



Voice of the Military Family: Using Survey Methodology to Understand the Impact of Military Service on Family Health and Well-Being

Hope M. McMaster, PhD¹; Kari E. Sausedo, MA¹; Cynthia A. LeardMann, MPH¹; Isabel G. Jacobson, MPH¹; Nisara S. Granado, MPH, PhD¹; Besa Smith, MPH, PhD¹; Beverly D. Sheppard, BS¹; John A. Fairbank, PhD²; Charles Marmar, MD³; William E. Schlenger, PhD⁴; and Tyler C. Smith, MS, PhD¹; for the Millennium Cohort Study Team

¹DoD Center for Deployment Health Research, Naval Health Research Center, San Diego, CA; ²Duke University Medical Center; Durham, NC; ³New York University Langone Medical Center, New York, NY; ⁴Abt Associates Inc., Durham, NC



Abstract

The Millennium Cohort Family Study will be the largest prospective study in military history designed to assess the interrelated health effects of military service and deployment on service members, spouses, and their children. The study team anticipates enrolling 10,000 spouses, of whom approximately half will be married to service members who have deployed in support of the operations in Iraq and Afghanistan. Participants will complete a web-based questionnaire covering mental/physical health, relationship quality, deployment/reunion, and service utilization. In addition, data will be linked to medical records collected and maintained by the DoD and Department of Veterans Affairs that include inpatient/outpatient care, pharmacology, and other data. The Millennium Cohort Family Study offers a unique opportunity to explore the interdependence of spouses' experiences and their impact on family health and well-being. A comprehensive understanding of the challenges faced by military families provides a vehicle to create truly effective interventions and support mechanisms.

Objectives

- Explore the impact of military service on the health and well-being of service members and their families
- Assess the importance of family support and other factors on positive and negative health outcomes
- Examine new-onset diseases and conditions among military spouses and children
- Inform policy makers and guide prevention measures that positively impact military families

Methods

- Invite 250,000 active-duty, Reserve, and National Guard service members with 2-5 years of service, oversampling for female and married personnel, to enroll in the fourth panel of the Millennium Cohort Study in 2010/2011
- Of the 250,000 invitees, half are married
- It is estimated that 25% of the invitees will enroll in the Millennium Cohort Study and that 65% of the married members will grant permission to contact their spouse (n ~ 20,313)
- 50% of the referred spouses are expected to enroll in the Family Study
 - n ~ 10,000
 - Approximately half will be married to service members who have deployed in support of the operations in Iraq and Afghanistan

Background



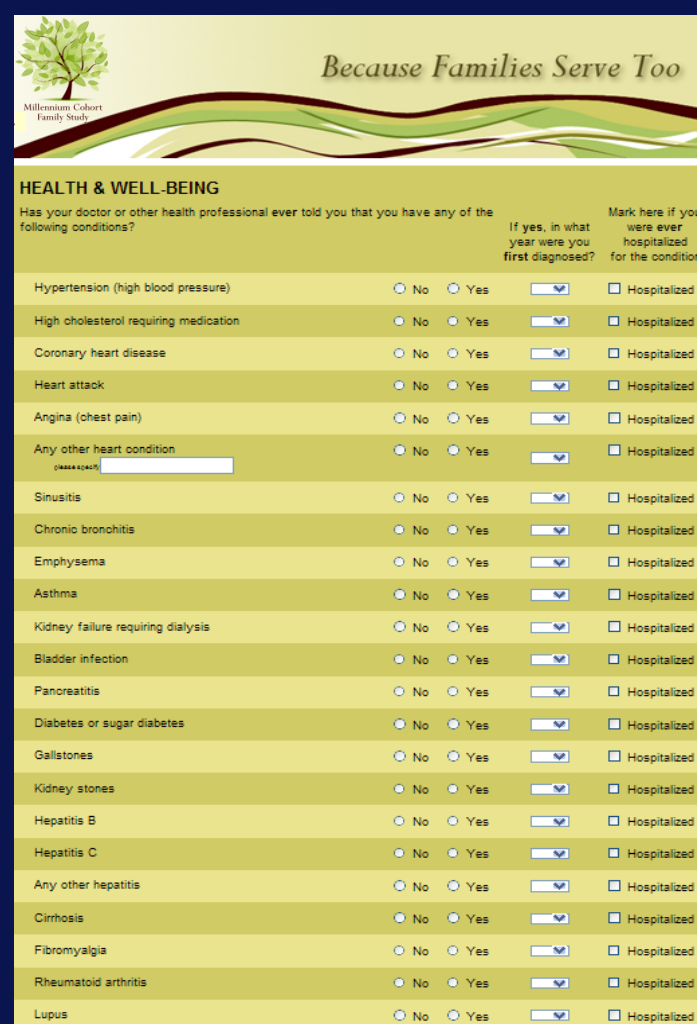
- The Millennium Cohort Study was launched in 2001 in collaboration with all US military services and the Department of Veterans Affairs, prior to the conflicts in Iraq and Afghanistan



