the summer (46.5%), followed by spring (26.4%), and the least number was reported during winter (11.1%). Most victims (84.0%) showed no relationship with the assailants, and sexual assault was in the victim's house in only (18.1%) of cases. A single assailant performed sexual assault in (92.4%) of cases. Forensic examination of victims was performed within seven days in most cases (63.9%), and the most reported type of assault was rape in (50.75%) of cases, followed by sodomy in (38.2%) of cases, and mixed rape and sodomy was reported only in (11.1%) of cases. Sexual assault is more prevalent in spring and summer. In Egypt, the nice weather at this time helps people to spend more time outside,

making them more vulnerable to assault (**Sivarajasingam et al., 2004**).

In consistence with the present study, **Kaushik et al. (2016)** claimed that most cases of sexual assault (94.20%) were carried out by a single assailant. According to the place of the assault, only (16.9%) of victims have the assault in their house. The medicolegal examination was performed within one week for (63.2%) of the victims.

The study of **Vadysighe et al. (2015)** about socio-demographic and medicolegal factors of victims of sexual assault in Sri Lanka showed a delay in the time between the assault and forensic examination. This late presentation may affect the medical evidence and injuries sustained by the victims.

According to the type of assault, the study of **Abo El Wafa and Mohammed (2020)** about sexual assault in Qaluybia, Egypt, agrees with our results. They revealed that (64.8%) of victims have vaginal penetration, (32.4%) have anal penetration, and (2.8%) have mixed penetration.

The study of **Saleh (2022)** about the medicolegal examination of sexual assault cases in Fayoum City, Egypt, reported that anal sexual assault is the most common form (53.7%), followed by rape (41.5%), while mixed assault rape and anal assaults are at 4.9%. The difference could be due to the low report by the victims in order not to be blamed.

Physical force is the most reported method to overcome resistance by the victims in (54.2%) of cases. As regards females, the external examination showed that only (16.5%) of cases showed abrasions in the anogenital region, and (6.1%) of cases showed injuries in other parts of the body. Regarding the internal examination, only (35.1%) of cases showed ruptured hymen, (2.1%) of cases showed anal fissures, and both injuries were reported in 4 cases (4.1%).

As regards males, the external examination showed that only (14.9%) of cases have abrasions in the anogenital region, and (8.5%) of cases have injuries in other parts of the body. Regarding the internal examination, (25.5%) of cases showed anal fissures; otherwise, all other cases are

normal. Semen was detected in only one case, and pregnancy occurred in only (4.9%) of cases.

Similar results were reported by the study of **Perera (2021)** about patterns of injuries in sexual assault cases in Gampaha which demonstrated that (10%) of victims have non-genital injuries and 11% of victims have genital injuries commonly in the hymen. The study also revealed that only (3%) of victims have anal or perianal injuries.

Unlike our study, **Kebede (2018)** showed that evidence of anogenital injuries was observed in (30.4%) of cases, and non-genital injuries were seen in (2.2%) of total cases. The study also revealed that the hymen was the most common site of genital injury (37.7%) of cases, and the lower parts of the body were the most common for extra-genital injuries (46.5%).

Moreover, **Brahim et al. (2022)** study revealed that body injuries were commonly located on the thigh, upper arm, and breast. Anogenital examination revealed a hymenal tear in (87%) of cases and one injury at least around the anus in (17.6%) of victims.

The low prevalence of injuries in the current work could be explained by the delayed presentation and examination of the victims that may be associated with the healing of different types of abrasions, bruises, or lacerations. Another explanation could be due to the low resistance by the victim (**Karki et al., 2020**). In addition, the present study showed that only (4.9%) of cases got pregnant. This result matches the study of **Karki et al. (2020)** about the medicolegal findings in cases of sexual assault in Nepal. They reported pregnancy in only 4 cases representing (7.7%) of cases.

Semen detection is important for the link between sexual assaults and assailants. Unfortunately, in our study, semen was detected only in one case, unlike the study of **Rehman et al. (2018)**, who reported the detection of semen in (62.4%) of vaginal swabs for victims of sexual assaults. This difference could be attributed to the delayed presentation of cases for forensic examination. Increasing the time interval between the sexual act and examination will decrease the possibility of semen detection.

Moreover, changing clothes and washing the genitalia would affect semen detection (**Uddin et al., 2022**).

All reported types of sexual assault were common in the age category of less than 18. Sodomy is common in males in 47 cases (85.5%) compared to 8 (14.5%) in females. Rape was reported in 73 females. Other than the sex and the method to overcome resistance, there was no statistically significant relation between the type of sexual assault and other variables in the study. This result agrees with **Khater et al. (2021)** and **Abdellah and Ali (2018)**, who revealed that sodomy is more common among males (74.19% and 84.62%, respectively). The findings of **Khater et al. (2021)** and **Whitaker et al. (2007)** are similar to our findings which reported that physical force was the most common method of resistance to overcome assault.

