

Father's Role in Preconception Health

Paternal Involvement in Pregnancy Outcomes
Conference

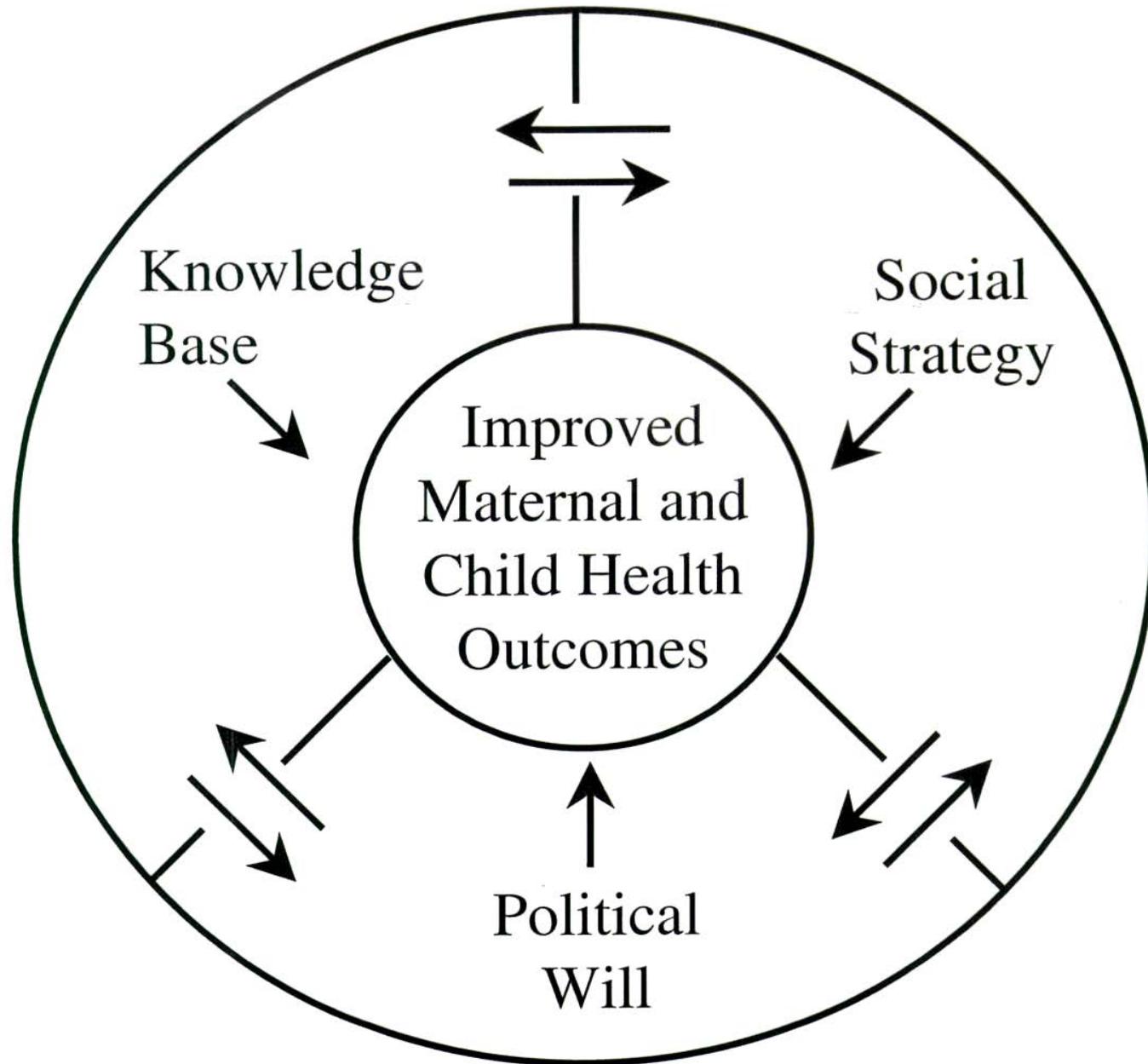
September 26, 2013

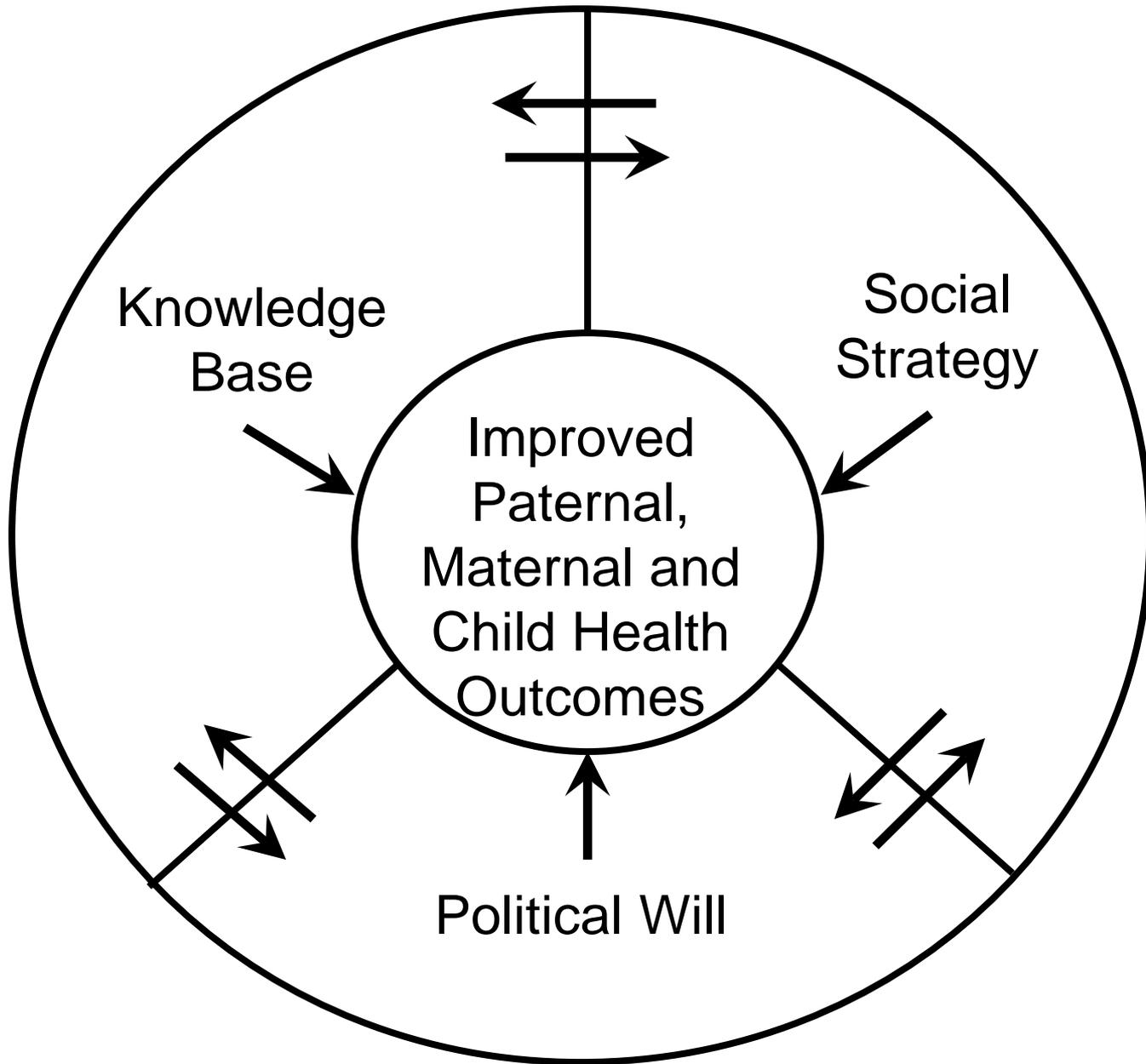
Pontiac Maryland

Milton Kotelchuck PhD, MPH,
Professor of Pediatrics
Harvard Medical School
MassGeneral Hospital for Children

Goals of Talk

- Tell my personal story of involvement with fathers and child development
- Introduce the history and significance of the MCH Life Course and Preconception Health for this Conference
- Discuss six Men's/Father's Preconception Health concepts
- Broadly examine Men's Preconception Health risk, practice and policy research and research needs





Conclusions

- Men's preconception Health is an important new topic in Fatherhood discussions
- The Women's Preconception Health Movement was the initial impetus for this topic
- The MCH life course perspective further enriches this topic

Conclusions

- It has been a challenge to get a medical model of men's health, including Preconception Health, into both fatherhood and reproductive health discussions
- Then challenge that view as too limited an understanding of men's preconception health
- We must move the male preconception health conversation beyond the quality of men's sperm
 - Six themes associated with men's preconception health are introduced
 - Men's own psychological development, and
 - Men's own health over their lifetime

Conclusions

- Much more research is needed on topic of men's preconception health
 - To enhance the basic risk knowledge base;
 - To evaluate social strategies interventions
 - from three perspectives; health care, resiliency/maturation and social determinants
 - To foster more policy research
- This topic helps bridge the population based public reproductive health and child developmental research worlds
- Men's Health (from pre-conception onward) is an important fatherhood topic

