



***Tenth Annual  
Obstetrics & Gynecology  
Resident Research Day***

***March 9, 2005***

***University of Hawaii  
John A. Burns School of Medicine  
Department of Obstetrics, Gynecology and Women's Health***

*cover:*  
*University of Hawaii*  
*John A. Burns School of Medicine*  
*The Kaka'ako Waterfront Campus*

***Tenth Annual  
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and  
Women's Health***

***Hawaii Prince Hotel Ballroom  
Honolulu, Hawaii***



## **KENNETH WARD, M.D.**

**KENNETH WARD, M.D.  
PROFESSOR AND CHAIR  
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY  
UNIVERSITY OF HAWAII  
JOHN A. BURNS SCHOOL OF MEDICINE**

Welcome to the Tenth Annual Resident Research Day being held by the University of Hawaii Department of Obstetrics and Gynecology. Medical research is a critical component of medicine. As one of my professors used to put it: “Half of what we teach you is wrong, half of what you will do in practice is wrong...only research can tell us which half is right and which half is wrong!”

An integral part of training for our residents is an understanding of medical research. In discovering how to question, how to structure a protocol, how to maneuver through an Institutional Review Board approval, how to enroll patients, how to assess information and data, our residents develop an awareness of good science. This knowledge and the ability to critically read a journal article will serve these physicians well throughout their careers. We thank everyone on the faculty and in the community who have helped guide our residents at each “how to” step. We applaud our chief class for the hurdles they have cleared.



## **LYNNAE MILLAR, M.D.**

**LYNNAE MILLAR, M.D.  
ASSOCIATE PROFESSOR & DIRECTOR OF RESEARCH  
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY  
UNIVERSITY OF HAWAII  
JOHN A. BURNS SCHOOL OF MEDICINE**

Welcome to the Chief Resident Annual Research Day. During their four years with us each of our chief residents has developed or collaborated on an original research project. This program was initiated to help educate our residents regarding study design, data collection and analysis, and paper writing and editing. Understanding the process of different types of clinical and basic science research will enable our residents to be critical readers of scientific literature and help them to become well-educated physicians practicing evidence-based medicine. We appreciate all the support from attending physicians and fellow residents who enroll their patients in these trials and for coming today to hear the presentations.

# GUEST SPEAKER & JUDGES



## **Robert B. Jaffe, M.D., M.S.**

Fred Gellert Endowed Chair in Reproductive Medicine and Biology  
University of California at San Francisco  
Alpha Omega Alpha  
President, Society for Gynecologic Investigation  
President, Perinatal Research Society  
Human Embryology and Development Study Section: National Institute of  
Child Health and Human Development Advisory Council  
Association of American Physicians  
President's Distinguished Scientist Award, SGI  
Society of Gynecological Investigation President's Mentorship Award  
Distinguished Scientist Award, American Society of Reproductive Medicine  
Sidney A. Ingbar Distinguished Service Award, Endocrine Society

Wednesday, March 9, 2005, Hawaii Prince Hotel Ballroom  
9:10 - 10:00 a.m., "*Angiogenesis and Ovarian Cancer*" OB/GYN Research Day Lecture

Lectures for OB/GYN Faculty, Residents, Students & Private Attendings:

Thursday, March 10, 2005, Kapiolani Medical Center, Room 815  
1:00 - 2:00 p.m., Review & Advise: ongoing 3rd year Research Projects  
2:30 - 3:30 p.m., "*Having Fun as a Physician-Scientist*" Lecture/Discussion

Friday, March 11, 2005, Kapiolani Medical Center, Room 815  
9:00 - 10:00 a.m., "*What? Another Talk on Menopause?*" Lecture

