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Research Article

IPV Screening and Readiness to Respond to IPV in Ob-Gyn Settings: A Patient-Physician Study

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Purpose. Intimate partner violence (IPV) is a serious, preventable public health concern that largely affects women of reproductive age. Obstetrician-gynecologists (ob-gyns) have a unique opportunity to identify and support women experiencing IPV to improve women's health. Considering recent efforts to increase IPV awareness and intervention, the present study aimed to provide a current evaluation of nationally representative samples to assess ob-gyn readiness to respond to IPV as well as patient IPV-related experiences. *Methods*. 400 ob-gyns were randomly selected from American College of Obstetricians and Gynecologists' (ACOG) Collaborative Ambulatory Research Network. Each physician was mailed one physician survey and 25 patient surveys. *Results*. IPV training/education and IPV screening practices were associated with most measures of ob-gyn readiness to respond to IPV. Among respondents, 36.8% endorsed screening all patients at annual exams; however, 36.8% felt they did not have sufficient training to assist individuals in addressing IPV. Workplace encouragement of IPV response was associated with training, screening, detection, preparation/knowledge, response practices, and resources. Thirty-one percent of patients indicated their ob-gyn had asked about possible IPV experiences during their medical visit. *Conclusion*. Findings highlight specific gaps in ob-gyns' IPV knowledge and response practices to be further addressed by IPV training.

1. Introduction

Intimate partner violence (IPV) is a serious, preventable public health concern. The Centers for Disease Control and Prevention (CDC) defines IPV as physical violence, sexual violence, stalking, and/or psychological aggression by a current or former intimate partner [1]. In the United States, approximately 4.8 million women are physically assaulted each year by an intimate partner [2], and 42.4 million women (35.6%) are victims of rape, physical assault, and/or stalking by an intimate partner in their lifetime [3]. IPV has serious health consequences, including physical injury, psychological trauma, chronic health problems, and death [3–5]. For women, IPV is most prevalent among those of reproductive age and contributes to gynecological disorders, pregnancy complications, unintended pregnancy, and sexually transmitted infections [6].

Given these serious health consequences and the threat to women's safety, the Institute of Medicine recommends that all women be screened and counseled for IPV [7]. Obstetrician-gynecologists (ob-gyns), who serve a vital role in women's healthcare, have a unique opportunity to identify and support women experiencing IPV. Annual prevalence of IPV in ob-gyn settings has been estimated to be 12.7% [8]. The American College of Obstetricians and Gynecologists (ACOG) recommends that ob-gyns screen all patients for IPV periodically at routine, family planning, preconception, prenatal (at least once per trimester), and postpartum visits [9]. Guidelines for response to IPV disclosure emphasize the importance of assessing the patient's immediate safety, developing a

safety plan with the patient and offering information about appropriate community resources and referrals [9]. Physician screening increases rates of IPV identification [10, 11], which enables physicians to offer patients counseling interventions as well as referral to community resources. Benefits of counseling interventions include improved quality of life, improved birth outcomes, reduced IPV for new mothers, decreased pregnancy coercion, and fewer violence-related injuries [11]. Improved health outcomes for women confer positive benefits for children, families, and communities.

In light of recent efforts to increase IPV awareness and intervention [12, 13], the present study aimed to provide a current evaluation of ob-gyn readiness (i.e., how prepared ob-gyns are) to recognize and respond to IPV (based on responses to a validated survey tool) as well as patient experiences in nationally representative samples. More specifically, ob-gyn training, preparation, knowledge, screening, response practices, opinions, and practice-related factors/resources were assessed. Patients also responded to questions regarding past and present IPV, their ob-gyn's assessment of possible IPV during their visit, and their satisfaction with their ob-gyn's assessment of possible IPV.

2. Methods

2.1. Materials. For the physician component of the study, the Physician Readiness to Manage Intimate Partner Violence Survey (PREMIS) [14] was minimally adapted for use with an ob-gyn specialist population, with minute changes made only to the demographics portion. The PREMIS is a validated 67-item self-assessment tool that assesses demographics as well as IPV training, perceived knowledge, perceived preparation, objective understanding, opinions, screening/response practices, and practice resources. The instrument has demonstrated the capacity to discriminate trained from nontrained physicians, and scales have been found to be closely correlated with theoretical constructs and predictive of self-reported practices [15].