- The Millennium Cohort Study has now enrolled over 151,000 service members that are surveyed every 3 years to examine how deployment and military occupational exposures affect the long-term health of military members and veterans

- Family relationships can be a source of support or stress for service members
- However, few epidemiologic studies have examined the impact of deployment on family members and family functioning
- In order to broaden our understanding and ability to address needs, a Family Cohort has been added to the 2010 Millennium Cohort enrollment cycle to assess the interrelated health effects of military service and deployment on service members, spouses, and co-resident children

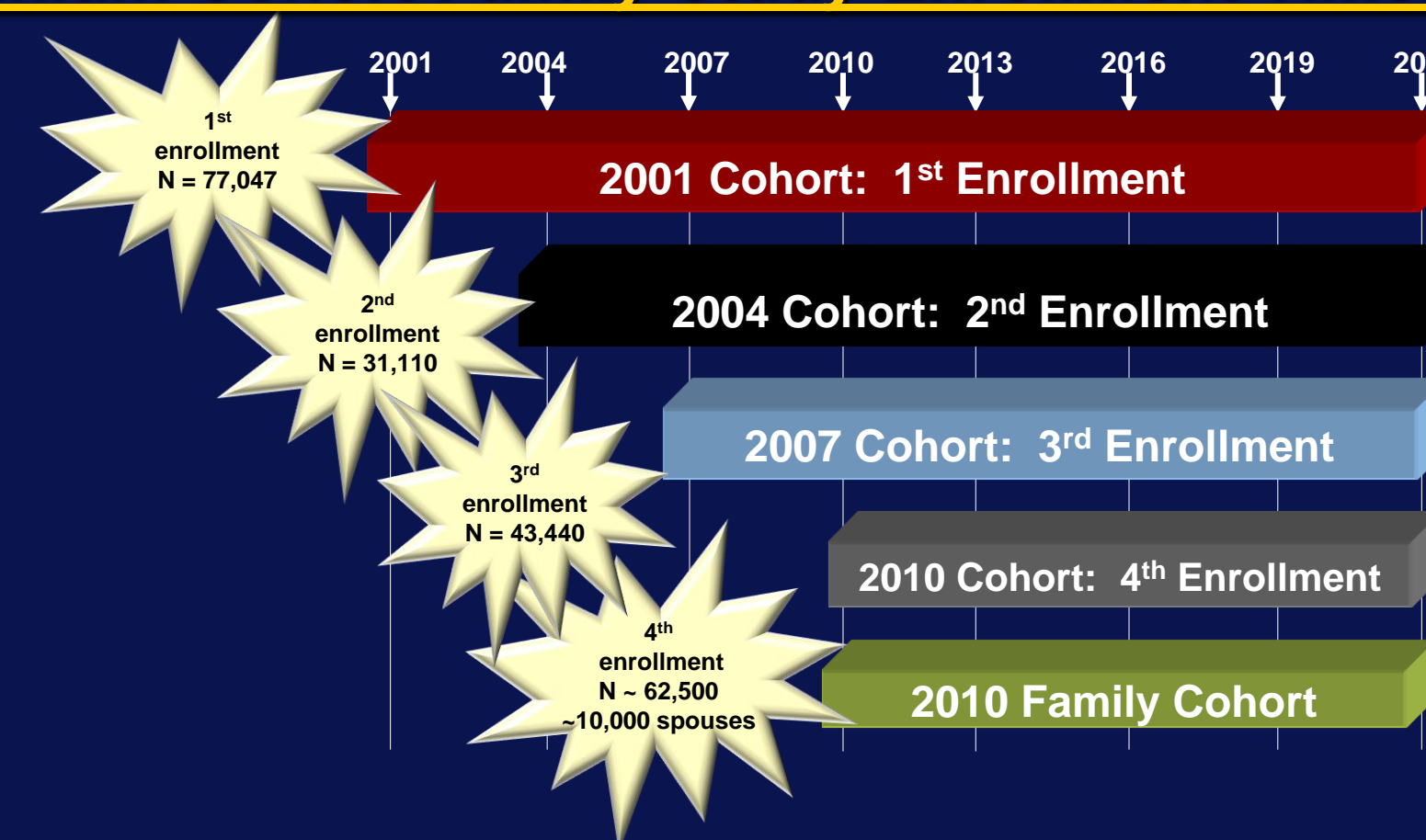
"You're heroes just as much as our men and women in uniform -- the spouses who stay behind, with all the pride of being a military wife or husband, but with also the fears and the anxiety that come when the person you love the most in the world is in harm's way." - Michelle Obama speaking at Camp Pendleton, CA June 20, 2010



