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Knowledge and Clinical Skills of Primary Care Physicians Toward Domestic Violence and Abuse in Jazan Region, Saudia Arabia

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Abstract

Background: Domestic violence (DV) presents in a range of ways to family medicine clinics. Little is known about the current level of knowledge and clinical skills of family physicians in Saudi Arabia regarding the recognition and management of domestic violence cases. Method: The study is a cross-sectional questionnaire-based observational investigation using a random sampling scheme. Results: (n = 335) doctors agreed to be included in the study. Poor women DV knowledge was found among (n = 125, 36.2%) doctors, particularly the inexperienced and non-Saudi. Only 40% of doctors reported DV training, mostly through medical school. Just 2% of doctors indicated wide use of DV protocols in their facility. Only 35% of doctors encountered an elderly abuse case, mostly neglect in 55% of cases. Only 36% of participants indicated enough training in child abuse. Conclusion: We confirmed, in consistence with global findings, that knowledge of domestic violence is suboptimum among Saudi family physicians, particularly elderly DV. Doctors who identified DV cases were few, likely due to under-recognition or time constraints. Targeted educational interventions improve family physicians' subaverage DV management skills and awareness. Recommendations: Domestic Violence protocols should be standardized across Saudi Arabia and adopted in all health facilities with necessary training provided using face-to-face lectures and practical demonstrations preferably.

Keywords: Domestic violence, Child abuse, management, recognition, Primary care, Public Health, Saudi Arabia.

Introduction

Domestic violence (DV) is the aggressive behavior of one person towards another within the same household. Victims of DV include women, children, parents, and older people [1,2]. Physical violence includes various forms of aggression, such as hitting and beating up. Emotional violence like blaming, shaming, and name-calling. A victim can also be affected by economic, sexual, and neglect, especially in children and the elderly [1,2]. For example, in Saudi Arabia, it was reported that 20% of women are exposed to DV during their lifetime [3].

DV has negative impacts on societies, resulting in psychiatric and medical issues [1,2]. Our study is the first of its kind in Saudi Arabia, targeting children, women, and older people together. Globally, clinicians raised concern regarding suboptimum training in managing DV [4,5]. Regionally, primary healthcare physicians and nurses had poor knowledge and perception of DV

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[6]. Psychological abuse was the most encountered DV type in France (83%), followed by neglect (60%) and physical abuse (30%) [7].

In Abha, 68% of the physicians agreed to redefine child abuse and neglect in Saudi Arabia according to Saudi culture and religious practices. Also, 64.3% of them recorded agreement regarding their willingness to report child abuse cases. About 62% of physicians recorded their good training to deal with a child abuse case. However, about 64% of physicians said child abuse in Saudi Arabia is underreported, and 7.7% of physicians report only life-threatening injuries. Underreporting of suspected child abuse cases among physicians was attributed to many factors. Almost 47% said that unclear reporting procedure was responsible for that, while 44% stated that community barriers prevent children and families from reporting. Besides that, 39% thought that fear of parents' response was the leading cause [8]. No previous studies investigated DV towards women and older people in Saudi Arabia, and few studies about child abuse. These studies showed poor knowledge and practice in the case of DV and the main problems in reporting systems and patients' support. These studies recommended teaching undergraduate and postgraduate medical students about DV and sought political support.

Study Rationale

The current study would provide important information about healthcare physicians' current levels of knowledge, practices, and clinical skills about the diagnosis and management of domestic violence. This information would be helpful to all who attempt to design clinical strategies and educational programs in primary health care facilities, schools, and universities; target authorities will be able to make and generate new policies for the prevention of DV in our society.

Study Aim

Our study aims to know the level of knowledge of primary healthcare physicians and their practices and clinical skills about Domestic violence and abuse.

Primary objective: To measure levels of knowledge of primary healthcare physicians and their practices and clinical skills about Domestic violence and abuse.

Secondary objective: To know the average number of domestic violence cases seen in the clinic.