For the patient component of the study, the Patient Safety and Satisfaction Survey (PSSS) [16] was modified to evaluate patient perceptions of ob-gyn IPV assessment. Questions on the altered PSSS regarded demographics, experiences of IPV, and experiences with their doctor (screening for IPV, satisfaction with screening, and presence of IPV materials). Like the PREMIS, minor changes were made to the language of the PSSS to best represent ob-gyn practices.

2.2. Procedures and Participants. Institutional Review Board approval was obtained from American University. In December 2014, 400 ob-gyns were each mailed one physician questionnaire and 25 patient questionnaires along with a cover letter, instructions for patient recruitment, and patient resource cards. Ob-gyns were randomly selected members of the Collaborative Ambulatory Research Network (CARN). CARN is a representative group of ACOG Fellows who volunteer to participate in questionnaire studies without compensation. More than 90% of US board-certified ob-gyns are members of ACOG. For patient recruitment, ob-gyn office staff were instructed to offer patient surveys to all English-speaking women after their appointments until either all 25 surveys had been completed or the study deadline had passed. Written information for informed participation was provided; physician consent was implied by return of a survey, while patients checked a box to certify consent. Four additional mailings were sent to nonresponding ob-gyns between February and July 2015; only the first reminder mailing included patient materials. Data collection ended on July 29, 2015.

2.3. Data Analysis. From the physician data, several scale scores were calculated based on published scoring instructions for the PREMIS [14, 15]. Since objective knowledge questions were informed by the IPV literature, a total score of correct items was obtained. All other scales were calculated as mean scores, and internal consistency was excellent ($\alpha \geq 0.909$). Although opinion subscales and a composite practice issues score were calculated by Short and colleagues [14, 15], we found that grouped items demonstrated poor internal consistency and exploratory factor analyses failed to yield meaningful subscales. Consequently, key items from those sections will be discussed separately and not as scale scores.

Since physicians returned their surveys with their patient surveys, patient and physician data could be linked. Patient responses were compared with physician practice characteristics (e.g., type of practice). Other comparisons of patient-physician data, which used higher-order predictive models, are reported elsewhere [17].

Data analysis was conducted using a personal computer-based software package (IBM SPSS Statistics® 23.0, IBM Corp©, Armonk, NY, USA). Data were examined descriptively, and response categories endorsed by <10% of participants were collapsed. Unless otherwise noted, response frequencies were reported as percentages with total number of participants in the sample as the denominator. Pearson correlations were used to examine associations between continuous variables. Relationships between categorical variables were evaluated with chi-square tests; tests with ≥25% of cells with an expected count of less than 5 were considered invalid and discarded. Independent samples t-tests and ANOVAs were used to evaluate mean differences in continuous variables grouped by categorical variables. Tests were considered significant at $p < 0.05$.

3. Results

Of the 400 physicians invited to participate, 48.5% ($n = 194$) responded (48 opt-outs, 21 retired), and 125 eligible participants completed the survey for a viable response rate of 31.2%. Practices were well-distributed across 41 US states. Male participants ($m = 30.6$; SD = 10.4) had been in practice for significantly longer than female participants ($m = 21.7$, SD = 8.7, $t = 5.23$, and $p < 0.001$). The physician sample is described further in Table 1. Of the patients whose physician responded, 981 patient surveys were returned (31.4%) and the patient sample is described in Table 2.

Table 1: Physician sample demographics ($N = 125$).