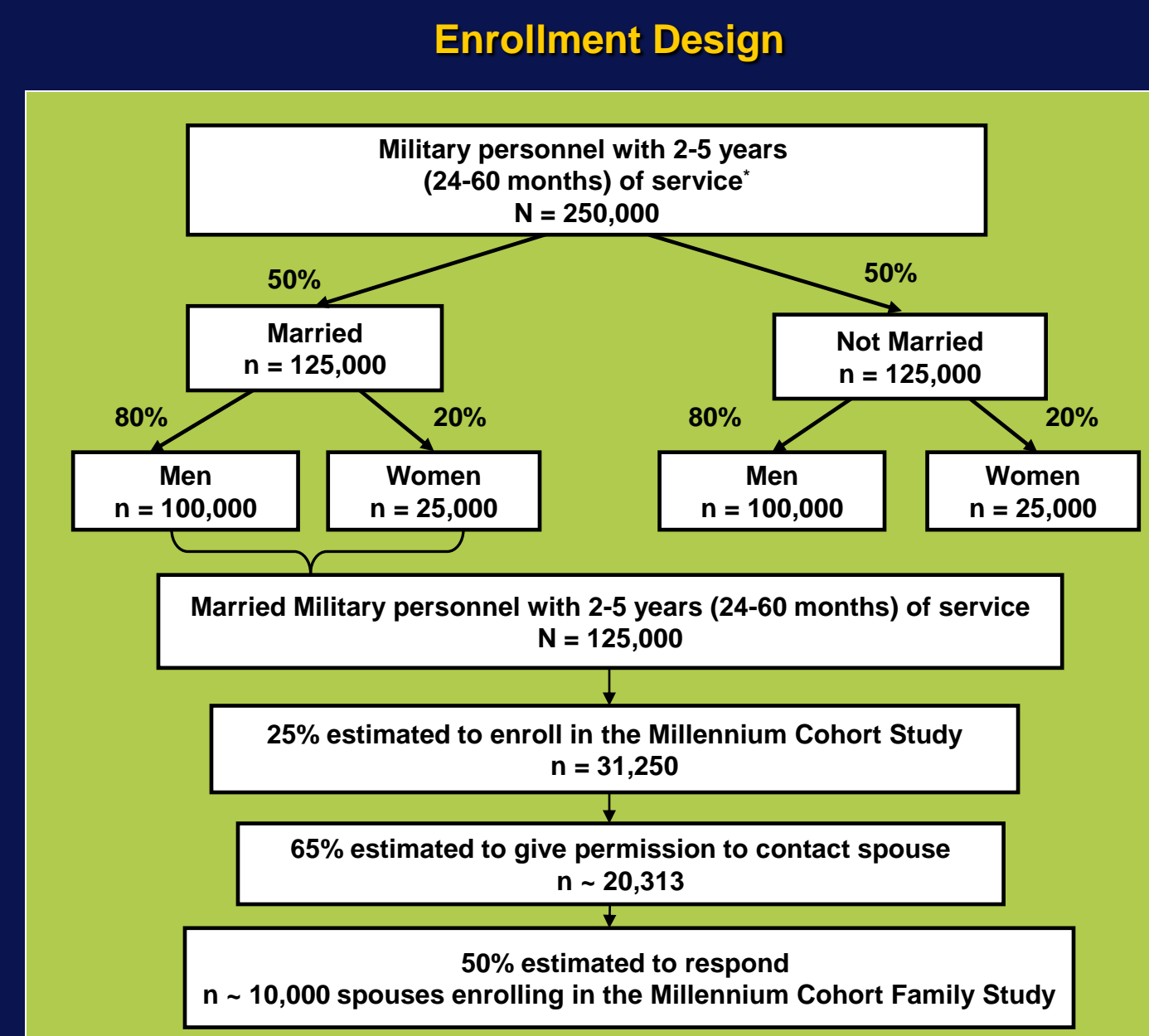
Longitudinal Contact

- Postcards and Study Updates will be sent to participants to promote Family Cohort identity, as well as to encourage participants to complete the survey and update their contact information

Millennium Cohort Family Study Enrollment Timeline



Summary of Participants



*Additional Defense Manpower Data Center (DMDC) specifications: Members must have complete data on social security number, first name, last name, date of birth, sex, race/ethnicity, service branch, component, pay grade, and marital status

Online Participation



- Large cost savings are associated with online enrollment
- Participants will receive their choice of a \$10 gift card to one of over 50 vendors



www.familycohort.org

Measured Health Outcomes and Impact

Main Survey Topics:

- Demographic information
- General health (including sleep)
- Spouse, family, child, and service member stress
- Impact of deployment and military service
- Family cohesion, expressiveness, and conflict
- Child behavioral, developmental and general health
- Health services
- Alcohol and tobacco use
- Military specific questions for active-duty spouses

Research will inform policy makers and guide intervention and prevention strategies related to:

- Family member resilience
- Deployment-related stress
- Family support dynamics
- Service member and family well-being
- Force readiness
- Military separation
- Barriers to care

Acknowledgements

The Millennium Cohort Study team includes Melissa Bagnell, Gina Creaven, James Davies, Gia Gumbs, Nisara Granado, Lesley Henry, Dennis Hernandez, Jaime Horton, Isabel Jacobson, Kelly Jones, Lauren Kipp, Cynthia LeardMann, Travis Lelue, Gordon Lynch, Jamie McCrew, Hope McMaster, Stacie Nguyen, Amanda Pietrucha, Teresa Powell, Kar Sausedo, Amber Seelig, Beverly Sheppard, Besa Smith, Tyler Smith, Katherine Snell, Steven Speigle, Marleen Welsh, Micha