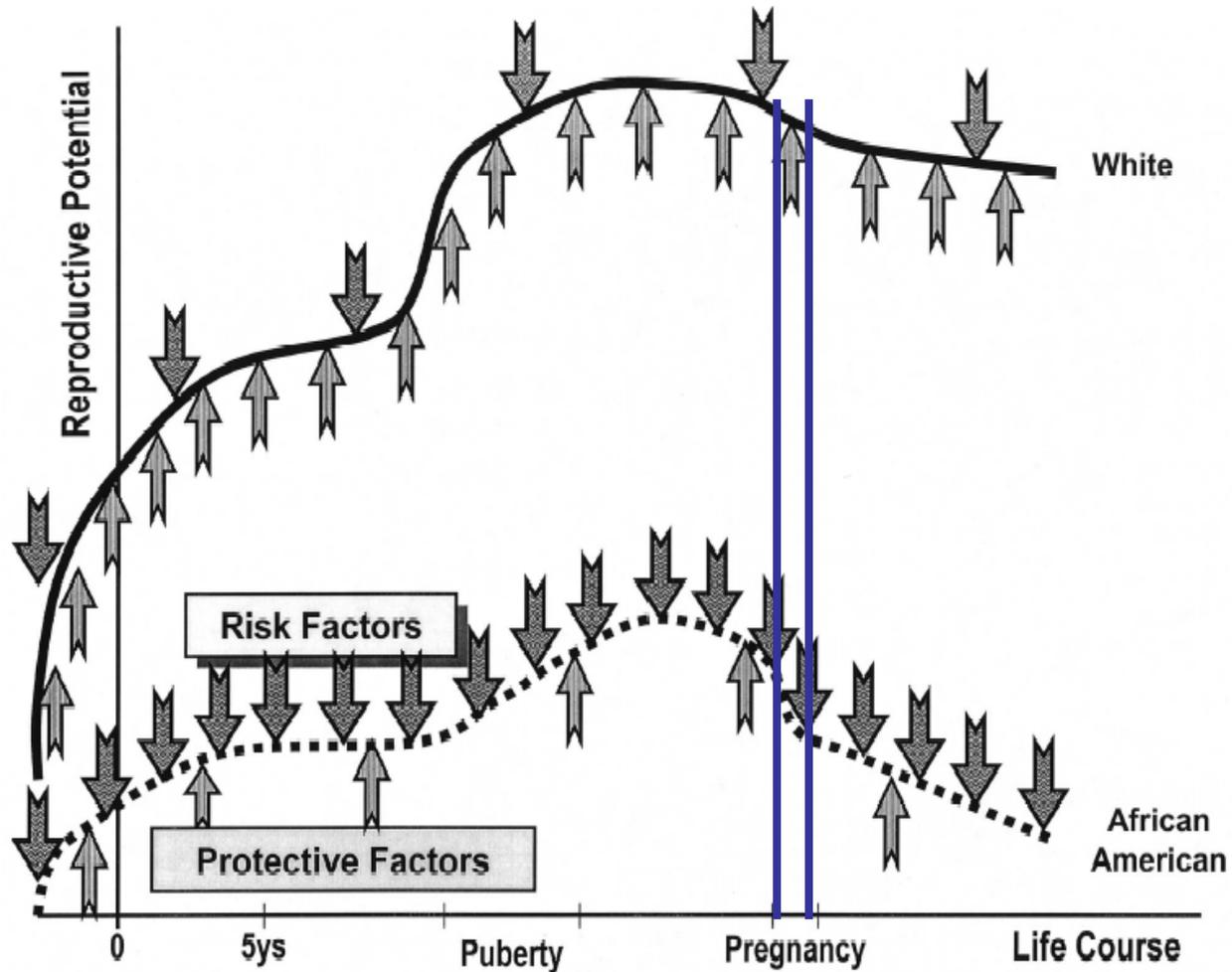
MK personal history

- Thesis: “Nature of the Infant’s Tie to his Father” (1972)
- Life: Fatherhood; 4 children and now 4 grandchildren
- Public Health: Men’s involvement in reproductive health and child development programs; MCH life course
- The Clinical Content of Preconception Care for Men (2007)

Historical context of men's and father's health involvement in reproductive and child development

- Much progress on this topic since 1972 when birth and early childhood were the domains of women only
- Men now more actively involved pregnancy and early life
 - Most men now are present at birth
- It is still a political/professional struggle to involve men in reproductive health, including men's involvement in preconception health
- May be part of movement from MCH to family health
- Few conceptualize men's involvement as a life course concept
 - Even the expanded theme of this conference from preconception to early fatherhood is an achievement