**JUDGING PANEL:**      **Robert B. Jaffe, M.D.**

**Kenneth Ward, M.D.**

**Tod C. Aeby, M.D.**

# OB/GYN RESIDENT RESEARCH DAY

- 2004 Diana W. Bianchi, M.D.**  
Chief of the Division of Genetics in the Department of Pediatrics at Tufts-New England Medical Center  
Natalie V. Zucker Professor of Pediatrics and Obstetrics and Gynecology  
*"Circulating Fetal Nucleic Acids on Maternal Blood: Origin and Diagnostic Applications"*
- 2003 Roy M. Pitkin, M.D.**  
Former Editor, *Obstetrics and Gynecology*, *Clinical Obstetrics and Gynecology*  
Emeritus Professor and Chairman of Obstetrics and Gynecology, University of California, Los Angeles  
School of Medicine  
*"Obstetric-Gynecologic Research, 1953 - 2002"*
- 2002 James R. Scott, M.D.**  
Professor, University of Utah, Department of Obstetrics and Gynecology  
Editor of *Obstetrics and Gynecology*  
Co-Editor of *Clinical Obstetrics and Gynecology*  
*"Pregnancy in Transplant Patients"*
- 2001 William Droegemueller, M.D.**  
Clinical Professor and Chairman Emeritus, University of North Carolina, Department of Obstetrics  
and Gynecology  
Associate Editor of *Obstetrics and Gynecology*  
*"Don't Look Back...Someone is Gaining on You", A Discussion of Mentoring*
- 2000 Robert Israel, M.D.**  
Chief of Gynecology, University of Southern California, Department of Obstetrics and Gynecology  
Associate Editor of *Obstetrics and Gynecology*  
*"Endometriosis: A Continuing Conundrum"*
- 1999 David A. Grimes, M.D.**  
Vice President of Biomedical Affairs Family Health International  
Associate Editor, *Obstetrical and Gynecological Survey*, *Contraception*  
Former Professor and Vice-Chairman, Department of Obstetrics, Gynecology and Reproductive Sciences,  
University of California, San Francisco  
*"Evidence-based Medicine in Obstetrics and Gynecology: the Paradigm for the Next Century"*
- 1998 Roy M. Pitkin, M.D.**  
Editor, *Obstetrics and Gynecology*  
Editor, *Clinical Obstetrics and Gynecology*  
Former Professor and Chairman of Obstetrics and Gynecology, University of California, Los Angeles  
School of Medicine  
*"The Peer Review System in Medical Publishing"*
- 1997 John T. Queenan, M.D.**  
Professor and Chairman of Obstetrics and Gynecology, Georgetown University School of Medicine  
and Chief of Georgetown University Hospital since 1980  
Editor-in-Chief of *Contemporary Obstetrics and Gynecology*
- 1996 Moon Kim, M.D.**  
Richard L. Neiling Chair, Professor & Vice-Chairman of Obstetrics and Gynecology, Ohio State University,  
University Medical Center  
Associate Editor, *The American Journal of Obstetrics and Gynecology*  
*"Fertility and Environment"*

# OUTSTANDING RESIDENT RESEARCH

## *First Place Award*

- 2004 Scott D. Eaton, M.D.  
“EKG Changes Occuring with Magnesium Administration for Preterm Labor”
- 2003 Sapna M. Janas, M.D.  
“Rate of Complication from Third Trimester Amniocentesis Performed at the Fetal Diagnostic Center”
- 2002 Ian A. Oyama, M.D.  
“Local Anesthetic for use in Colposcopic Biopsies”
- Melissa J. Lawrence, M.D.  
“Impact of Fetal Fibronectin Testing at Kapi’olani Medical Center”
- 2001 Seema Sidhu, M.D.  
“Randomized, Double-Blind Trial of Rectal Misoprostol Versus Oxytocin in Management of the Third Stage of Labor”
- 2000 Deborah D. Geary, M.D.  
“TDx Surfactant/Albumin Ratio and Lamellar Body Count: Effect of Blood and Meconium Contaminants on Fetal Lung Maturity Assays”
- 1999 Steven M. Nishi, M.D.  
“Sample Adequacy of Endocervical Curettage (EEC) Compared with Endocervical Brush”
- 1998 Julie Ann Henriksen, M.D.  
“Nitric Oxide in the Human Placenta”
- 1997 Cheryl Leialoha, M.D.  
“Uriscreen, a Rapid Enzymatic Urine Screening Test for the Detection of Bacteriuria in Pregnancy”
- 1996 Christine Brody, M.D.  
“Vaginal Birth After Cesarean Section in Hawaii: Experience at Kapiolani Medical Center for Women and Children”



# RESEARCH DAY PROGRAM

*Wednesday, March 9, 2005*

- 8:30 a.m.      *Registration/Continental Breakfast*
- 9:00 a.m.      *Welcome and Introduction of Speaker by Kenneth Ward, M.D., Chair*
- 9:15 a.m.      *“Angiogenesis and Ovarian Cancer”, Robert B. Jaffe, M.D.*
- 10:00 a.m.     *Chief Residents’ Research Presentations*