Characteristics *n* (%)	
Gender ($n = 125$)	
Female	63 (50.4)
Male	62 (49.6)
Years in practice ($n = 125$) (including residency)	26.1 ± 10.5
Ethnicity/race ($n = 124$)	
White, non-Hispanic	107 (85.6)
Asian	5 (4.0)
Black/African American	4 (3.2)
White, Hispanic	3 (2.4)
Multiracial	3 (2.4)
Others	2 (1.6)
Primary medical specialty ($n = 125$)	
General ob-gyn	89 (71.2)
Gynecology only	20 (16.0)
Maternal/fetal medicine	6 (4.8)
Others	10 (8.0)
Type of practice ($n = 124$)	
Ob-gyn partnership/group	58 (46.4)
University faculty practice	25 (20.0)
Solo private practice	22 (17.6)
Multispecialty group	12 (9.6)
HMO/staff model	5 (4.0)
Military/government	2 (1.6)
Practice location ($n = 125$)	
Suburban	49 (39.2)
Urban non-inner-city	38 (30.4)
Urban inner-city	20 (16.0)
Rural	18 (14.4)
Professional self-identification ($n = 124$)	
Both primary care provider and specialist	74 (59.2)
Specialist	46 (36.8)
Primary care provider	4 (3.2)

Table 2: Patient sample demographics ($N = 981$).

Characteristics *n* (%)	
Year of birth ($n = 967$)	1977 ± 13.3
Ethnicity/race ($n = 977$)	
White, non-Hispanic	618 (63.0)
Black/African American	143 (14.6)
White, Hispanic	130 (13.3)
Multiracial	44 (4.5)
Asian	27 (2.8)
Others	15 (1.5)
Education ($n = 979$)	
Less than a high school degree	47 (4.8)
High school degree	155 (15.8)
Some college, no degree	269 (27.4)
College degree	286 (29.2)
Graduate/professional degree	222 (22.6)
Home location ($n = 963$)	
Suburban	362 (36.9)
Urban inner-city	224 (22.8)
Rural	192 (19.6)
Urban non-inner-city	171 (17.4)
Military	14 (1.4)
Insurance type ($n = 967$)	
Private	734 (74.8)
Medicaid/Medicare	204 (20.8)
Uninsured	29 (3.0)
Relationship status ($n = 980$)	
Married	546 (55.7)
In an intimate relationship	247 (25.2)
Single/separated/widowed	187 (19.1)
Pregnancy status ($n = 977$)	
Pregnant	280 (28.5)
Not pregnant	682 (69.5)
Unsure	15 (1.5)
Perceived role of ob-gyn ($n = 971$)	
Doctor in addition to PCP	649 (66.2)
Main doctor for healthcare needs	322 (32.8)
Number of previous doctor visits ($n = 963$)	
1st visit	338 (34.5)
Two to three visits	275 (28.0)
Three to five visits	119 (12.1)
More than five visits	231 (23.6)

3.1. Physician Data (from the Modified PREMIS)

3.1.1. Training, Preparation, and Knowledge. Amount of previous IPV training ranged from 0 to 40 hours ($m = 5.8$; SD = 0.7). Ob-gyns with no training (20.8%) had been in practice longer ($t = 2.23$; $p = 0.028$) and had lower scores on the perceived preparation ($t = -4.38$; $p < 0.001$), perceived knowledge ($t = -4.99$; $p < 0.001$), objective knowledge ($t = -2.58$; $p = 0.011$), and questioning in specific situations ($t = -2.74$; $p = 0.007$) scales. Training was not related to the response practices scale. Physicians who had received classroom training (34.4%; $t = 5.31$ and $p < 0.001$) and postgrad training (26.4%; $t = 3.98$ and $p < 0.001$) had been in practice for fewer years; other sources of IPV training (e.g., attending a lecture or talk—48.8%) were unrelated to years in practice. Of ob-gyns in the sample, 36.8% agreed that they did not have sufficient training to assist individuals in addressing IPV.

Perceived preparation and perceived knowledge scores (see Table 3) were normally distributed and strongly correlated ($r = 0.901$; $p < 0.001$). Notably, most ob-gyns indicated that they felt *fairly* to *quite well prepared* to appropriately respond to disclosures of abuse (63.2%) and make appropriate referrals for IPV (57.6%), while only 30.4% felt *fairly* to *quite well prepared* to help an IPV victim make a safety plan. Additionally, most physicians reported that they knew a *fair amount* to *very much* about signs and symptoms of IPV (55.2%) and how to document IPV in patient charts (54.4%),

Table 3: PREMIS scales used in analyses ($N = 125$).