In all types of sexual assault, most cases showed normal external and internal examination. Abrasions or bruises in the anogenital region were detected in (11.4%) of rape cases, (36.4%) of sodomy, and (6.3%) of mixed assaults. Internal examination revealed that (45.7%) of raped females have ruptured hymen. The external examination demonstrated a non-significant difference among all types of sexual assault. However, internal examination showed a significant difference among the three types. The fissure and hymen rupture were associated with mixed cases of assault. The correlation between external examination age groups found that abrasions and bruises were more common in younger age groups less than 18 years.

This is consistent with **Hassan et al. (2016)** study about sexual assault in Nigeria, who found that the prevalence of sexual assault and related injuries are common among younger age groups.

Ezechi et al. (2016) demonstrated that attempted penile penetration in the vagina or the anus might lead to ruptured hymen or anal fissures.

Khater et al. (2021) stated that the victims try to defend themselves physically, leading to bodily lesions, which depend on the victim's power. Furthermore, the less invasive acts like

fondling and touching could be more frequent, leaving no injuries. The low prevalence of injuries, either genital or extra-genital, could be attributed to the delay in the medical examination of the victims.

CONCLUSIONS AND RECOMMENDATIONS

Young females living in urban areas are commonly affected by sexual assault, especially in summer and spring. Delayed presentation for examination may conceal the evidence of sexual assault, so awareness programs should be directed to this crime. Further larger studies should be performed to accurately estimate the problem's magnitude and search for the risk factors.

DECLARATIONS

- Approval of this scientific research was obtained from the Scientific Research Ethics Committee at Fayoum University numbered (R 421).
- No fund was obtained.
- No conflict of interest.

REFERENCES

- Abdellah, N. Z., & Ali, H. F. (2018)**. Pattern of Reported Sexual Assault Cases in Aswan Governorate, A Retrospective Study. *The Egyptian j of forensic Sciences and applied toxicology*, 18(2), 1-17.
- Abo El Wafa, S.M. and Mohammed Ali, N.E., 2020**. A Five-Year Retrospective Study of Female Sexual Assault in Qaluybia Governorate, Egypt. *Zagazig Journal of Forensic Medicine*, 18(2), pp.75-92.
- Brahim, O., Turki, E., Chebbi, E., Fersi, O. and Fatnassi, R., 2022**. Sexual Assault of Women in the region of Kairouan, Tunisia: an 8-year retrospective study on epidemiological and medicolegal characteristics. *BMC women's health*, 22(1), pp.1-10.
- El-Din, A.A.S., Elkholy, S.M., Metwally, E.S. and Farag, H.A., 2015**. Pattern of female

- sexual assault in Qalyubia Governorate, Egypt, during the period from 2009 to 2013: a retrospective study. *The American journal of forensic medicine and pathology*, 36(4), pp.276-284.
- El-Elemi, A.H., Moustafa, S.M. and Hagra, A.M., 2011.** Reported cases of female sexual assault over 5 years period in Suez Canal area, Egypt: demographic study. *Egyptian Journal of Forensic Sciences*, 1(3-4), pp.118-123.
- Elghossain, T., Bott, S., Akik, C. and Obermeyer, C.M., 2019.** Prevalence of intimate partner violence against women in the Arab world: a systematic review. *BMC international health and human rights*, 19(1), pp.1-16.
- Felson, R.B. and Cundiff, P.R., 2014.** Sexual assault as a crime against young people. *Archives of sexual behavior*, 43(2), pp.273-284.
- Fleming, S. and Fisher, R.A., 2021.** Sexual assault in surgery: a painful truth. *The Bulletin of the Royal College of Surgeons of England*, 103(6), pp.282-285.
- Karki, R.K., Singh, P.K. and Khan, A.S., 2020.** Medico-legal findings in victims and accused of sexual assault. *Journal of Nobel Medical College*, 9(2), pp.12-17.
- Kaushik, N., Pal, S.K., Sharma, A. and Thakur, G.C., 2016.** A retrospective study of sexual assaults in southern range of Himachal Pradesh. *Int J Health Sci Res*, 6(2), pp.342-51.
- Kebede, B., 2018.** Assessing medico legal evidence and legal outcome among cases of sexual assault (rape) in Addis Ababa. *Ethiopian Journal of Reproductive Health*, 10(1), pp.14-14.
- Mohamed, M.K., Ismail, M.A., Asasa, M.F. and Kayed, A.S., 2022.** Cross-Sectional Study and Descriptive Statistical Analysis During a Period of Time of One Year Extending from the Beginning of January to the End of December 2020 of Alleged Child Sexual Abuse Cases in Cairo Governorate in Egypt. *Al-Azhar International Medical Journal*, 3(4), pp.7-10.
- Molstad, T.D., Weinhardt, J.M. and Jones, R., 2021.** Sexual assault as a contributor to academic outcomes in university: a systematic review. *Trauma, Violence, & Abuse*, p.15248380211030247.
- Perera, B.C.S., 2021.** A Retrospective Study on Presentation, Patterns, and the Prevalence of Injuries in Alleged Sexual Assault Cases, Presented to District General Hospital Gampaha from July 2018 to April 2019. *Medico-Legal Journal of Sri Lanka*, 9(1).
- Rehman, H., Shehzad, B., Tariq, F., Qasim, A.P. and Nadeem, S., 2018.** Sexual Assault: A Crime of Power & Control. Medicolegal Study at Tertiary Care Hospital. *Annals of Punjab Medical College (APMC)*, 12(3), pp.182-185.
- Saleh, A.A., 2022.** Medicolegal Examination of Sexual Assault Cases. A Retrospective Study. *Zagazig Journal of Forensic Medicine*, 20(2), pp.205-221.
- Sherif, M., El-Gohary, M., El-Kelany, R. and Abo El-Noor, M., 2018.** Pattern of Sexual Assault in Gharbia Governorate during the Period between 2011-2014: Retrospective and Cross Section Study. *Ain Shams Journal of Forensic Medicine and Clinical Toxicology*, 30(1), pp.128-138.
- Sivarajasingam, V., Corcoran, J., Jones, D., Ware, A. and Shepherd, J., 2004.** Relations between violence, calendar events and ambient conditions. *Injury*, 35(5), pp.467-473.
- Strauss Swanson, C. and Szymanski, D.M., 2021.** Anti-sexual assault activism and positive psychological functioning among survivors. *Sex Roles*, 85(1), pp.25-38.
- Uddin, M.K., Saha, M., Gazi, M.N.U., Talukdar, S. and Raihan, M.M., 2022.** Study on Socio-Demographic Characteristics of Alleged Sexual Assault Cases in Rajshahi District in 2020. *TAJ: Journal of Teachers Association*, 35(1), pp.45-50.

