

Summary of Professional Experience

Dr. Tolley is a Behavioral Scientist II in the Behavioral and Social Science Research Unit of Family Health International. Through her research, she has examined acceptability and use of various contraceptive and reproductive technologies, including the perspectives of clients, their partners and social networks, and the service delivery environment. Current research focuses on microbicide acceptability and employs both qualitative and quantitative research methods to first develop scales (e.g., HIV risk perception, couple sexual communication, acceptability of product attributes) and then longitudinally assess their influence on consistent use. In recent years, she has played a central role in the planning and implementation of several important meetings to address the measurement and optimization of adherence and examine issues related to pregnancy in microbicide clinical trial research. Past research has assessed aspects of Norplant and DMPA acceptability and use, as well as adolescent abortion. Betsy brings to FHI experience in the training and use of qualitative research methods, including rapid appraisal and participatory techniques; a background in international economics; and over fifteen years of experience living and working in developing countries. She speaks fluent French, has a working knowledge of Hindi/Urdu and Arabic and has conducted studies in Senegal, Cote d'Ivoire and Guinea, as well as Haiti, Egypt, Jordan and India.

Education

Ph.D., Health Behavior and Health Education, University of North Carolina at Chapel Hill, 2005M.A., International Relations, Paul Nitze School of Advanced International Studies (SAIS), The Johns Hopkins University, Washington, DC, 1990

B.A., French, College of William and Mary, Williamsburg, Virginia, 1981

Professional Experience

1994 to 2011

Scientist II, Behavioral & Social Science Research Unit, Health & Development Sciences Department, Family Health International, Research Triangle Park, NC

Designs and conducts behavioral and programmatic research in developing countries with a focus on acceptability of contraceptive and HIV-risk reduction technologies. Specific responsibilities include: project development and implementation, data management and analysis, study monitoring and report writing. In addition, conducts workshops on the use of qualitative research data collection and analysis for data collectors of own studies, as well as for the WHO, NIH Institutes and other partners such as the Research and Management Unit (RMU) of the Egyptian Ministry of Health. One of three authors of a Jossey-Bass publication on the use of qualitative methods for reproductive health research. Provides technical assistance to in-country researchers. Collaborates with other FHI staff as needed on working groups to develop and implement organization-wide strategies. Supervises six to eight research staff. Provides technical and budgetary oversight for department's HIV-related research portfolio.

Recent research includes:

 PI of a NIMH-funded RO1 that proposes to conduct formative community-level research and a pilot prospective clinic-based study in India and Tanzania to investigate the barriers and opportunities related to including adolescent women aged 15-21 in future microbicide or other HIV prevention trials. (9/31/09-5/31/12)

- Co-investigator on Proof of Deliverability of PrEP project funded by the Bill and Melinda Gates Foundation.
- Co-investigator on a study aimed at developing a psychometric scale to measure the likelihood that a woman will become pregnant. (2008-present)
- Co-investigator on a mixed-method study to provide an understanding of the barriers to family planning use with a view to inform future programs and policies aimed at increasing contraceptive prevalence in Rwanda. (7/1/2009-6/30/2010)
- PI of a longitudinal, mixed-method study, conducted in parallel with a Phase II microbicide clinical trial, to identify factors predicting initiation and sustained use of vaginal microbicides among couples in Pune, India. (2002-8/30/2009)

Management activities include:

- HIV Portfolio Manager of approximately 40 research studies of varying funding totals and project timelines under the CTRU. Duties included working with project leads and coordinators to follow project progress, monitor and revise budgets and problem solve.
- Supervise from 6-8 full-time staff, providing mentoring on project work, conducting performance appraisals.
- Behavioral Expert on Prevention Technologies Agreement with USAID.

1993 to 1994 Consultant, Apnalaya, Bombay, India

> Designed and conducted participatory research to understand the context of women's health in a Bombay slum. Assisted Apnalaya to develop strategies for improving the health and well-being of poor women in their project area.