Scale	Description	N	Items	Mean ± SD	Range	Alpha
Perceived preparation	Ob-gyns rated how prepared they felt to assess for/respond to IPV on a scale from *not prepared* (1) to *quite well prepared* (7).	124	12	4.10 ± 1.38	1.00 to 7.00	0.946
Perceived knowledge	Ob-gyns rated how much they felt they knew about IPV and IPV response on a scale from *nothing* (1) to *very much* (7).	123	16	4.14 ± 1.41	1.00 to 7.00	0.968
Objective knowledge	Ob-gyns answered multiple choice, select all that apply, matching, and true/false/DK IPV knowledge questions.	124	38	26.51 ± 5.24	10.00 to 34.00	—
Questioning in specific situations	Ob-gyns rated how often in the past 6 months they asked patients with associated symptoms about IPV from *never* (1) to *always* (5). N/A responses excluded.	115	7	2.90 ± 0.99	1.00 to 5.00	0.921
IPV response practices	Ob-gyns who had identified IPV in the past 6 months indicated how often they performed response practices from *never* (1) to *always* (5). N/A responses excluded.	79	11	3.51 ± 0.97	1.00 to 5.00	0.909

A total score of correct items was obtained to represent criterion-referenced, objective knowledge; accordingly, "measurement of internal consistency . . . was not appropriate" [14, 15]. For the remaining scales, mean scores were calculated to account for missing items.

Table 4: Correlation matrix of scale scores ($N = 125$).

	(1)	(2)	(3)	(4)	(5)
(1) Perceived preparation ($n = 124$)	1 124				
(2) Perceived knowledge ($n = 123$)	0.901** 123	1 123			
(3) Objective IPV knowledge ($n = 124$)	0.267* 123	0.294** 123	1 124		
(4) Questioning in specific situations ($n = 115$)	0.644** 114	0.616** 114	0.145 115	1 115	
(5) IPV responses practices ($n = 79$)	0.432** 79	0.454** 79	0.454** 79	0.441** 76	1 79

*Correlation is significant at the 0.01 level. **Correlation is significant at the 0.001 level.

while only 34.4% felt they knew a *fair amount* to *very much* about their legal reporting requirements for IPV. Perceived preparation and perceived knowledge were both positively correlated with objective IPV knowledge (see Table 4).

Overall objective knowledge was high, such that 27 items were answered correctly on average (SD = 5.24) out of 38 possible. Objective knowledge scores were negatively correlated with years in practice ($r = -0.315$; $p < 0.001$) and lower among ob-gyns in solo private practice ($F = 9.33$; $p < 0.001$). In response to independent items, 64.8% of ob-gyns were "unsure" as to whether they were practicing in a state where it is legally mandated to report IPV cases involving competent nonvulnerable adults, and only 35.2% endorsed awareness of state legal requirements for reporting suspected cases of IPV.

3.1.2. IPV Screening and Diagnosis. Physician-reported IPV screening practices are described in Table 5. Ob-gyns who did not screen for IPV were more likely to have no previous IPV training ($\chi^2 = 6.68$; $p = 0.010$) and score lower on the perceived preparation ($t = 3.13$; $p = 0.002$), perceived knowledge ($t = 3.69$; $p < 0.001$), objective knowledge ($t = 3.66$; $p < 0.001$), and questioning in specific situations ($t = 4.22$; $p < 0.001$) scales. Similarly, ob-gyns who did not screen all new patients (37.6%) scored lower on the aforementioned

Table 5: Physician IPV screening practices ($N = 119$).

n (%)	Screening practice
16 (12.8)	I do not currently screen
47 (37.6)	I screen all new patients
46 (36.8)	I screen all patients with abuse indicators on history or exam
46 (36.8)	I screen all patients at the time of their annual exam
39 (31.2)	I screen all pregnant patients at specific times of their pregnancy
24 (19.2)	I screen all patients periodically
25 (20.0)	I screen certain patient categories only