Life Course Perspective



MCH Life Course Theory

- Current life course research has increasingly shown how environmental factors become embedded in the body; the importance of the earliest life experiences on subsequent adult health; and the continuities of pre to post reproductive health experiences
- MCH life course has four core ideas
 - Timeline
 - Timing
 - Environment
 - Equity



MMWRTM

Morbidity and Mortality Weekly Report

Recommendations and Reports

April 21, 2006 / Vol. 55 / No. RR-6

Recommendations to Improve Preconception Health and Health Care — United States

**A Report of the CDC/ATSDR Preconception Care
Work Group and the Select Panel
on Preconception Care**

CDC National Summit on Preconception Care

Defining Preconception Care

Preconception care is comprised of interventions that aim to identify and modify biomedical, behavioral, and social risks to a women's health or pregnancy outcome through prevention and management, emphasizing those factors which must be acted on before conception or early in pregnancy to have maximal impact. Thus, it is more than a single visit and less than all well-woman care. It includes care before a first pregnancy or between pregnancies (commonly known as interconception care).

Preconception Care Movement

- CDC and its partners lead this (still ongoing) effort
- 10 major recommendations
- Three major special journal issues resulted
- The publication, Preconception Health and Health Care: The Clinical Content of Preconception Care, focused on care for various special populations, including
- “The Clinical Content of Preconception Care for Men”
 - Keith Frey, Shannon Navarro, Milt Kotelchuck, Michael Lu. Amer J Obstet and Gynecol 2008;199(6):S389-95

Life course enriches the preconception health approach

- Men's development over the life course
- Intergenerational continuity and bi-directionality of health
- Broad holistic definition of health
- Addresses root causes of health
 - Social determinants of health examined
 - Linkage with other service domains
- Provides new places and times to intervene
- Fatherhood is one of life's sensitive periods

Why focus on Preconception Health and Men

- A strategy to improve the Health of Men
- A strategy to improve the Health of Infants
- A strategy to improve the Health of Parents
- A strategy to improve the Health of Family
- And possible strategy to reduce health disparities

CDC Web Site

Preconception Health and Health Care: Information for Men

- Prepare a Reproductive Life Plan
- Screened and Treated for STDs
- Stop Smoking , Using “Street Drugs”, and Excessive Alcohol
- Avoid Toxic Substances
- Prevent Infertility
- Achieve Healthy Weight
- Learn your Family History
- Get Help for Violence
- Get Mentally Healthy
- Support Your Partner

CDC Web Site

Preconception Health and Health Care Care; Information for Men

- Positively, the same 10 topics are covered for women on their preconception web site
- But nothing about “male development” as a future father, or his economic role
- Men are more than just their (healthy) sperm
- Improving men’s health overall can contribute both to reproductive health and to his own health – a concept similar to women’s preconception health

The Clinical Content of Preconception Care for Men

- Improving men's preconception health is critical for insuring that all pregnancies are planned & wanted
- Improving men's preconception health can result in improved pregnancy outcomes by enhancing men's biologic and genetic contributions to pregnancy conception
- Preconception care for men can result in improved reproductive health biology for women
- Preconception care for men can result in improved reproductive health practices and outcomes for women
- Preconception care for men can result in their own improved capacity for parenthood and fatherhood
- Preconception care can be a venue for enhancing

Improving men's preconception health is critical for insuring that all pregnancies are planned and wanted

- Men are critical partners in family planning
- CDC's first PCC recommendation is for every women, man and couples to develop a reproductive life plan
- Family planning should not mean that all responsibilities and risks are held by the women
- Most men are very interested in and supportive of family planning.
- Yet over 50% of births are unplanned
- PCC should positively impact on family planning

Improving men's preconception health can result in improved pregnancy outcomes by enhancing men's biologic and genetic contributions to pregnancy conception

- Traditional men's "preconception health" topic
- Sperm DNA can get damaged in many ways
 - Exposures to tobacco, alcohol, heat, radiation, PCBs, dioxin, diabetes,...
- Impacts fertility, subfertility, and birth defects
- Damaged sperm can be replaced because sperm regenerates every 42-76 days
- Preconception care offers an opportunity to improve sperm quality

Preconception care for men can result in improved reproductive health biology for women

- Allows for screening and treatment of STI's
 - Gonorrhea, syphilis and HIV, as well as environmental toxins
 - Treatment of women only without males is doomed to failure
- Address men's behaviors that result in undesired or unplanned pregnancies
 - IPV, rape, drinking /drug usage, multiple sexual partners
- International men's sexual health programs often focus on negative male themes (rape, dominance)
- Violence against women programs seem effective
- This topic is often presented too negatively; it needs a new positive responsibility tone