Literature review

Several studies were carried outside Saudi Arabia on DV in women. In the United Kingdom, 2012, a cross-sectional survey was carried out as a part of a randomized controlled trial for Domestic violence regarding knowledge, attitudes, and clinical practice of selected UK primary healthcare clinicians. The study used a sample size of 463 doctors

and nurses. They investigated the physician readiness to manage the intimate partner violence (IPV) Survey and found that between 25% and 44% of the physicians feeling unprepared to manage DV victims. Almost 56% said that they did not have sufficient training to diagnose DV cases. Physicians scored 28 out of 37 correct responses, and practice nurses scored a median of 24. The majority of physicians had good knowledge about DV regarding medical problems, common signs and symptoms of abuse, and the causes of DV. Fifty-four percent of the physicians diagnosed at least one new case of DV in the last six months. Between 36% and 48% of physicians reported that they give information, education, or counseling to the woman. The other 43% choose a referral to other authorities. Seventy percent of participants documented DV. Around 30% never or rarely gave referral or resource materials. Nearly half of them did not provide supportive sources to the woman or contacted domestic violence service providers. The majority of physicians were unaware of the resources available in their practices, or such funds were not accessible to help women experiencing DV. The study showed poor preparation of general practitioners for responding to women experiencing domestic violence. They recommended the urgent need for training at undergraduate and postgraduate levels and functional referral pathways to specialists of domestic violence services for women experiencing abuse [4].

Another cross-sectional study was done in Kuwait about knowledge and perception of domestic violence among primary care physicians and nurses and conducted in 2010. They used a self-administered close-ended questionnaire with a sample size of 899 physicians and 1617 nurses. Overall, primary healthcare physicians and nurses had poor

knowledge and perception of DV. The identification and management of persons being

abused in clinical practice were low, with estimates that only 7–25% of cases were

identified, and 60–90% of patients were inadequately managed. The findings of this study

showed that the awareness of the prevalence of DV among primary care physicians is

poor, and knowledge and perception of DV have been identified as barriers to effective

clinical responses by medical professionals [6].

In Lyon, France, a survey of the practice of 266 family physicians was conducted in

2012 by email using a questionnaire about the diagnosis and management of elder abuse

conducted. According to this survey, most of the types of abuse is psychological abuse

(83%), followed by neglect (60%) and physical abuse (30%). The detection of clinical signs

of abuse was good (45%). Actions were taken by physicians in the case of suspected

abusers, and 83% of the physicians preferred to discuss these issues with the families and

caregivers of the victims rather than to report it to authorities. In dealing with old people

cases, physicians admitted 41% to the hospitals. This study shows that those barriers to

reporting such cases were lack of training, poor knowledge of the law, and lack of

evidence regarding mandatory reporting. The teaching programs of universities should be

improved to include this subject in their curriculums [7].

One more study conducted in Michigan, USA concerning physician's attitudes and

practices for three years (2007-2007) targeting elder abuse. The survey included 222

physicians in internal medicine, family practice, and emergency medicine. More than half

of the survey (51%) had no formal training in elder abuse detection. Two thirds (67%) of

physicians said training about elder abuse was not adequate. The study concluded that

education is a critical component to reach goals. Also, providing additional community resources and financial support to treatment programs and public education is necessary to improve the quality of life for abused elders [5].

In Abha, Saudi Arabia, A cross-sectional study was conducted in 2018 about the Knowledge and attitude regarding child abuse among all primary healthcare physicians (475) who were working in primary health care centers and used a self-administrative questionnaire. About 61% of the physicians were family physicians, while others were general practitioners. Around 68% of the physicians agreed on the need to redefine child abuse and neglect in Saudi Arabia according to Saudi culture and religious practices. Also, 64.3% of them recorded agreement regarding their willingness to report child abuse cases. About 62% of physicians recorded their good training to deal with a child abuse case. About 64% of physicians said child abuse in Saudi Arabia is underreported, and 7.7% of the physicians choose to report only the life-threatening injuries. Underreporting of suspected child abuse cases among physicians was attributed to many factors. Almost 47% said that unclear reporting procedure was responsible for that, while 44% stated that community barriers prevent children and families from reporting. Besides that, 39% thought that fear of parent's response was the main cause. In general, primary health care physicians had good knowledge, optimal attitude, and positive perception. Further training on child abuse can be added to increase awareness and knowledge in reporting, and such training should be made mandatory [8].

Limited previous studies conducted among women and old people's in the kingdom of Saudi Arabia and few studies about child abuse. All of these studies showed poor

knowledge and practice in case of DV, and main problems in reporting systems and

patients' supports, and all of these studies recommended teaching undergraduate and

postgraduate medical students about DV and sought for political support.

Material and Methods

Study area

Jazan Province, Saudi Arabia. Jazan is the capital of Jazan province. Jazan is one of the 13 provinces of Saudi Arabia and comprises 13 sub-regions. It is located on the southwestern border of KSA with more than 1.5 million residents. The total number of primary health care centers is 170 centers.