<b>TIME</b>	<b>PRESENTER</b>	<b>ABSTRACT</b>
10:15 a.m.	<i>Bliss E.K. Kaneshiro, M.D.</i>	<i>“Effect of Delivery Route on Natural History of Cervical Dysplasia”</i>
10:30 a.m.	<i>Leanne Kon, M.D.</i>	<i>“Third and Fourth Degree Perineal Injury After Vaginal Delivery: Does Race Make a Difference? “</i>
10:45 a.m.	<i>Alexandra J. Sueda, M.D.</i>	<i>“Comparison of Sexual Risk Behavior in Adolescent Women Before and After Human Papilloma Virus Education”</i>
11:00 a.m.	<i>Mikiko A. Yazawa Bunn, M.D., M.P.H.</i>	<i>“Domestic Violence Screening in Pregnancy: Comparing Prevalence and Detection Rates with Obstetrics- Gynecology Practices and Perceptions of Screening in a Hospital-Based Clinic and the Private Community”</i>
11:15 a.m.	<i>Reni A. Soon, M.D.</i>	<i>“Comparison of Active Phase and Second Stage of Labor in Adolescents and Adults”</i>
11:30 a.m.	<i>Amy A. Hakim, M.D., M.S., M.A.</i>	<i>“Estrogen Use and Depressive Symptoms in Women with Healthy Cognitive Function: The Honolulu-Asia Aging Study”</i>
11:45 a.m.	<i>Buffet Lunch (Prince Court Restaurant) and Judges’ Deliberations</i>	
12:45 p.m.	<i>Awards Presentation - Lynnae Millar, M.D. and Robert B. Jaffe, M.D.</i>	
1:00 p.m.	<i>Closing</i>	

# BLISS E.K. KANESHIRO, M.D.

*Bliss Emi Kanani Kaneshiro, M.D.*

*Honors/Awards:*

*Department of Obstetrics & Gynecology:*

*2004 - Association of Professors of Gynecology  
& Obstetrics Resident Scholar Award*

*- American College of Obstetricians  
& Gynecologists, District VIII Junior  
Fellow Prize*

*- Donald F. Richardson Memorial Prize  
Paper Nominee*

*- Outstanding Resident for Excellence in  
Teaching Award*

*2003 - Outstanding Resident for Excellence in  
Teaching Award*



*University of Hawaii, John A. Burns School of Medicine, Honolulu, Hawaii*

*Honors/Awards:*

*2000 - Honors in Surgery Clerkship*

*- Honors in Obstetrics and Gynecology Clerkship*

*1998-2000 - Hans and Clara Zimmerman Foundation Scholarship*

*1998-1999 - John A. Burns School of Medicine Office of Medical Education Scholarship*

*B.A. Ancient History, Pomona College, Claremont, California*

*Honors/Awards:*

*1993-1997 - Marion MacMarrell Scott Scholarship*

*- Rotary Foundation Scholarship,*

*1993-1994 - Ray A. Kroc Achievement Award*

*- McKinley Foundation Scholarship*

*Hobbies & Interests: Surfing, fishing, hiking, and running*

*Place of Birth: Honolulu, Hawaii*

*Research Experience: Cecilia Shikuma, M.D., Hawaii Aids Clinical Trials Unit. Studied the incidence and clinical manifestations of HIV in different ethnic populations in Hawaii.*

*Richard Kasuya, M.D., Ke Ola Hawaii. Designed the Walking Improves Life program and investigated the efficacy of this program in improving the lifestyle of Queen Emma Clinic patients.*

*Richard Yanagihara, M.D., Retrovirology Research Laboratory. Analyzed techniques in long distance PCR for the characterization of HIV-positive blood samples from Vietnam.*

*Publications: Kaneshiro B, Acoba JD, Holzman J, Wachi K, Carney ME. Effect of Delivery Route on the Natural History of Cervical Dysplasia. American Journal of Obstetrics and Gynecology 2005 in press*

Blum C, Kaneshiro B, Lee A, Motosue J, Johnson DS. University of Hawaii School of Medicine Medical Education Poster Session, Increasing Awareness and Understanding the Under-Utilization of the Howard and Dorothy McGuire Fund, April 1999.

Kaneshiro B, Rebibis W, Enomoto H, McLaren C, Nakamura T, Richards K, Wong K, Kasuya R. University of Hawaii School of Medicine Medical Education Poster Session, Walking Improves Life (WIL): A Low Impact Walking Education Program for Queen Emma Clinic Patients. April 1999.

Kaneshiro B, Shikuma CM, Nerurka VR, Conrado T, Sousa S, Yanagihara R. RCMI International AIDS Symposium, Seroprevalence and Natural History of HIV/HTLV Co-Infected Individuals in Hawaii, November 1998.