Vadysighe, A.N., Senasinghe, D.P.P., Attygalle, U., Abeysekara, A.M.G., Gunasena, M.D.P., Ratnayake, R.M.U.C. and Banda, Y.M.G., 2015. An analytical

study on socio-demographic and medico-legal factors of victims of sexual assault from the Central and Sabaragamuwa Provinces in Sri Lanka. *Sri Lanka journal of forensic medicine, science and law*, 6(1), pp. e7758-e7758.

الملخص العربي

تقييم الجوانب الطبية الشرعية والمجموعات الأكثر عرضة للجرائم الجنسية

هدى سيد محمود¹, هبة حسين رحيم², أحمد عبدالمنعم¹

١- قسم الطب الشرعي والسموم الإكلينيكية بكلية الطب البشري جامعة بني سويف.

٢- قسم الطب الشرعي والسموم الإكلينيكية بكلية الطب البشري جامعة الفيوم.

بعد الاعتداء الجنسي من أكثر القضايا انتشارًا في الوقت الحالي وله العديد من الآثار السيئة على الصحة الجسدية والنفسية والاجتماعية. إن تقدير مدى انتشار الاعتداء الجنسي له أهمية كبيرة في تحديد التدابير الفعالة للسيطرة على هذه الجريمة. الهدف من هذه الدراسة هو تقييم ملامح الاعتداء الجنسي في محافظة الدقهلية بمصر.

لذلك كانت هذه الدراسة الوصفية بأثر رجعي حول حالات الاعتداء الجنسي. تم الحصول على البيانات من سجلات معهد الطب الشرعي بوزارة العدل، محافظة الدقهلية، مصر. تضمنت البيانات التي تم الحصول عليها عمر الضحية وجنسها ومكان إقامتها وحالتها التعليمية والزوجية بالإضافة إلى الحالة العقلية للضحية وخصائص الاعتداء الجنسي وفحص الحالات لتحديد الاصابات الظاهرية بها.

النتائج:

بلغ متوسط عمر الضحايا ١٤,٣١ ± ٩,٨١ معظمهم من الإناث ٩٧ (٦٧,٤٪) في الحضر ٩٣ (٦٤,٦٪). أبلغت معظم الحالات عن اعتداء فردي ١٣٣ (٩٢,٤٪) وغالبية الضحايا ١٢١ (٨٤,٠٪) لم يظهروا أي علاقة مع المعتدين. وكان أكثر أنواع الاعتداء المبلغ عنها هو الاعتصاب ٧٣ (٥٠,٧٥٪). أظهر فحص الإناث أن ١٦,٥٪ فقط من الضحايا سحجات في المنطقة الشرجية التناسلية و ٦,١٪ حالات ظهرت بها إصابات في أجزاء أخرى من الجسم. فيما يتعلق بالفحص الداخلي أظهر ٣٥,١٪ تمزق غشاء البكارة. فيما يتعلق بفحص الذكور أظهر الفحص الخارجي أن ١٤,٩٪ من الحالات تعاني من سحجات في المنطقة الشرجية التناسلية و ٨,٥٪ حالات ظهرت بها إصابات في أجزاء أخرى من الجسم أما عن الفحص الداخلي أظهر أن حوالي ٢٥,٥٪ من الحالات تعاني من شرخ في فتحة الشرج.

الاستنتاجات:

أكثر الفئات تضررا من الاعتداء الجنسي كانت الشابات اللائي يعشن في المناطق الحضرية وغير المتزوجات. التأخير في التقديم للفحص أمر شائع ويؤثر عادة على تفسير البيانات بسبب عدم وجود دليل على وقوع إصابات