> Conducted in-house training program on the use of participatory research methods for NGO social workers and para-professionals.

Consultant, Crop International Research for the Semi-Arid Tropics, Hyderabad, India

1991 to 1993 Consultant, Johns Hopkins University Project on Qualitative Methods for Research on Women's Health Issues, Bombay, India

1990 to 1991 Volunteer Coordinator, The Washington Free Clinic, Washington, DC

> Assisted in the design and conduct of a training program for ethnographers in the use of qualitative methods for a study on food security issues. Training included classroom and field-based modules.

Consultant, The Pathfinder Fund, Cairo, Egypt

Conducted a survey of 11 family planning clinic delivery projects funded by USAID. Developed a system for easy retrieval, update and comparison of pricing, salary, and service information of the various projects.

1988 to 1990 Project Coordinator, The Centre for Development and Population Activities, Washington, DC

Family Planning International Assistance, New York, NY

1992

1989

1986 to 1988

1985 to 1986 Development Coordinator, U.S. Peace Corps, Morocco, North Africa

1984 to 1985 English Teacher

Languages

English French Arabic (Classical and Moroccan Dialect) Hindi/Urdu German

Publications

In Press

Marlow, H.M; Tolley, E.E.; Weaver, M.A.; Kohli, R.; Mehendale, S. "Changes in condom use during a microbicide acceptability study and clinical trial in Pune, India." <u>AIDS Care</u>, (In press March 2011.)

Kohli, Rewa; Tsui, Sharon; Mehendale, Sanjay; Tolley, Elizabeth. "Indian Married Men's Interest in Microbicide Use." <u>AIDS Care</u>, (In press March 2011.)

Albert, L.M.: Akol, A.; L'Engle, K.; Tolley, E.E.; Ramirez, C.; Baine, S.O.; Opio, A.; Tumwesigye, N. M. "Acceptability of male circumcision for prevention of HIV infection among men and women in Uganda." <u>AIDS Care</u>, July 2011.

Tolley, Elizabeth E.; Tsui, Sharon; Mehendale, Sanjay; Weaver, Mark A.; Kohli, Rewa. "Predicting Product Adherence in a Topical Microbicide Safety Trial in Pune, India." (In press <u>AIDS & Behavior</u>, August 2011.)

Taylor, Douglas J.; Lie, Che-Chin; Weaver, Mark A.; Tolley, Elizabeth; Van Damme, Lut; Halpern, Vera; Feldblum, Paul; Ogunsola, Folasade; Obunge, Orikomaba; Ramjee, Gita; Alary, Michel; and Mirembe, Florence. "Notes on the Frequency of Routinely Collected and Self-Reported Behavioral Data in HIV Prevention Trials." AIDS & Behavior 2010: 15(2):389-395.

Bentley, Margaret E.; Tolley, Elizabeth E.; Pequegnat, Willo. "Qualitative Inquiry: An End Not Just a Means." In Pequegnot, W.; Stover, E.; Boyce, C. (ed.) 2010, <u>How to Write a Successful Research grant Application: A Guide for Social and Behavioral Scientists</u>, Springer Publications.

Marlow, Heather M.; Tolley, Elizabeth E.; Kohli, Rewa; Mehendale, Sanjay. "Exploring Married Couples' Sexual Communication within the Context of a Microbicide Clinical Trial and Acceptability Study in Pune, India." Culture, Health & Sexuality 2010: 12(8): 899-912.

Tolley, Elizabeth E; Harrison, Polly F; Goetghebeur, Els; Morrow, Kathleen; Pool, Robert; Taylor, Doug; Tillman, Stephanie N; van der Straten, Ariane. "Measuring Adherence in Phase 2/3 Microbicide Trials." <u>AIDS & Behavior</u>, 2010: 14:1124-1136.