## **EFFECT OF DELIVERY ROUTE ON NATURAL HISTORY OF CERVICAL DYSPLASIA**

***Bliss E.K. Kaneshiro, M.D., Jared D. Acoba, M.D., Michael E. Carney, M.D., Jennifer Holzman, M.D., and Kelly Wachi, M.D.***

### ***OBJECTIVES:***

It is hypothesized that cervical trauma and immunologic responses following vaginal delivery result in higher regression rates of dysplastic lesions in postpartum patients. However, this theory is not convincingly supported by the current literature. The purposes of this study were to determine: (1) impact of delivery route on the natural history of cervical dysplasia and (2) overall regression rates of cervical dysplasia in pregnant women

### ***STUDY DESIGN:***

A retrospective analysis was performed on 705 pregnant women with abnormal pap smears who presented for prenatal care at the Kapiolani Medical Center Women's Clinic in Honolulu, Hawaii between 1991 and 2001. Data collection included demographics, delivery route, and cervical pathology.

### ***RESULTS:***

Two hundred one patients met the inclusion criteria. Regression rates for vaginal and Cesarean section groups were: Atypical Squamous Cells (64% vs. 70%,  $p=0.32$ ), Low Grade Squamous Intraepithelial Lesion (58% vs. 42%,  $p=0.073$ ), and High Grade Squamous Intraepithelial Lesion (53% vs. 25%,  $p=0.44$ ). Of the total population, 30 percent of lesions persisted postpartum, 58 percent regressed, and 12 percent progressed.

### ***CONCLUSIONS:***

Mode of delivery does not influence the natural history of dysplastic lesions. Gravid and nongravid women have similar regression rates.

# LEANNE M. KON, M.D.

*Leanne Mayumi Kon, M.D.*

*University of Hawaii, John A. Burns  
School of Medicine, Honolulu, Hawaii*

*Honors/Awards:*

*1998 - Hawaii Society of Allergy,  
Asthma & Immunology  
Scholarship*

*B.S. Biology with Honors, University*

*of Hawaii, Honolulu, Hawaii*

*Honors/Awards:*

*1996 - 21st Annual West Coast  
Biological Science  
Undergraduate Research Award,  
Best Poster Presentation  
- Association for Women in Science Award*

*1995 - University of Hawaii, John A. Burns School of Medicine Annual Biomedical Science  
Symposium Award, Best Undergraduate Poster Presentation*

*Hobbies & Interests: Aerobics, fishing, animal care, sewing, reading, cooking, arts & crafts*

*Place of Birth: Honolulu, Hawaii*

*Research Experience: Summer Research Fellow, Hawaii Society of Asthma, Allergy &  
Immunology, Initiated a method of pollen collection for analysis in the Honolulu area.*

*Summer Research Fellow, Queen's Medical Center Summer Research Program, A chart review  
of all coronary artery bypass graft (CABG) patients at Queen's Medical Center over a  
two-year period comparing saphenous vein vs. internal mammary artery grafting in CABG  
surgeries in relation to post-operative mortality and morbidity.*

*Undergraduate Research Fellow, Howard Hughes Medical Institute Program, Analyzed  
the topography of cytochrome b558, a component of the NADPH-oxidase generating  
superoxide oxyanion, under the supervision of Richard Gullary, Ph.D of the University of Hawaii  
Department of Biochemistry and Biophysics.*

*Publication: Jianrong Li, Leanne M. Kon, Richard John Guillory, Ph.D. Federation of European  
Biochemical Societies (FEBS) Letters, Papain Proteolysis Releases a Soluble NADPH Dependent  
Diaphorase Activity from Bovine Neutrophil Membranes, January 1998, vol: 424, 188-192.*



# **THIRD AND FOURTH DEGREE PERINEAL INJURY AFTER VAGINAL DELIVERY: DOES RACE MAKE A DIFFERENCE?**

*Leanne M. Kon, M.D., Mark Hiraoka, M.D., Bruce Kessel, M.D., and Todd Seto, M.D.*

## ***INTRODUCTION:***

Vaginal delivery can cause severe (third and fourth degree) perineal injury and result in long term morbidity, i.e., urinary and fecal incontinence and pelvic organ prolapse. Many studies have examined risk factors for perineal injury during childbirth with the single greatest risk being episiotomy. Other factors include operative delivery, length of second stage, macrosomia, nulliparity, etc. Studies have started to examine whether there are interracial differences in the rates of severe perineal lacerations during vaginal delivery. Goldberg et al. reported women of Asian descent to be at highest risk of third and fourth degree perineal injury during vaginal delivery, holding all other risk factors constant. However, his Asian patient population was fairly limited with a predominance of Chinese. In Hawaii, we have a significant number of Asian patients and are able to subdivide the Asian race into subgroups including Japanese, Chinese, Filipino, etc. The purpose of our study is to examine the rates of severe perineal injury in different Asian subgroups and Pacific Islanders compared to Caucasian women.