Study Design

The study is a cross-sectional questionnaire-based observational investigation. The sampling frame was all primary health care physicians in all primary health care centers in Jazan. The current total number of physicians working at primary health care centers in the Jazan region is 483 physicians, and all of them will be invited to participate in this study.

Study population

Full-time primary health care physicians in the Jazan region, Saudi Arabia.

Sampling procedure

Simple random sampling scheme of all primary care physicians practicing in any of the health centres in Jazan region.

Inclusion criteria: Primary healthcare physicians who are working at the time of the study in the same primary healthcare centers for last three months.

Exclusion criteria: Physicians who are not practicing in primary healthcare centers in the Jazan region or working for less than three months

Data collection instrument

The study was based on primary data collected from the primary healthcare centers using a self-administered questionnaire. The questionnaire was simple and required no formal training for filling it. Participants were encouraged to share sensitive information as the questionnaire was strictly anonymous. Questions were made straightforward enough to be understood without verbal explanation. The questionnaire contained both structured and open-ended questions. The tool was obtained from a previous study and was edited, formatted, and translated into Arabic to

be comprehended by physicians. Several steps were performed to ensure the validity and reliability of our questionnaire. First, the content of the questionnaire was assessed by experts in domestic violence knowledge. The face validity of the questionnaire was assessed by piloting the study via a sample of 20 physicians to evaluate the clarity questions items of the questionnaire the time needed to answer the questionnaire. Finally, Cronbach's Alpha test was used to assess the internal reliability of the questionnaire [7,8]. We found the Cronbach's Alpha estimate to be 0.93 (95% Confidence Interval: 91% to 94%) indicative of excellent internal consistency.

Data collection technique

Recruitment was commenced using the simple sampling scheme detailed above. Once a physician was selected as potential participant then s/he was contacted and interviewed by the principal researcher. The study purpose was explained in simple plain Arabic, and they were given ample opportunity to ask questions about the study. Written informed consent was ensured prior to participation in the study. Strictest confidentiality measures were followed throughout the selection, explanation, and consenting process. Thereafter, they were provided with pen and paper containing the study tool that measures exposure and knowledge of DV.

Data management and analysis

Data were entered into an excel document as they were collected. The document was saved in the personal computing device of the principal researcher. It was password protected. Descriptive statics such as frequencies and proportions were used to describe categorical data (for instance: gender of physician and their nationality or specialism category). Measures of location such as mean and measures of central tendency such standard deviation were used to describe continuous numerical data (for instance: years of experience and sum of knowledge score). Generalized Linear Poisson Regression modeling techniques were used to analyze the adjusted effect of sociodemographic factors on DV among women's knowledge scores. The

tests were all be two-sided, and the significance threshold was set at $P < 0.05$ with Bonferroni correction where applicable.

Pilot study

The first 20 physicians' data were examined for any technical difficulties. The understanding of physicians for the research tools' items was examined.

Ethical consideration

The regional research and ethics committee sought and granted full ethical approval.

Results**3.1. Socio-demographic characteristics**

Table one illustrates the demographic characteristics of the (n = 345) physicians included in the study. We note that (n = 144, 41.7%) were female doctors and (n = 201, 58.3%) were male primary care physicians.

Table 1. Background demographics of the study participants and unadjusted effects on knowledge score

Factor	Count (n)/ mean (μ)	Percentage /SD
<i>Age</i>		
24-30	139	40.3%
31-35	84	24.3%
36-40	80	23.2%
Over 40	42	12.2%
<i>Gender</i>		
Male	201	58.3%
Female	144	41.7%
<i>Specialty</i>		
Family Medicine	194	56.2%
General Practitioner	142	41.2%
Internal Medicine	2	0.6%
Other	7	2%
<i>Experience</i>	$\mu = 7.2$ years	SD = 5.5 years
<i>Nationality</i>		
Saudi	252	73%
Non-Saudi	93	27%

3.2. Violence against women

Table (2) displays the results in terms of knowledge regarding women's DV. There were (n = 12, 3.5%) of the doctors who reported no training in this matter, with (n = 119, 34.5%) reported receipt of good training in the knowledge of signs of domestic violence against women.