Responses to "Check the situation listed below in which you currently screen for IPV" *(check all that apply)*. Missing = 6.

scales ($t = -3.08$ and $p = 0.003$; $t = -3.83$ and $p < 0.001$; $t = -2.29$ and $p = 0.024$; $t = -3.966$ and $p < 0.001$, resp.) than those who did. Only screening patients during pregnancy was associated with fewer years in practice ($t = 2.41$; $p = 0.018$). On the questioning in specific situations scale, most ob-gyns indicated that they "always" or "almost always" asked about IPV when seeing patients with injuries (57.6%), whereas a minority did so when seeing patients with other associated symptoms (e.g., chronic pelvic pain; depression/anxiety).

Regarding new diagnoses of IPV in the past 6 months, 29.6% of ob-gyns had made none, while 65.6% had made at least one. Physicians who had made no new diagnoses were more likely to indicate that they did not screen for IPV ($\chi^2 = 6.55$; $p = 0.010$). In contrast, physicians who had made at least one new diagnosis were more likely to indicate that they screened all new patients ($\chi^2 = 5.41$; $p = 0.020$), all patients at annual exams ($\chi^2 = 9.12$; $p = 0.003$), and all pregnant patients ($\chi^2 = 6.90$; $p = 0.009$). Ob-gyns who had made no new diagnosis had been in practice longer ($t = 2.78$; $p = 0.006$) and had fewer hours of previous IPV training ($t = -2.71$; $p = 0.008$). They also scored lower on the perceived preparation ($t = -4.37$; $p < 0.001$), perceived knowledge ($t = -4.11$; $p < 0.001$), objective knowledge ($t = -2.37$; $p = 0.019$), and questioning in specific situations ($t = -5.48$; $p < 0.001$) scales.

3.1.3. IPV Response and Practice-Related Factors. On the response practices scale, most ob-gyns who had identified IPV in the past six months reported that they had "always" or "almost always" documented patient statements (85.7%), provided referral and/or resource information (82.2%), and offered validating or supportive statements (78.4%). Around half "always" or "almost always" conducted a safety assessment (54.7%) and helped the patient develop a safety plan (45.8%). The response practices scale positively correlated with perceived preparation ($p = 0.43$; $p < 0.001$), perceived knowledge ($p = 0.45$; $p < 0.001$), and objective knowledge ($p = 0.45$; $p < 0.001$) scores.

Of ob-gyns in the sample, 50.4% agreed with the statement "my workplace encourages me to respond to IPV." Those who agreed had more hours of IPV training ($F = 6.97$; $p = 0.001$) and higher scores on the perceived preparation ($F = 19.15$; $p < 0.001$), perceived knowledge ($F = 20.65$; $p < 0.001$), questioning in specific situations ($F = 8.13$; $p = 0.001$), and IPV response practices ($F = 7.05$; $p = 0.002$) scales. Objective IPV knowledge scores were not associated with workplace encouragement. Agreement was also associated with a greater likelihood of screening new patients ($\chi^2 = 9.43$; $p = 0.009$) and having made at least one new IPV diagnosis ($\chi^2 = 17.52$; $p < 0.001$) as well as knowledge of mandated reporting for IPV in their state (20.8%; $\chi^2 = 13.24$ and $p = 0.010$), awareness of an IPV response protocol at their clinic/practice (30.4%; $\chi^2 = 20.41$ and $p < 0.001$), familiarity with their institution's policies regarding IPV screening/response (33.6%; $\chi^2 = 26.83$ and $p < 0.001$), and feeling that their site had adequate referral resources (30.4%; $\chi^2 = 13.74$ and $p = 0.008$).

3.2. Patient Data (from the Modified PSSS)

3.2.1. IPV Experiences. A small percentage (0.6%) of patients reported that they had visited their doctor that day because they were hurt by a current or former partner. When asked about IPV experiences within the past year, however, a greater number of patients indicated that they had been physically hurt (5.1%; e.g., pushed, shoved, hit, slapped, and kicked) and/or forced into sexual activities (1.9%) by a current or former partner. Responses to these questions revealed that 6.0% had experienced a form of IPV within the past year. Additionally, nearly one in five patients (18.8%) indicated having ever been emotionally or physically abused by a current or former partner.