## ***OBJECTIVE:***

The purpose of this study was to examine the impact of maternal ethnicity on the risk of developing third and fourth degree perineal lacerations after vaginal delivery. We hypothesize that maternal ethnicity will be an independent risk factor with women of Asian subgroups having a significantly higher rate of third and fourth degree perineal lacerations compared to Caucasian women.

## ***STUDY DESIGN:***

A retrospective, case-control chart review was performed. We reviewed two thousand, four hundred sixty-seven records of vaginal deliveries from January 1, 2002 through December 31, 2003 at the Queen's Medical Center in Honolulu, Hawaii. Cases were defined as those who had a documented third degree or greater perineal laceration. Control subjects delivered vaginally with less than or equal to a second degree perineal laceration. For each patient, the following demographic variables were obtained: maternal height and weight, age, maternal and paternal race, education and employment. Obstetric variables included gestational age, parity and the presence of diabetes mellitus (pregestational vs. gestational). Labor variables included induction vs. spontaneous labor, anesthesia type, and length of second stage. Delivery variables included operative delivery, episiotomy, and laceration/extension. Finally, fetal variables were birth weight and position of child upon delivery. Univariate and multivariate analysis were performed with the use of logistic regression.

## ***RESULTS:***

Chart review is currently in progress and results are pending final data collection.

## ***CONCLUSIONS:***

Preliminary data reveal patients of Japanese and Filipino descent have higher rates of third and fourth degree perineal lacerations compared to Caucasian women. Pacific Islanders have a lower rate of third and fourth

# ALEXANDRA J. SUEDA, M.D.

*Alexandra Jane Sueda, M.D.*

*Honors/Awards:*

*Alpha Omega Alpha Honorary Housestaff  
Member*

*Department of Obstetrics & Gynecology:*

*2004 - American College of Obstetricians  
& Gynecologists, District VIII  
Junior Fellow Chair*

*- Outstanding Resident for  
Excellence in Teaching Award*

*2003 - American College of Obstetricians  
& Gynecologists, District VIII  
Junior Fellow Vice-Chair*

*- Outstanding Resident for Excellence  
in Teaching Award*

*- Berlex Laboratories Best Teaching Resident*



*Keck School of Medicine at the University of Southern California , Los Angeles, California*

*Honors/Awards:*

*2001 - Frederick N. Elliot Award, awarded to medical student who best exemplifies the humanitarianism of Dr. Elliot*

*2000 - 2001 - Dean's List*

*B.A. Sociology with Honors & Cum Laude, The Colorado College, Colorado Springs, Colorado*

*Honors/Awards:*

*1996 - Phi Beta Kappa*

*- Pi Gamma Mu, International Social Science Honor Society  
- Leadership Award for Community Service*

*1992 - 1996 - Dean's List*

*Hobbies & Interests: Reading, traveling, knitting, piano playing, spending time with my husband, son, and dogs*

*Place of Birth: Anchorage, Alaska*

*Research Experience: Clinical Research Fellow, University of Southern California School of Medicine, Department of Obstetrics and Gynecology*

*Publication: Hindle WH, Arias RD, Felix JC, Sueda A , "Breast Cancer: Adaptation of Fine-Needle Aspiration to Office Practice", Clinical Obstetrics and Gynecology. 45(3): 761-6, 2002.*

*Women's and Children's Hospital, Los Angeles, Department of Obstetrics and Gynecology.*

*Compiled and analyzed data and wrote a manuscript for above publication. Presented results at the University of Southern California School of Medicine Research Forum and Poster Day, April 1999.*

# COMPARISON OF SEXUAL RISK BEHAVIOR IN ADOLESCENT WOMEN BEFORE AND AFTER HUMAN PAPILLOMA VIRUS EDUCATION

*Alexandra J. Sueda, M.D., LeighAnn Frattarelli, M.D., and Steve Shaha, Ph.D.*

## **BACKGROUND:**

High-risk human papillomavirus (HPV) infection has been causally related to the development of cervical cancer. Past studies have demonstrated an association between certain sexual behaviors and high-risk HPV infection. Adolescents have been shown to have a lack of knowledge about HPV, but have the ability to retain information once they are educated. In studies of other health issues, it has been shown that knowledge alone does not influence behavior. It is unknown whether knowledge about HPV may change high-risk sexual behaviors among adolescents.

## **OBJECTIVES:**

1. Evaluate for changes in HPV knowledge and high-risk sexual behavior after education.
2. Evaluate associations between HPV knowledge and high-risk sexual behavior.

