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AVA Research Review

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AVA Research Reviews provides AVA members with recent published, peer-reviewed articles in a broad array of violence and abuse topics. The goal is to highlight and disseminate violence and abuse research in a timely fashion, and to enhance healthcare providers' practice by fostering the educational mission of AVA

Review Title: Varied Testing and Prophylaxis in Pediatric Emergency Departments for Adolescent Sexual Assault Victims

Reviewers: Angie S. Guinn, MPH, School of Public Health, Georgia State University, and Katie A. Ports, PhD, Behavioral Scientist, Division of Violence Prevention, the Centers for Disease Control and Prevention.

The findings and conclusions in this paper are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Article: Schilling, S., Samuels-Kalow, M., Gerber, J. S., Scribano, P. V., French, B., & Wood, J. N. (2015). Testing and treatment after adolescent sexual assault in pediatric emergency departments. Pediatrics, 136(6), e1495-e1503. doi:10.1542/peds.2015-2093

Article Summary:

Glrpmbsarmpw Amk kclr8 Rfc Aclrcpq dmp Bgqc_qc Amlrpmj _lb Npctclrgml &ABA' _lb rfc ?kcpga_l ?a_bckw md Ncbg_rpgaq &??N' recommend testing and prophylaxis for sexually transmitted infections (STIs) in all sexual assault victims regardless of time since the assault.[1,2]

This paper evaluates 38 pediatric emergency departments across the United States (with and without specialized sexual assault pathways or teams) on rates of testing and prophylaxis for gonorrhea, chlamydia, and pregnancy in sexually assaulted adolescents.

Background: Qcvs_j tgmjclac* n_prgasj_pjw cvnmqspc bspglc rfc dgpqr /6 wc_pq md jgdc* gq _ ns`jga fc_jrf npm`jck ugrf gknjga_rgmlq dmp fc_jrf _lb ucjjlcqq _apmqq rfc jgdc amspqc, ?aampbglc rm rfc 0.// L_rgml_j Glrgk_rc N_prlcp _lb Qcvs_j Tgmjclac Qsptcw* _l cqrgk_rcb /7# md umkcl _lb lc_pjw 0# md kcl gl rfc Slgrcb Qr_rcq f_tc`ccl p_ncb bspglc rfcgp jgdcrgkcq* ugrf _nnpmvgk_rcjw 2.# md dck_jc tgargkq _lb 0/# md k_jc tgargkq cvncpgclaglc p_nc`cdmpc /6 wc_pq md _ec,[1]

Sexual assault victims are vulnerable to contracting STIs. As such, the CDC and AAP recommend testing and prophylaxis for chlamydia and gonorrhea in all adolescent sexual assault victims, ideally within 72 hours of the assault. In addition, the AAP recommends emergency contraception to all post-pubertal female victims within 120 hours of the assault even if the victim is unsure whether penetration actually occurred.

Although previous studies have evaluated sexual assault guidelines and procedures in adult emergency departments, little is known about the uptake of these guidelines in pediatric emergency departments. Of additional interest is the presence of sexual assault clinical pathways and specialized teams that assist with medical and law enforcement evaluations in pediatric emergency departments. The impact that specialized pathways and teams have on testing and prophylaxis in pediatric emergency departments has not been evaluated beyond single-center studies.

Aims/hypotheses of article:
The aim of this study was to examine 38 pediatric emergency departments to describe and compare testing and prophylaxis practices for sexually assaulted adolescents.

Rfc npcqclac md qncag_jgxcb qcvs_j _qq_sjr rc_kq _lb n_rfu_wq u_q _l_jwxcb rm qcc gd rcqrgle _lb-mp npmnfwj_vgq u_q _ddcarcb `w rfcgp npcqclac, ?l glapc_qc gl p_rcq md npmnfwj_vgq _lb rcqrgle u_q fwnmrfcqgxcb ugrfgl ncbg_rpga ck cpeclaw bcn_prkclrq ugrf ajglga_j a_pc n_rfu_wq _lb qncag_jgxcb qcvs_j _qq_sjr rc_kq,

Methods:
This was a retrospective study of 12 to 18 year old adolescents diagnosed with a sexual assault at 38 emergency departments in the Pediatric Hospital Information System (PHIS) database. Demographic information and clinical data from adolescents discharged between 2004 and 2013 with ICD-9 codes for child sexual assault, rape, or observation after rape were extracted from the PHIS database. Only patients who received care at their first visit after sexual assault were included in the analyses. A survey was constructed for emergency departments and child abuse physicians to determine: the presence of specialized sexual assault pathways or teams; if present, the year that the sexual assault pathway or team was implemented; and specific practices for testing and prophylaxis for adolescent sexual assault victims.