Married women were less likely to have experienced IPV within the last year (2.4%; $\chi^2 = 30.40$ and $p < 0.001$) or at any point in time (12.2%; $\chi^2 = 47.81$ and $p < 0.001$), compared to those who were in an intimate relationship (9.9%; 22.7%) or not in an intimate relationship (12.0%; 35.0%). Additionally, non-Hispanic White patients were less likely to report that they had experienced IPV within the last year (4.1%) compared to Hispanic (10.2%), Black (9.2%), Asian (7.4%), and multiracial (11.4%) patients ($\chi^2 = 12.56$ and $p = 0.028$). Additionally, patients with less than a high school degree were the most likely to report that they had ever experienced IPV (34.8%), while those with college or graduate/professional degrees were the least likely (16.0-17.0%; $\chi^2 = 11.31$ and $p = 0.023$). Finally, participants with a more recent year of birth ($m = 1981$ versus 1977) were more likely to indicate that they had experienced IPV within the last year ($t = 2.45$; $p = 0.014$). Neither location nor insurance type was associated with IPV experiences.

3.2.2. IPV Screening during Medical Visit. One-third of patients in the sample (31.4%) reported that their physician had asked about possible IPV experiences during their medical visit that day. Among those who had been asked ($N = 308$), the vast majority were satisfied with the way their doctor had asked about IPV (98.5%), the amount of time their doctor had taken to talk about IPV (98.9%), the private environment their doctor had provided (96.5%), and the resources their doctor had provided on IPV (98.8%). Married women were less likely to be asked about their possible experiences with IPV (28.6%) than those in an intimate relationship (39.1%) or not in an intimate relationship (39.7%; $\chi^2 = 11.88$ and $p = 0.003$). Women who visited a solo private practice were less likely to be asked (25.8%) than those who visited a university faculty practice (31.5%) or an ob-gyn partnership/group (37.9%; $\chi^2 = 10.60$ and $p = 0.014$). Additionally, higher education trended towards being associated with a decreasing likelihood of being asked about possible IPV ($p = 0.063$). Neither race/ethnicity, location, year of birth, nor insurance type was associated with being asked about IPV experiences.

Importantly, patients who indicated that they had experienced IPV within the past year ($\chi^2 = 12.39$; $p < 0.001$) or at any point in time ($\chi^2 = 5.87$; $p = 0.015$) were more likely to have been asked about possible IPV experiences during

their visit. Including the visit prior to survey completion, patients who had visited their ob-gyn more frequently (3 or more times) within the past year were less likely to have been asked about possible IPV experiences that day (24.9–27.6%), compared to those who visited less frequently (36.5–39.4%; $\chi^2 = 15.10$ and $p = 0.002$). Similarly, pregnant patients reported more frequent ob-gyn visits within the past year ($\chi^2 = 324.68$; $p < 0.001$) and were less likely to have been asked about possible IPV experiences that day ($\chi^2 = 6.98$; $p = 0.031$).

4. Discussion

The present study evaluated ob-gyn readiness to detect and respond to IPV as well as patient IPV-related experiences. To begin, we found that classroom and postgrad IPV training has increased such that ob-gyns who have been in practice for fewer years are more likely to have received such training. Despite this increase in training, one third of ob-gyns in this sample felt they did not have sufficient training to assist individuals in addressing IPV. Lack of medical training on IPV identification and response is a common physician-reported barrier [18, 19]. One in five ob-gyns had received no previous IPV training. While unrelated to response practices following IPV identification, no training was associated with lower likelihood of screening for and detecting IPV as well as lower perceived preparation, perceived knowledge, objective knowledge, and questioning in specific situations. Scales were interrelated and associated with IPV screening practices and identification, both of which were closely linked.