## **METHODS:**

Women ages fourteen to eighteen filled out a questionnaire designed to assess knowledge about HPV and high-risk sexual behavior scores. Sexual risk scores were determined based on previously published scales designed to evaluate risk for acquiring HPV with casual and long-term partners. A short educational session regarding HPV was then conducted. The participants filled out a second questionnaire six to twelve months later, which re-evaluated HPV knowledge and sexual risk scores for activity with both long-term partners and casual partners. Knowledge and risk scores and changes in these scores were compared using Pearson correlation.

## **RESULTS:**

Seventy women agreed to participate in this study, filled out the initial questionnaire and participated in the HPV educational session. Twenty participants filled out the second questionnaire six to twelve months after the educational session. 32.9 percent described their ethnicity as part-Hawaiian. The percent of participants who were correct about the purpose of pap testing more than doubled (13.5% pre-test vs. 29.4% post-test) after education, although this was not statistically significant. Mean knowledge scores were not significantly different before and after the HPV education session (52% vs. 56%,  $p = .469$ ). Similarly, mean sexual risk scores did not change significantly at the time of follow-up for either long-term partner risk (13.3 vs. 13.9,  $p = .598$ ) or casual partner risk (6.1 vs. 7.5,  $p = .215$ ). However, improvements in knowledge scores were associated with improvements in sexual risk scores. Favorable changes (increases) in knowledge score were significantly correlated with follow-up long-term partner risk scores ( $r = -.490$ ,  $p = .028$ ) and casual partner risk scores ( $r = -.598$ ,  $p = .005$ ). Additionally, favorable changes in knowledge scores (increases) were significantly correlated with favorable changes (decreases) in long-term partner risk scores ( $r = -.489$ ,  $p = .029$ ) and casual partner risk scores ( $r = -.547$ ,  $p = .013$ ) over the six to twelve months to follow-up.

## **CONCLUSIONS:**

Knowledge regarding HPV and the purpose of pap smear testing is poor among this adolescent population. Education regarding risk reduction is essential to the medical care of adolescents. In this study population, educating young women regarding HPV and sexual risk has a significant favorable effect on their behavior. Poor follow-up of our participants even after health education may indicate an obstacle to caring for this population. New and innovative programs should be designed to provide tools in addition to education to diminish risk-taking behavior.

# MIKIKO A. YAZAWA BUNN, M.D., M.P.H.

*Mikiko A. Yazawa Bunn, M.D, M.P.H.*

*University of Hawaii, John A. Burns School  
of Medicine, Honolulu, Hawaii*

*M.P.H. Health Education, University of Hawaii  
School of Public Health, Honolulu, Hawaii*

*B.A. English, Williams College, Williamstown,  
Massachusetts*

*Honors/Awards:*

*1989-1991 Dean's List*

*Hobbies & Interests: Public health, music, art,  
and crafty things*

*Place of Birth: Cleveland, Ohio*

*Volunteer Experience: Violinist, Berkshire Symphony Orchestra, and the William College String Quartet*  
*- Board of Directors, Honolulu Chamber Music Series*  
*- Hawaii Department of Health, Hypertension Program*

*Work Experience: Windward Division Director, American Heart Association, Hawaii Affiliate*  
*- Intern, Pucker Safray Gallery, Boston, Massachusetts*  
*- Freelance Editor, University of Hawaii Center on the Family*

*Research Experience: Needs Assessment Project, Waimanalo Health Center, Waimanalo, Hawaii*  
*- Development and publication of a Food and Drug Interaction pamphlet for Saint Francis Medical  
Center, Honolulu, Hawaii*  
*- Research Assistant, Immunologic Research Laboratory, Shriners Hospital for Children, Honolulu,  
Hawaii*

*Publication: M. Yazawa, The World of Obstetrics & Gynecology, HIV/AIDS in Thailand: Implications for  
Asia, August 1996, volume:48, pages: 67-71*

## **DOMESTIC VIOLENCE SCREENING IN PREGNANCY: COMPARING PREVALENCE AND DETECTION RATES WITH OB-GYN PRACTICES AND PERCEPTIONS OF SCREENING IN A HOSPITAL-BASED CLINIC AND THE PRIVATE COMMUNITY**

***Mikiko Yazawa Bunn, M.D., M.P.H., and Willie J. Parker, M.D., M.P.H.***

### ***INTRODUCTION:***

Routine and universal screening for domestic violence (DV) is a recommended component of prenatal care by the American College of Obstetrics and Gynecology. However, even in primary care settings, only 10 percent of physicians routinely screen for DV. Domestic violence affects as many as three hundred twenty-four thousand pregnant women each year, with conservative prevalence estimates at 7-8 percent. Violence in pregnancy is associated with multiple maternal and infant health problems, including delayed prenatal care, preterm labor and low birth weight, as well as with increased health care costs. Pregnancy has been described as a unique time when women tend to take greater interest in and responsibility for their own health and that of their children. Taking into account the intimate nature of prenatal care encompassing monthly and weekly prenatal visits, the prenatal course may provide the greatest opportunity to screen for DV. Despite ACOG recommendations that pregnant women be screened in every trimester, it is unclear if such screening actually occurs and how obstetricians view screening for DV in this community.