Table 2. Knowledge regarding women DV among the participating physicians

Factor	Count (n)	Percentage
<i>Training in signs of DV</i>		
No training	12	3.5%
minimum training	28	8.1%
Some training	91	26.4%
Average training	95	27.5%
Good training	119	34.5%
<i>Training in DV referral sources</i>		
No training	39	11.3%
minimum training	79	22.9%
Some training	103	29.9%
Average training	59	17.1%
Good training	65	18.8%
<i>Training in DV risk assessment</i>		
No training	29	8.4%
minimum training	44	12.8%
Some training	124	35.9%
Average training	75	21.7%
Good training	73	21.2%
<i>Training in DV clinical recoding</i>		
No training	64	18.6%
minimum training	75	21.7%
Some training	92	26.7%
Average training	55	15.9%
Good training	59	17.1%

Training in DV safety planning		
No training	64	18.6%
minimum training	58	16.8%
Some training	90	26.1%
Average training	69	20%
Good training	64	18.6%

Table 3 and Figure 1 illustrate the effect of different background factors on the overall knowledge score. Summing up women's domestic violence knowledge score, we arrive at a reliable and valid scale. Cronbach's alpha was estimated at 0.93 (95% CI: 0.91 to 0.94), indicating excellent internal consistency. There were (n = 125, 36.2%) who scored below half the total score and were therefore regarded as having poor knowledge about women's DV. Table (3) clearly shows that age between 36 and 40 years was associated with better knowledge ($\beta = 0.139$, $p = 0.004$), also improved knowledge was associated with experience ($\beta = 0.012$, $p = 0.006$), Saudi doctors ($\beta = 0.254$, < 0.0001) and family physicians ($\beta = 0.264$, $p = 0.006$). Gender effect was not statistically significant ($\beta = 0.045$, $p = 0.125$).

Table 3. Adjusted impact of sociodemographic variables on knowledge level of female domestic violence among the study participants

	odds	95% CI	β	SE	P
Age 31-35	1.031	0.954 to 1.115	0.031	0.040	0.4401
Age 36- 40	1.150	1.044 to 1.265	0.139	0.049	0.0043
Age above 40	0.930	0.784 to 1.104	-0.072	0.087	0.4088
Gender Male	0.956	0.902 to 1.013	-0.045	0.029	0.1252
Nationality Saudi	1.289	1.179 to 1.410	0.254	0.046	< 0.0001
Specialism: Family Medicine	1.302	1.077 to 1.575	0.264	0.097	0.0064
Experience	1.012	1.004 to 1.021	0.012	0.005	0.0059

Figure 1. Estimates for the effects of clinical and demographic factors on knowledge of violence against female