Greene E, Batona G, Hallad J, Johnson S, Neema S, Tolley EE. "Factors Affecting Acceptability and Adherence of a Candidate Microbicide Gel among High-Risk Women in Africa and India." <u>Culture, Health & Sexuality</u> 2010:12(7): 739-754.

Lopez LM, Tolley EE., Grimes DA, Chen M. Theory-based interventions for contraception. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD007249. DOI: 10.1002/14651858.CD007249.

Ramjee G; Doncel G, Mahendale S; Tolley B; Dickson K. "Microbicide 2008 Report, New Delhi." <u>Journal of AIDS Research and Therapy 2008;5(19)</u>.

Raymond, Elizabeth G; L'Engle, Kelly L; Tolley, Elizabeth E; Ricciotti, Nancy; Arnold, Martha V; Park, Sola. "Comprehension of a Prototype Emergency Contraception Package Label by Female Adolescents," Contraception, September 2008;77: 333-337.

Raymond, Elizabeth; Taylor, Douglas; Cates, Willard; Tolley, Elizabeth; Borasky, David; Cancel, Aida; Masse, Benoit; Bukusi, Elizabeth; Johnson, Brooke. "Pregnancy in Effectiveness Trials of HIV Prevention Agents." Sexually Transmitted Diseases, November 2007; 34(11).

Tolley, Elizabeth; Eng, Eugenia; Kohli, Rewa; Bentley, Margaret; Mehendale, Sanjay; Bunce, Arwen; Severy, Lawrence. "Examining the context of microbicide acceptability among married women and men in India." Culture, Health & Sexuality, July-August 2006;8 (4):351-369.

Tolley, Elizabeth and Lawrence Severy,. "Integrating Behavioral and Social Science Research into Microbicide Clinical Trials: Challenges and Opportunities." <u>American Journal of Public Health</u>, January 2006; 96(1):79-83.

Tolley, Elizabeth; Loza, Sarah; Kafafi, Laila; Cummings, Stirling. "The Impact of Menstrual Bleeding on Contraceptive Discontinuation: Findings from a Longitudinal Study in Cairo, Egypt". <u>International Family Planning Perspectives</u>, March 2005; 31(1):15-23.

Severy, Lawrence; Tolley, Elizabeth; Woodsong, Cynthia; Guest, Greg. "A Framework for Examining the Sustained Acceptability of Microbicides". <u>AIDS and Behavior</u>, March 2005; 9(1):121-131.

Bentley, Margaret E.; Fullem, Andrew M.; Tolley, Elizabeth E; Kelly, Clifton; Jogelkar, Neelam; Srirak, Namtip; Mwafulirwa, Liness; Khumalo-Sakutukwa, Gertrude; and Celentano, David D. "Acceptability of a Microbicide Among Women and Their Partners in a Four-Country Phase I Trial". <u>American Journal of Public Health</u>, July 2004; 94(7):1159-1164.

Ulin, Priscilla; Robinson, Elizabeth; Tolley, Elizabeth. <u>Qualitative Methods in Public Health: A Field Guide for Applied Research.</u> (2005), Jossey-Bass: San Francisco.

Ulin, Robinson, Tolley and McNeill. <u>Qualitative Methods: A field Guide for Applied Research in Sexual and Reproductive Health.</u> (2002), Family Health International.

Tolley, Elizabeth and Christine Naré. "Access to Norplant Removal: An Issue of Informed Consent", <u>African Journal of Reproductive Health</u>, April 2001; 5(1):90-99.

Naré, Katz and Tolley. "Adolescents' Access to Reproductive Health and Family Planning Services in Dakar". <u>African Journal of Reproductive Health</u>, September 1997; 1(2):15-25.

Tolley, Elizabeth and Margaret Bentley. "Training Issues for the Use of Participatory Research Methods in Health". in de Koning, K. and Martin, M. (ed.) (1996) <u>Participatory Research in Health: Issues and Experiences</u>, Zed Books Ltd.