**OBJECTIVES:**

The goals of the study are to (1) compare the prevalence of prenatal screening and detection rates for domestic violence in a hospital-based clinic setting vs. private obstetric practices in Honolulu and (2) explore provider perspectives on screening.

**MATERIALS AND METHODS:**

We reviewed prenatal charts of all Queen Emma Clinic (QEC) patients who presented for prenatal care and delivered at Queen's Medical Center (QMC) during a twelve-month window, October 2003 through October 2004 (105). We also reviewed a randomized sampling of prenatal charts of patients of private obstetricians in the community during the same time period who delivered at QMC, representing approximately 10 percent of all QMC deliveries (189). Eighty-five clinic charts and one hundred eighty-five private charts met inclusion criteria..

In addition, we surveyed all private obstetricians who deliver regularly at QMC (33) and all current OB-GYN residents (25) regarding DV screening practices.

Main Outcome Measure: Prevalence of DV screening and detection based on prenatal records; cost-excess projection based on assessment of acknowledged risk factors for DV victimization; analysis of provider self-assessment of DV screening practices based on a 6-item questionnaire, with responses compared by physician sex, practice setting, and domestic violence training.

**RESULTS:**

Ninety-eight percent (83) of the QEC patients were not screened for DV during pregnancy, compared to 70 percent (129) of private patients. However, 80 percent (45) of private patients indicated as "screened" had a "global negative" screen: no positive responses to a comprehensive list of medical problems, including "trauma and violence." A sole case of DV was identified, postpartum, among the QEC population, while no cases of DV were identified among the private patients.

Patients who were screened were more likely to have had prenatal care by a female practitioner (42) than a male practitioner (14) ( $p=0.0001$ ).

QEC patients were more likely to have multiple risk factors associated with victimization (age <24 years, late prenatal care, public insurance, and single marital status) than patients of private providers.

Provider survey: Though most (76%) were aware that ACOG recommends DV screening in pregnancy, the majority of private practitioners and residents (69%) "never or rarely" screened their patients. The data suggested that female practitioners were more likely to screen than male practitioners and that younger physicians (<age 50) were more likely to screen than older physicians (>age 50). Recent domestic violence training made no difference in likelihood of screening.

Ninety-two percent of physicians perceived barriers to screening. The most frequently perceived barriers identified were lack of time, lack of privacy (partner in room), and inadequate training. Perceived barriers were not consistently associated with physician gender, age or clinical setting.

**CONCLUSIONS:**

Despite professional recommendations and awareness of those recommendations, during 2003-2004, routine prenatal screening for DV was notoriously lacking for patients delivering at Queen's Medical Center. The Queen Emma Clinic in particular, despite having a patient population that is at high risk for domestic abuse, was deficient in its screening practices. The detection rates in both private and clinic-based settings were not consistent with national prevalence data, which may indicate a lack of coordinated screening efforts. Both private obstetricians and residents are missing opportunities to screen for domestic violence in pregnancy, with important clinical and fiscal implications.

# RENI A.Y. SOON, M.D.

*Reni Aukai Yukie Soon, M.D.*

*University of Hawaii, John A. Burns School  
of Medicine, Honolulu, Hawaii*

*Honors/Awards:*

*2001 - Alpha Omega Alpha Honor  
Medical Society  
-Janet M. Glasgow Memorial  
Achievement Citation*

*2000 - Honors in Obstetrics &  
Gynecology Clerkship  
- Honors in Surgery Clerkship  
- Honors in Family Practice Clerkship*



*B.A. Human Biology, Stanford University,  
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## **COMPARISON OF ACTIVE PHASE AND SECOND STAGE OF LABOR IN ADOLESCENTS AND ADULTS**

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### ***RESEARCH PROBLEM:***

The State of Hawaii is ranked 12<sup>th</sup> in the nation for incidence of adolescent pregnancies, with 10 percent of all deliveries occurring in women under the age of twenty. With such a large percentage of deliveries being in this age group, it is important to understand any differences in obstetric outcomes particular to this population.