Wheeler, Martin White, James Whitmer, and Charlene Wong, from the Department of Defense Center for Deployment Health Research, Naval Health Research Center, San Diego, CA; Paul Amoroso, from the Madigan Army Medical Center, Tacoma, WA; Edward Boyko, from the Seattle Epidemiologic Research and Information Center, Veterans Affairs Puget Sound Health Care System, Seattle, WA; Gary Gekkerstar, from the Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, Bethesda, and the Analytic Services (ANSER), Arlington, VA; Gregory Gray, from the College of Public Health, University of Iowa, Iowa City, IA; Tomoko Hooper, from the Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, Bethesda; James Riddle and Timothy Wells, from the US Air Force Research Laboratory, Wright-Patterson Air Force Base, OH; and Margaret Ryan from the Naval Hospital Camp Pendleton, Camp Pendleton, CA.

Additionally, the authors thank Scott Seggerman from the Management Information Division, US Defense Manpower Data Center, Seaside, CA; Michelle Stola from the Naval Health Research Center; and all the professionals from the US Army Medical Research and Materiel Command, especially those from the Military Operational Medicine Research Program, Fort Detrick, MD. We appreciate the support of the Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD.

The views expressed in this research are those of the authors and do not necessarily reflect the official policy or position of the Department of the Navy, Department of the Army, Department of the Air Force, Department of Veterans Affairs, Department of Defense, or the US Government. Human subjects participated in this study after giving their free and informed consent. This research has been conducted in compliance with all applicable Federal Regulations governing the Protection of Human Subjects in Research.

We are indebted to the Millennium Cohort Study members for their continued participation!