In Preparation

Evens, Emily; Tolley, Elizabeth; Headley, Jennifer; McCarraher, Donna; Hartman, Miriam and the FEM-PrEP Study Groups in South Africa and Malawi. "Identifying Factors that Influencing Pregnancy Intentions: Evidence from South Africa and Malawi." (In development for submission to Culture, Health & Sexuality.)

Tolley, Elizabeth; DeVellis, Robert; Severy, Lawrence; Kohli, Rewa; Foshee, Vangie; Eng, Eugenia; Mehendale, Sanjay. "HIV Risk in Marriage: Development and validation of scales related to HIV risk perception, couple harmony and sexual power for use with women in India." (unpublished – submission to AIDS & Behavior, August 2011).

Brunie, Aurélie; Tolley, Betsy; Ngabo, Fidele; Wesson, Jennifer; Chen, Mario. "Barriers to modern contraceptive use in Rwanda: Correlates of non-use and reasons for not using a modern method." (Submitted to <u>International Perspectives on Sexual and Reproductive Health</u>, July 2011.)

Morrow, K.M.; Tolley, E.E.; Carballo-Diéguez, A. "Topical Microbicide Acceptability." Book chapter requested for second edition of <u>Sexually Transmitted Diseases</u>. (Draft submitted in June 2011.)

Mehendale, S.; Deshpande, S.; Kohli, R.; Tsui, S.; Tolley, E. "Microbicide Gel Acceptability associated with Coitally-Dependent and Daily Use." (Submitted to <u>International Health</u> in January 2011.)

Final Reports

Tolley, Dev, Hyjazi and Welffens-Ekra. "Context of Abortion Among Adolescents in Guinea and Côte d'Ivoire". Final Report October 1998.

Barry, Tolley, Katz and Johnson. "Assessing the Impact of the Guinea Family Planning Options Project (FAMPOP)". Final Report November 1997.

Tolley, Elizabeth, Dr. Abdullah Issa et al. "Acceptability of Two Progestin-Only Methods at Three Hospitals in Amman, Jordan". Final Report September 1997.

Tolley, Elizabeth, Christine Naré. "Women's Experiences with Norplant Removal in Four Clinics in Dakar". Final Report August 1997.

Tolley, Elizabeth, Dr. Guy Theodore et al. "Report of a Study to Evaluate the Provision of Norplant by Non-Physicians, Pignon, Haiti". Final Report March 1996.

Naré, Christine, Karen Katz and Elizabeth Tolley. "Measuring Access to Family Planning Education and Services for Young Adults in Dakar, Senegal". Final Report 1996.

Tolley, Elizabeth and Margaret Bentley. "Participatory Methods for Research on Women's Reproductive Health". RRA Notes. Vol. 16, 1992.

Presentations

Tolley, Elizabeth E. "Application of Theory in Clinical Trials to Inform HIV Risk Measurement." Invited presentation at Behavioral and Social Science Workshop sponsored by NIAID, Rockville, MD, June 27-28, 2011.

Tolley, Elizabeth E., Weaver, Mark, Albert, Lisa. "Refining Recruitment in HIV Prevention Trials Using DHS Data." Poster presentation at Microbicides 2010 Conference, Pittsburg, PA. May 22-25, 2010.

Tolley, Elizabeth E. "Married Women & Microbicide Trials: Implications for Product Introduction." Invited presentation at Global Health Council's 36th Annual International Conference, Washington, D.C., May 26, 2009.

Tolley, Elizabeth E. "Predicting Adherence Within & Beyond the Clinical Trial Setting." Invited presentation at Behavioral and Social Science in HIV Vaccine Clinical Research Workshop sponsored by NIAID, Washington, D.C. May 10-11, 2009.

Tolley, Elizabeth E. "Adherence in Microbicide Clinical Trials: Adherence Matters." Invited panel presentation at International HIV Treatment Adherence Conference, Miami, FL, April 5-7, 2009.

