

## Research Article

# Impact of a Novel Training Curriculum for Pediatric Residents in the Prevention of Intimate Partner Violence

Cynthia Lewis\*, Anil Kumar Swayampakula, Alexandra Smith, Richard Neugebauer and Ayoade Adeniyi

Department of Pediatrics, Bronx-Lebanon Hospital Center, USA

**\*Corresponding author**

Cynthia Lewis, Chief, Division of Adolescent Medicine, Bronx Lebanon Hospital Center, Associate Professor of Pediatrics, Albert Einstein College of Medicine, USA, Tel: 718-316-1772; Email: c.lewismd@aol.com

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**Abstract**

**Objective:** To assess pediatric residents' knowledge of and attitudes about IPV at a community hospital in the South Bronx before and after IPV training.

**Methods:** A seven-hour IPV training program on IPV relevant screening, education, policies, and resources was offered in July/August 2010 and again in July/August 2011. Residents completed a pre- and post-training survey consisting of 60 questions divided into 14 distinct themes/competencies areas. Mean scores were calculated for each theme/competency. Paired sample t-tests were used to evaluate participants' pre-test and post-test change in survey responses. After the 2011 training module, a convenience sample of caregivers and adolescents were assessed with a separate health visit exit-survey focusing on IPV and provider interview.

**Results:** Thirty-six residents were trained and surveyed in 2010 (PGY-1 and 2), 18 (50%) received a second training module in 2011. The baseline survey showed that 60% of the residents lacked prior IPV-specific training, and 50% were unaware of relevant community resources. Mean values for 12 out of the 14 IPV-relevant themes improved significantly after the initial training module and exhibited further improvement in several areas of theme/competency including self-efficacy, referral, screening, workplace limitations, legal requirements, and victim understanding after the 2<sup>nd</sup> training module in 2011. Among the teenager sample (n=113) (mean age [SD] of 14.2 [2.2] years), 86% indicated that they would ask their provider for help if they were victims of IPV; while 80% of the caregivers (n=101) said they would discuss healthy relationships with their teenagers.

**Conclusion:** This IPV-specific training module for residents improved significantly their IPV-relevant competencies. Our findings demonstrate that IPV-specific training would be a beneficial addition to the Pediatric Residency Training Curriculum.

**INTRODUCTION**

Clinical health settings are potentially important in identifying intimate partner violence (IPV) among adolescents. Research shows that nationwide, an estimated 1 in 5 high school girls are affected by physical or sexual IPV victimization during their high school years [1-4]. Further, the prevalence of IPV among adolescent females seeking care in emergency departments, primary care clinics, and adolescent/ gynecologic clinics is doubles that of these nationwide estimates [5-8]. One recent study on IPV among female users of urban adolescent clinics revealed two in five (40%) adolescent female patients

had experienced IPV, with 32% and 21% reporting physical and sexual victimization respectively [9]. Adolescent girls who are victims of IPV experience greater rates of health risk and disease including substance use, risky sexual behavior, STIs, unhealthy weight control, depression, and suicide. Further, pregnancy coercion and birth control sabotage has been found to be associated with IPV and increased risk of unintended pregnancy among teenage and young adult females utilizing family planning clinics [10].

Clinical settings represent an opportunity for health care providers to help identify, diagnose, and manage IPV among

adolescents and the health problems associated with it. Clinical settings have been recognized as key sites for IPV detection in adult women and medical guidelines exist to identify and assist women IPV victims [11,12]. However, IPV among adolescents is reported to be infrequently identified by providers. In a study by E. Miller, et al., 30% of adolescent participants reported that a health care provider had ever asked them about being hurt or feeling unsafe in a dating relationship [9]. In another study, M Forcier, et al. found that while pediatric residents were knowledgeable about the prevalence of dating violence, 91 % did not routinely screen for dating violence among adolescent patients [13]. Barriers to screening for IPV were similar to those identified by primary care physicians and psychiatrist in other studies, with insufficient training and lack of time cited as major barriers [14,15].

In 2009 the AAP updated its policy statement on the role of the pediatrician in youth violence to include new areas of youth violence with dating violence being among them [16]. The AAP recommends Intimate Partner Violence (IPV) screening during adolescent office visits and supports IPV-specific training during residency. The present study responds to those recommendations by offering and assessing the impact of a novel IPV-specific training module on pediatric residents' knowledge and attitudes.

## METHODS

A seven-hour IPV training program on IPV relevant screening, education, policies and resources was offered in July/August of 2010 and again in July/August of 2011 to PGY-1 and PGY-2 pediatric residents. The training was developed using the best available evidence in teen IPV assessment, management and prevention. The training specifically focused on: a) the epidemiology, diagnosis and health impacts of IPV among adolescents; b) the identification, screening, and management of IPV including treatment, safety planning, referral, and utilization of community resources; and c) how to provide anticipatory guidance on safe, supportive relationships to pre-teens, teens, and parents/caregivers. Residents practiced using the skills acquired through a series of role-plays and received a training guide which included clinical, community, and practice management resources and patient education materials. Residents completed a pre- and post-training survey consisting of 60 questions that were arranged into 14 distinct themes/competencies, each containing 2-6 questions. Some questions were open-ended, but most were scored from 1 to 7 (strongly agree to strongly disagree). The questionnaire data collected was de-identified. The residents' questionnaire administered before and after the delivery of the educational program generated mean scores on each of the 14 themes/competences. A resident's score on any particular theme/competency was calculated by summing the responses (ranging from 1 – 7) on each of the items comprising that theme. Change in mean scores on each of these themes is assessed with a paired t-test. While it is recognized that program effectiveness is often evaluated using a comparison group out of concern that pre-post change in respondent scores may reflect the operation of factors other than the training program itself. Given that the baseline survey in the study was administered just prior to the 7 hour training program and the post-test was completed directly afterwards, we judged the use of a comparison group unnecessary.