In 1955, Friedman published a classic study on primigravid labor that remains the standard for normal labor progression. Our current definitions of labor protraction and arrest are based on the 95<sup>th</sup> percentile of various parameters in Friedman's population, and these standards have been in practice for the last fifty years. Recent studies, however, have questioned the applicability of Friedman's curve in contemporary practice as well as in different populations. Anecdotally, adolescents are known as a group that demonstrates faster progression through labor than their mature counterparts.

**OBJECTIVE:**

The objective of this study was to compare the labor progression of adolescents in spontaneous labor to that of adult controls. Our hypothesis was that adolescents have a shorter duration of both the active phase of the first stage and the second stage of labor as compared with adults.

**STUDY DESIGN:**

This was a retrospective cohort study comparing the labor progression of term nulliparous adolescents in spontaneous labor to that of adult controls. Two hundred eighty-one patients, ages fourteen to eighteen delivered at Kapiolani Medical Center for Women and Children between 1997 and 2004 were compared to six hundred eighty-five controls ages twenty to thirty-four. Multiple gestation, labor induction, and deliveries ending in Cesarean section were excluded. Labor data for adolescent versus adult parturients was contrasted primarily using *t*-tests.

Based on past research in this area, it was calculated that a minimum of sixty-five patients in each group would be required to determine a 25 percent difference in the time of active phase and two hundred fifty-three patients in each group would be required to determine a 25 percent difference in the length of second stage.

**DATA ANALYSIS:**

There were no significant differences between the two groups in cervical dilation on admission, mean birth weight, frequency of operative vaginal deliveries, frequency of oxytocin augmentation or the incidence of chorioamnionitis. Epidural use was significantly higher in the adult cohort.

There was no significant difference in the duration of the active phase of labor between teen and adult parturients ( $3.48 \pm 1.97$  hours versus  $3.72 \pm 2.25$  hours). The duration of the second stage of labor was significantly lower in the adolescent group ( $1.12 \pm 1.07$  hours versus  $1.54 \pm 1.21$  hours). Despite the difference in frequency of epidural use, two-way analysis of variance yielded statistical significance for adolescents versus adults and in epidural versus non-epidural groups. Therefore, epidural use did not explain the statistically significant difference in the duration of second-stage labor.

**CONCLUSIONS:**

Although adolescents' time in active labor is equal to that of adults, they do have a significantly shorter second stage of labor, with or without epidural anesthesia. This knowledge is important in the recognition and management of labor disorders in adolescents. It may also help to better prepare the clinician for the rapid second stage of their adolescent patients.

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# **ESTROGEN USE AND DEPRESSIVE SYMPTOMS IN WOMEN WITH HEALTHY COGNITIVE FUNCTION: THE HONOLULU-ASIA AGING STUDY**

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## ***BACKGROUND:***

Although equivocal, evidence suggests that estrogen use in women is associated with a lower frequency of depressive symptoms. Less is known, however, whether this relationship persists in the absence of dementia or in the absence of mild or moderate cognitive impairment.

## ***OBJECTIVE:***

To examine the relationship between estrogen use and depressive symptoms in women with healthy cognitive function.

## ***MATERIALS AND METHODS:***

Study participants were wives or daughters of a sample of men enrolled in the Honolulu-Asia Aging Study. For this report, two hundred sixty women ages thirty-nine to eighty-five years with healthy cognitive function were subjected to rigorous and structured questioning about depressive symptoms, cognitive function, and general health status during interviews that were conducted from 1991 to 1994. Use of estrogen was defined as at least once every other day on a regular basis. Healthy cognitive function was defined as a score > 85 on the Cognitive Abilities Screening Instrument. The presence of depressive symptoms was defined as a score > 8 on a modified version of the Center for Epidemiologic Studies Depression Instrument. Statistical methods included two-sample t-tests, chi-square tests for comparing two proportions, and binary logistic regression with adjustments for confounding characteristics.

## ***RESULTS:***

Overall, depressive symptoms were observed in twenty-two of the two hundred sixty women (8.5%). After age adjustment, the prevalence of depressive symptoms was 11.6 percent (19/170) in the nonusers of estrogen and 3.1 percent (3/90) in the users ( $p=0.029$ ). After additional adjustment for menopausal status, education, and cognitive function in a husband or father, there was a 3.9-fold excess in the odds of depressive symptoms in the nonusers of estrogen versus the users (95% confidence interval 1.1-14.3,  $p=0.041$ ). There was no apparent relationship between estrogen use and depressive symptoms in women whose cognitive function was less than healthy.

## ***CONCLUSIONS:***

In women with healthy cognitive function, use of estrogen was significantly associated with a lower frequency of depressive symptoms. Whether estrogen use has clinical applications in depressed women with healthy cognitive function warrants further study.

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