Rfc msramkcq md glrcpcqr ucpc cvrp_arcb dpmk rfc NFGQ b_r_`_qc* _lb glajsbcb j_`mp_rmpw rcqrgle _lb nf_pk_aw `gjjgle dmp rfc dmjjmugle8 npcel_law &gd dck_jc'* afj_kwbg_* _lb emlmppfc_, Rfc npgk_pw glbcnclbclr t_pg_`jc glajsbcb rfc npcqclac md _ qcvs_j _qq_sjr n_rfu_wmp rc_k, ?ec* qcv* p_ac-crflgagrw* glqsp_lac _lb bgqaf_pec wc_p ucpc glajsbcb _q n_rgclr+jctcj amt_pg_rcq* _lb fmqngr_j pcegml u_q glajsbcb _q _ fmqngr_j+jctcj amt_pg_rc, Sl_bhsqrcb p_rcq md rcqrgle _lb npmnfwj_vgq ucpc a_jasj_rcb dmp c_af fmqngr_j, ?bhsqrcb jmegqrga pcepcqqgml kmbcjq ucpc sqcb rm cv_kglc rfc _qqmag_rgml md n_rfu_wq _lb rc_kq ugrf rcqrgle _lb npmnfwj_vgq p_rcq,

? t_jgb_rgml qs`+qrsbw u_q amknjcrcb ml _p_lbmk q_knjc md kcbga_j pcampbq* _lb pcqsjrq glbga_rcb _ nmqgrgtc npcbgargtc t_jsc md 70# dmp fmqngr_j GAB+7 ambcq _lb fgef qclqgrgtgrw _lb qncagdgagrw ncpaclr_ecq dmp afj_kwbg_* emlmppfc_* _lb npcel_law rcqrgle _lb npmnfwj_vgq,

Moreover, the data regarding the AHT rates were based on administrative claims data rather than data collected specifically for research use. Additionally, the analytic power of the intervention was limited by both the small sample size (72 observations) in thedifference-in-difference analysis and the short-term (3 years) of data which were collected after implementation of the intervention. Therefore, authors suggested that more effective preventive interventions to AHT should be developed and more rigorous evaluation conducted in the future.

Reviewers' Comments:

The study is important in the field of AHT and child abuse prevention. Although some previous research demonstrated an association of an increased caregivers' knowledge concerning crying and shaking with the PURPLE intervention (e.g. Fujiwara et al., 2002), the study makes a contribution by directly evaluating the effectiveness of a universal AHT prevention program in reducing AHT rates at the state-wide level. After all, to reduce the risk for AHT is the major purpose of child abuse prevention programs.

The results did not support the effectiveness of the PURPLE program in reducing the incidence of AHT in North Carolina. In fact, to evaluate such a large-scale program in a real-world context is very challenging because of the rare incidence of AHT and the large year-to-year variability (Barr, 2014). The study employed a pre- and post-intervention design, in which some unmeasured variables might confound the results of this study. For example, although two economic indicators were controlled when assessing the change in ATH rates, other economic factors, such as consumer price index or housing starts, might also impact the AHT rates within states during the period of economic recession. Also, the study measured the outcome by assessing the change in the number of telephone calls to a nurse advice line. However, the change of caregiver's help-seeking behaviors might occur because there was more supportive information available through other media such as the internet rather than through the program.

The authors indicated that the study was not designed as a randomized clinical trial (RCT). But they argued that a RCT design might not be feasible to evaluate the effectiveness of universal interventions on reducing rare illnesses. In fact, a place randomization design employed in some Triple P population outcome studies (e.g., Every Family Study and U.S. Triple P System Population Trial) may be an appropriate method to evaluate the effectiveness of universal interventions. In a place randomization design, geographic areas, such as cities, counties, or states, would be randomized to either intervention or control (Bentovim and Gray, 2014). It may be more informative scientifically to include comparison groups when evaluating the effectiveness of child maltreatment prevention programs.

The ineffectiveness of the intervention might be the reason for the non-significant outcome of this study. Although infant crying is "the most significant trigger for AHT", causes of AHT may be more complicated in the context of the family. There are many risk factors for AHT, such as young and/or single parents, unwanted pregnancy, financial problems, domestic violence, and limited or no immediate support system. In order to develop an effective preventive intervention for a complex and elusive problem, there is an urgent need for interventions which mediate known risk factors for AHT, including, but not exclusive to, crying.

Additionally, since the main goal of an evaluation is to improve the program performance (Wholey et al., 2010), the study under review may highlight the need to provide additional strategies to improve the performance of the PURPLE intervention.

In summary, this is an important study which demonstrates the challenges in developing a unidimensional intervention to address a multidimensional problem. Evidence to support the effectiveness of prevention interventions in reducing AHT rates is still needed.

References:

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