Consistent with these results, IPV screening among general physicians has been associated with prior IPV training/education, perceived knowledge, and perceived preparation [19, 20]. We also found that the percentage of ob-gyns who endorsed screening all patients at annual exams was consistent with existing research [20]. However, both physician endorsement and patient-reported data suggest that ob-gyns are still more likely to screen for IPV during new patient visits than during subsequent visits. This is significant as repeated physician inquiry improves the likelihood of patient disclosure [21].

Overall, 31.4% of patients reported that their physician had asked about possible IPV experiences during their medical visit that day, which is higher than past patient-reported screening rates (e.g., 7%) [22]. In line with these previous studies [22], we found that women who were married and more highly educated were less likely to be asked about IPV during their visit. Whereas non-White race/ethnicity, younger age, living in a rural area, and greater health care utilization have also been found to predict higher rates of IPV screening [22, 23]; these associations were not found in the current study. Though we found that patients who were married, White, college-educated, and older in age were less likely to report IPV experiences, which is consistent with previous reports [3, 24], IPV affects women of all backgrounds and is not accurately predicted by demographic factors [25]. Universal IPV screening on the part of ob-gyns is therefore recommended.

Ob-gyns demonstrated good objective knowledge and endorsed use of appropriate response practices recommended by ACOG. After IPV identification, a majority of ob-gyns "always" or "almost always" documented patient statements, provided referrals and/or resources, and offered validation or support; however, safety assessment and safety planning occurred less frequently. This could indicate that time is a barrier to enacting ACOG-recommended response practices. Importantly, workplace encouragement of IPV response was associated with increased IPV training, screening, diagnosis, perceived preparation/knowledge, response practices, and resources to facilitate response (e.g., a response protocol), but not objective knowledge about IPV support. The majority of ob-gyns were unaware of an IPV response protocol at their site. While this is in line with existing research [19, 20], ob-gyn offices and practices should increase awareness of their protocols. Finally, in contrast to previous reports [22, 26], gender was not related to IPV screening nor readiness to respond to IPV.

The present study assessed current readiness to detect and respond to IPV in a nationally representative sample of ob-gyns as well as IPV-related experiences in a large, diverse sample of patients. However, several limitations are noted. Since ob-gyns were aware of the study aims, it is possible that they altered their screening practices during the data collection period, which consequently could have impacted patient-reported screening rates. Additionally, ob-gyn responses may have been influenced by social desirability bias, while patient responses may have been influenced by self-selection bias. Ob-gyns and office staff may have deviated from the data collection protocol (e.g., provided patients with the survey before their appointment instead of after). The patient survey was also only offered in English, preventing generalization to non-English-speaking patient populations. Finally, causal relationships cannot be drawn from questionnaire-based data. In the future, the impact of education and training programs on IPV screening and response should be evaluated using experimental designs, allowing for causal conclusions to be drawn.

5. Conclusion

In conclusion, our findings highlight the need to improve IPV training and workplace support to facilitate ob-gyn screening of and response to IPV. Addressing IPV in healthcare settings can improve the reproductive and overall health of women, confer positive outcomes for children/families, and reduce the wide-reaching societal and economic consequences of IPV [9]. However, physicians generally report dissatisfaction with their IPV education and training [18]. Specific areas of uncertainty (e.g., state legal requirements) and underutilized response practices (e.g., safety planning) need to be further addressed. Furthermore, IPV training programs may be more effective if they were to aid ob-gyns in recognizing the importance of universal and routine screening of all patients, not just those at increased risk of victimization, so as to reduce missed opportunities for identifying survivors. Additionally, it should be emphasized that screening for

IPV is itself an intervention, as detection and referral to appropriate community resources have significant impact. Recent research indicates computer screening may increase IPV disclosures as well as IPV discussions between physicians and patients and the amount of services provided [27]. Perceived workplace support for IPV response as well as practice-related resources (e.g., community referrals, an IPV response protocol) appear to facilitate ob-gyn preparedness to respond to IPV.

Disclosure

The present address for Katherine M. Jones is as follows: Counseling Center, Johns Hopkins University, 3003 N. Charles St., Baltimore, MD 21218, USA. The funding source had no role in the study design; the collection, analysis, and interpretation of the data; nor the preparation, writing, or submission of this manuscript.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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