Tolley, Elizabeth E. "What predicts adherence in a safety trial – is it generalizable beyond the trial setting?" Presentation at Microbicides 2008 Conference, New Delhi, India, February 24-27, 2008.

Tolley, Elizabeth E. Feedback session on Adherence and Its Measurement in Microbicide Clinical Trials meeting sponsored by the Alliance for Microbicide Development and Family Health International. Presentation at Microbicides 2008 Conference, New Delhi, India, February 24-27, 2008.

Wong, C.M., Johnson, L., Patterson, K., Batona, G., Neema, S., Johnson, S., Hallad, J.S., Tolley, E. & Van Damme, L. (2008). "Acceptability of the cellulose sulfate vaginal microbicide among HIV-negative women in the Conrad phase III effectiveness trial." Poster presentation at Microbicides 2008 Conference, New Delhi, India, February 24-27, 2008.

Hallad, J.S., Bhargava, P. K., Satyanarayan, P. B. S., Van Damme, L., Wong, C.M. & Tolley, E. (2008). "Early closure of a phase III microbicide clinical trial in South India:Implications on trial participants and clinical staff." Poster presentation at Microbicides 2008 Conference, New Delhi, India, February 24-27, 2008.

"But will they use it? Examining Microbicide Use in the Context of the HPTN 059 Tenofovir Gel Safety Trial." Plenary presentation of the Microbicides Trials Network 2007 annual meeting in Washington, D.C., March 26, 2007.

"Ethical Issues Related to Pregnancy during Microbicide Trials." Paper presented at the Microbicides 2006 Conference, Cape Town, South Africa, April 21-23, 2006.

"Potential Predictors of Microbicide Acceptability in India: Development and Validation of Measures." Paper presented at the Microbicides 2006 Conference, Cape Town, South Africa, April 21-23, 2006.

"Supporting the Trial: The use of behavioral and social science (BSS) methods for recruitment, retention, and monitoring community concerns." Poster presented at the Microbicides 2006 Conference, Cape Town, South Africa, April 21-23, 2006.

"Behavioral and Social Science Research in Support of Phase III Microbicide Trials." Paper presented at Indian Council of Medical Research-Microbicide Development Project (ICMR-MDP) Workshop, New Delhi, India, December 5-6, 2005.

"Behavioral Issues Related to Contraceptive Use in Microbicide Clinical Trials." Paper presented at Meeting on Pregnancy in Microbicide Trials, Research Triangle Park, North Carolina, November 17, 2005.

"Whatever Happens Is Written in Our Fate: The relationship between marital violence, HIV risk and sexual power in Pune, India." Paper presented at the 3rd South African Gender Based Violence and Health Conference, Stellenbosch, South Africa, October 16-18, 2005.

Expert Witness for behavioral issues at Clinical Trials Working Group Meeting, sponsored by Alliance for Microbicides, London, England, October 10-11, 2005.

"Microbicide Acceptability: Measuring what lies beneath the surface." Paper presented at the Alliance for Microbicides Development Mini-Summit on Behavioral Research, Washington, D.C., January 2005.

"An Expanded Framework for Examining Microbicide Acceptability: Conceptual and Methodological Issues". Paper presented at Symposium on Microbicides and Their Potential for Prevention of Sexually Transmitted Infections and Pregnancy, Mumbai, India, June 21-22, 2004.

"Microbicide Acceptability: Development and Validation of Psychometric Scales". Poster presentation at Microbicide 2004 Conference in London, England, March 2004.

"Women's Experiences with Norplant Removal in Four Clinics in Dakar". Paper presented at a regional workshop on the future of Norplant services in West Africa held in Lomé, Togo, April 1998.

"Adolescent Abortion in Guinea and Côte d'Ivoire: What Perpetuates the Problem?" Paper presented at the International Conference on Reproductive Health in Mumbai, India, March 1998.

"Participatory Research in Bombay, India: Concerns in Health". Paper presented at NCIH Conference, June 1994.