In addition, a 12-question health visit exit-survey was administered to 113 youth ages 11 to 17 at Bronx-Lebanon Hospital Center/MLK Pediatric and Adolescent Clinic sites assessing whether the pediatric resident talked to them about IPV and healthy relationships. The parents/caregivers accompanying these youth received a similar 12-question health visit exit-survey. Surveys were conducted 1 – 6 months following resident IPV training. The data collected from youth and caregiver questionnaires was anonymous. Questions and responses were written at an appropriate grade level for targeted responders. The youth and parent surveys were comprised of a series of binary response options "yes" "no" and each respondent was classified in terms of the proportion of responses in the "yes" category. Alpha was set at  $p < .05$ . Findings with regard to these assessments are reported simply in the form of descriptive statistics. However, a sufficiently large sample of children was selected ( $n > 100$ ) so that the reported proportion would be characterized by a comparatively small 95% confidence interval. For example, with a sample of 100 adolescents if 80 individuals provided affirmative responses to 80% of the questions, we can be 95% confident that the true percent of individuals with 80% affirmative answers would range quite narrowly between 72-88%.

The Institutional Review Board at Bronx Lebanon Hospital Center, Bronx, NY approved this study. Parental consent and adolescent assent were obtained for teenage participants, and self-consent was obtained for parent participants.

## RESULTS

Thirty-six residents trained and surveyed in 2010 (PGY-1 and 2), 18 (50%) received a second training module in 2011. The 2010 baseline survey showed that 60% of the residents lacked prior IPV-specific training, and 50% were unaware of relevant community resources. Mean values for 12 out of the 14 IPV-relevant themes improved significantly after the initial training module (Table 1). In response to the 2nd training module, further improvement was noted in the theme/competency of self-efficacy, referral, screening, workplace limitations, legal requirements, and victim understanding. Among studied teenagers ( $n=113$ ) (mean age [SD] of 14.2 [2.2] years), 86% indicated that they would ask their provider for help if they were victims of IPV; 70% indicated they were comfortable with talking about these issues with their provider. A similar proportion indicated that they were glad that their provider had raised these issues with them.

The findings from the caregiver interviews ( $n= 101$ ) were similar. Over 60% indicated that they would talk to their provider if their child had been victimized; while 80% said they would be talking to their children about healthy relationships.

## DISCUSSION

Current research demonstrates that 10-33 % of teens have experienced some degree of physical, sexual, or emotional abuse from a dating partner [16]. Pediatricians may interface with these teens before, during, or after these violent episodes. This makes it essential for pediatric residents to receive IPV-specific training so that they are familiar with IPV, its potential repercussions and possible methods of screening and intervention. In our study, the

**Table 1:** Mean scores for IPV-specific themes/competencies before and after the training.

Theme/Competency	2010 Training Session (n=36)		
	Mean Before	Mean After	p-value
Self-efficacy	18.67	22.87	0.000
Referral	12.86	16.86	0.000
Health Care Role	35.30	38.63	0.002
Screening	15.50	17.90	0.001
Workplace	18.66	22.24	0.000
Too Busy/Can't Help	16.03	17.58	0.008
Limitations	12.80	14.77	0.003
Legal Requirements	9.40	11.80	0.000
Don't Need Training	8.90	10.16	0.024
Victim Understanding	11.13	12.70	0.016
Identify and Document	10.86	12.14	0.002
Victim Autonomy	15.97	17.34	0.024
Staff Preparation	9.57	9.57	1.000
Relationship of Alcohol and Drugs	11.83	12.07	0.482

IPV-specific training module for residents improved their IPV-relevant competencies significantly. Further, over 80% of studied teens and caregivers gave positive responses for would “ask their provider for help if they were victims of IPV” and would “discuss healthy relationships with their teenagers” respectively. Our teen responses are in line with other studies that show the majority of adolescents believe medical providers should screen for IPV as they believe healthcare providers are likely to be helpful [17,18].

Two specific limitations warrant mention. As noted, the teenagers evidenced a very positive attitude towards discussing IPV with their physician and the caregivers expressed a strong interest in talking about healthy relationships with their teens. However, the absence of a pre-posttest with these two groups precludes drawing a strong inference that the residency training program led to an improvement in patient and caregivers' attitudes and knowledge regarding IPV. Further studies must address this question rigorously. Additionally, further studies are warranted to assess whether or not the improvements made by residents in IPV-relevant competencies are sustained over time. It is likely that as with other trainings, maintenance sessions are needed.

## CONCLUSION

Intimate Partner Violence among adolescents is an important public health concern which must continue to be addressed by pediatricians in the health care setting. Our findings clearly suggest that IPV-specific training would be a beneficial addition to the Pediatric Residency Training Curriculum. Such training will give pediatricians the skills they need to assist in the prevention of IPV among teenagers and increase the rate of its disclosure

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