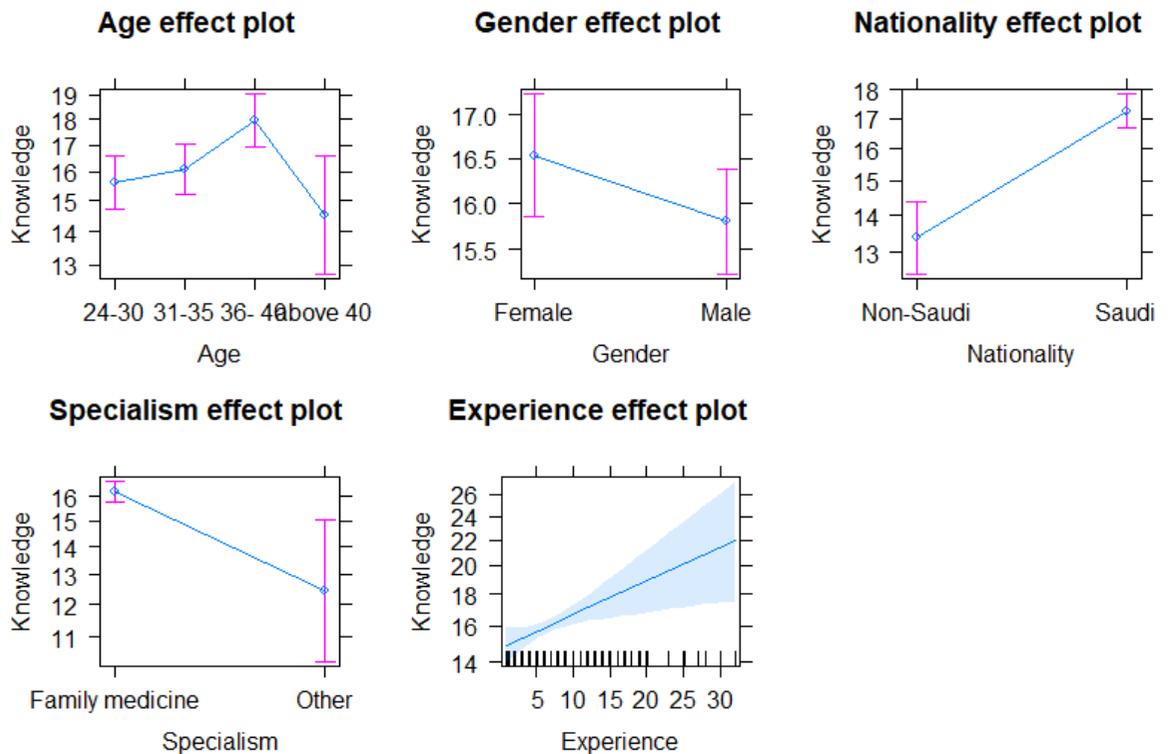


Table 4 shows that participating doctors were familiar with a range of DV signs and barriers. Most notoriously depression by (n = 292, 84.6%). Moreover, (n = 277, 80.3%) noted that reporting DV of a child might not serve the child's best interest in question.

Table 4. Recognition of signs of DV and barriers against reporting it among our participating doctors

Factor	Count	percentage
Signs		
1/ Chronic unexplained pain	243	70.4%
2/ Anxiety	267	77.4%
3/ Substance abuse	233	67.5%
4/ Frequent injuries	269	78%

5/ Depression	292	84.6%
Barriers		
1/ Fear of retribution	264	76.5%
2/ Financial dependence on the perpetrator	258	74.8%
3/ Religious beliefs	206	59.7%
4/ Children's needs	277	80.3%
5/ Love for one's partner	169	49%
6/ Isolation	197	57.1%

Table (5) illustrates the frequency of each action taken upon assessing potential DV cases. Provision of information was performed in (n = 253, 73.3%) of cases, whereas only (n = 39, 10.4%) provided information on how to self-refer.

Table 5. Action taken upon identification of domestic violence among the study participants

Action taken	Count	Frequency
Have not identified domestic violence.	41	11.9%
Provided information (phone numbers, pamphlets, other information) to a woman.	253	73.3%
Counselled a woman about options she may have.	73	21.2%
Conducted a safety assessment for the woman.	31	9%
Conducted a safety assessment for a woman's children.	24	7%
Provided referral information.	36	10.4%
Documented in medical record.	33	9.6%

3.3. Violence against old peoples

In terms of elderly abuse, Table (6) provided a comprehensive account for warning signs attitudes and helped identify elderly domestic violence among the study participants.

Among our primary care physicians (n = 6, 1.7%) suspected DV in the elderly over five times, (n = 46, 13.3%) between one to five times, (n = 69, 20%) once suspected a DV case, while (n = 224, 64.9%) never suspected a DV case among his elderly patients.

Table 6. Warning signs, attitudes, and help provided upon identification of elderly domestic violence among the study participants

	Count	Frequency
Warning Signs		
The words or attitude of the elderly	263	76.2%
The words and attitudes around	135	39.1%
The involvement of a relative	83	24.1%
Call of a caregiver	59	17.1%
Attitudes		
Dialogue with relatives and/or caregivers	243	70.4%
Hospitalization for the elderly to avoid risk	94	27.2%
Reporting (administrative or judicial)	82	23.8%
Use an institution (College of Physicians, Association)	44	12.8%
Help provided		
A clear system for a smooth reporting	246	71.35
Better training	241	69.9%
People with whom dialogue is possible	180	52.2%
Better information	194	56.2%
insurance act without risking yourself problems	173	50.1%

In terms of the warning signs used in identifying elderly DV, physician attitude, and help provided, see table 5 above. The most common warning sign used was words or attitudes of the patient (n = 263, 76.2%). The most frequent attitude used as a dialogue with relatives and caregivers (n = 243, 70.4%). The most frequent help provided was clear system for smooth reporting of DV.

Some (n = 85, 24.7%) felt minimally or unprepared to recognize clinical signs of elder abuse, compared to (n = 89, 25.7%) for psychological signs, and (n = 107, 31%) for legalisation knowledge.

3.4. Violence against children

Table (7) illustrates the potential barriers against reporting child abuse, acts of physical child abuse, and child neglect among the study participants. There were (n = 108, 31.2%) who did not feel that they had enough training to deal with child abuse and neglect. On the other hand, (n = 124, 35.9%) agreed they have enough training.

(n = 158, 45.7%) believed that child abuse is underreported in Saudi Arabia. However, there were (n = 95, 27.5%) who did not think so.

Table 7. Barriers against reporting child abuse, acts of physical child abuse and child neglect among the study participants

	Count	Frequency
Reasons for under-reporting of child abuse		
It is not legally mandating to report the child abuse	104	30.1%
Reporting might not be good for the sake of the child	116	33.6%
Reporting procedures are unclear	198	57.4%
Reporting child abuse to authorities is not yet acceptable in our community	173	50.1%
Fear of parent response	177	51.3%
Acts considered abusive		
Burning the child for misbehaviors	235	68.1%
Locking the child alone at home.	240	69.6%
Severe beating that leaves marks on the child body.	242	70.1%
Parents throwing different object at the child when angry.	217	62.9%

Parents who smoke at the presence of the child	223	64.6%
Acts considered neglect		
Parents refused sending the child to school.	250	72.5%
Parents refused medical treatment or surgical intervention necessary for their child	245	71%
Child with severe dental problems, which are not treated.	229	66.4%
Parents pay no attention to the child cleanness.	231	67%
Child fails to thrive due to social deprivation.	230	66.7%

Discussion

The current investigation surveyed three hundred and forty-five primary care physicians, in order to evaluate the current clinical practice and knowledge about DV in South-east Saudi Arabia. As well-established, Saudi Arabia considers DV as a significant public health problem [9] with well-recognized medical and psychiatric sequelae [10]. Indeed, DV is a public health issue worldwide [11]. Advocates in Saudi Arabia have initiated a momentum to view DV as a violation of fundamental human rights issues [12].

The estimate for suboptimal knowledge levels, particularly women's DV, was a little over 36% among our doctors. There is enormous room for improvement for healthcare providers in terms of their knowledge and preparedness towards standing "up to the task" of DV [13]. Doctors' knowledge and professional skills in tackling DV and child abuse were suboptimum [14]. Doctors' reliance on the rigid medical model in their daily clinical encounters is problematic. Moreover, time constraints and lack of clear protocol and guidance on delivery of holistic and humanistic care to clients. However, educational interventions do help [15]. Better knowledge was found among the experienced doctors, Saudi nationals, and those with family medicine specialist.

The training was rated as poor in DV among the participating doctors, as low as 40%. Although the figure was underwhelming as per our results, it was far above a 17% figure reported previously [16]. Sadly, among our participants in Jazan province, only 2% of the surveyed doctors reported wide use of existing DV protocols in their facility. These low proportions for family physicians engaging in real-life DV scenarios are very concerning. DV assessment should make part of daily clinical care in primary care settings. However, many international studies agreed on the lack of knowledge and skills among primary care physicians regarding recognition, screening, and management of DV [17]. However, targeted educational interventions do improve family physicians' skills and awareness [18].

Only 35% of doctors encountered an elderly abuse case, mostly neglect in 55% of cases. This is consistent with a recent survey that abuse was identified in a third of attendees of Saudi tertiary hospitals [9]. A quarter of the surveyed doctors felt unprepared to recognize clinical signs of elderly DV. That can be taken as a willingness to engage in further focused and standardized training in recognizing and reporting DV cases among women, the elderly, and children. This is bearing in mind that most cases of DV remain under-reported and unaccounted for [19].

Only 36% of participants indicated satisfaction with their training in child abuse. Globally, awareness about recognizing child abuse, mainly resulting in severe trauma, is poor [20]. That highlights how DV is one of the under-covered issues in the postgraduate medical curriculum [21]. Evidence indicates that for better recognition of DV among primary care, clinicians should be developing trust with patients and improving mental health care skills [22].

One significant limitation in the current research is the cross-sectional design that gives only a snapshot of the levels of knowledge about DV among doctors but could not ascertain causation relationship between clinical and sociodemographic factors with knowledge and clinical practice level. Social desirability bias can be a problem for the current investigation. However, strict confidentiality and anonymity are hoped to have minimized its effect.

Future research should investigate the effectiveness of targeted educational interventions that could improve knowledge and practice in terms of recognition and management of DV among primary care doctors.

Conclusion

Our current study aimed at evaluating knowledge of primary care physicians about DV directed towards women, elderly, and children in Saudi Arabia. Our results confirmed that such knowledge is quite sub-average and calls for substantial investment into training and education of doctors with regards to the public health issue of DV.

Recommendation

- Theoretical and practical training sessions regarding domestic violence during undergraduate training should be intensified as they were the most popular among primary care doctors.
- Domestic Violence protocols should be standardized across Saudi Arabia and adopted in all health facilities with necessary training provided using face-to-face lectures and practical demonstrations preferably.
- Future research should seek to evaluate the impact of targeted educational interventions in raising awareness and improving the clinical skills of primary care physicians in the management of DV.

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