Preconception care for men can result in improved reproductive health practices and outcomes for women

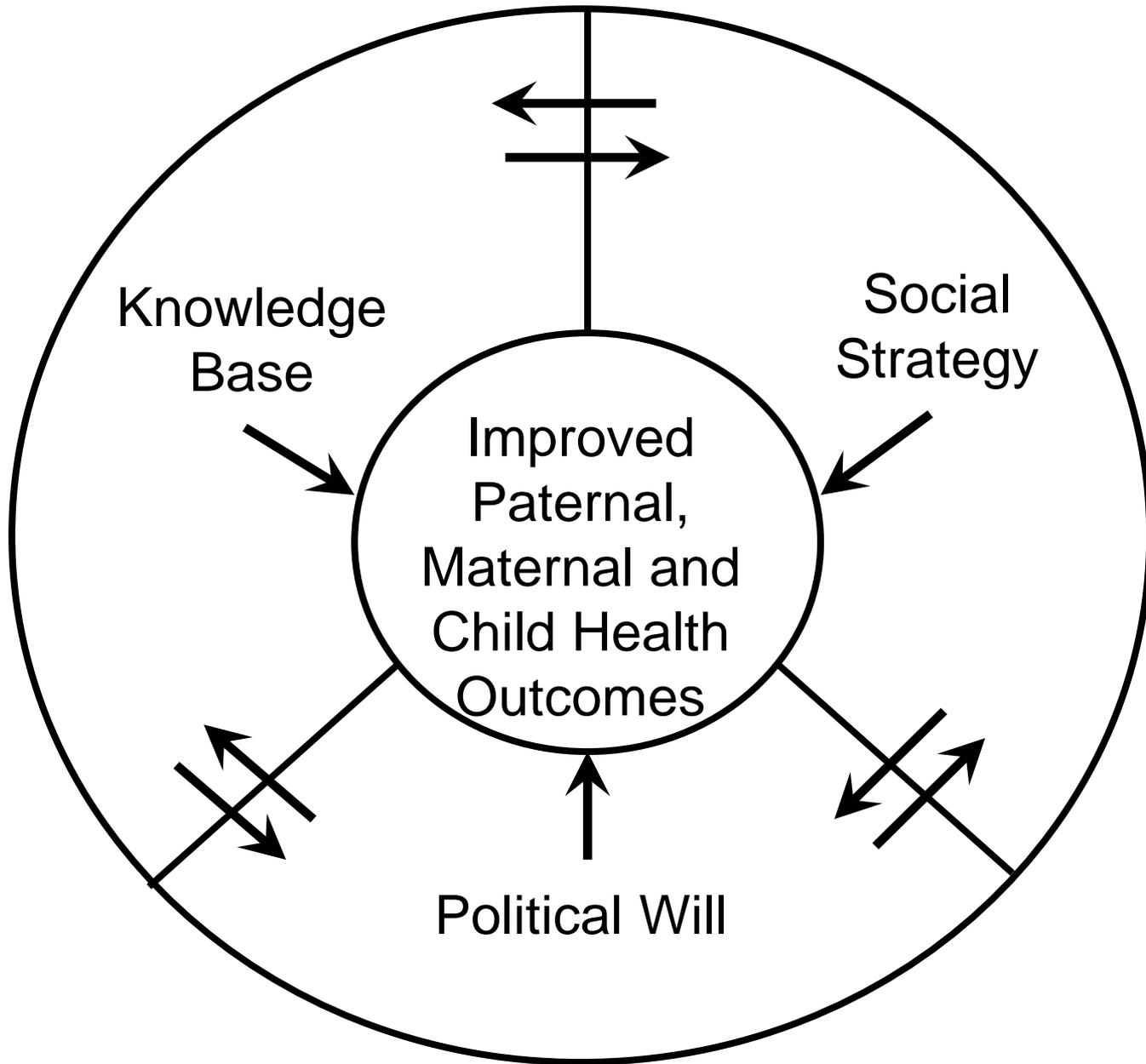
- Men can be a vital source of support or stress for women during pregnancy, birth, and parenting
- Men can be a controlling gate keeper in decisions around PNC, delivery, and other health seeking behaviors
- Men foster and discourage maternal health behaviors.
 - Drinking, smoking, fitness, nutrition among partner
 - Male depression influences his partner's well-being
- Men want to ensure healthy babies, by assuring/supporting partner's better practices
- Men's own PCC could offers opportunities to support, model, and promote women's positive reproductive health and health care seeking behaviors

Preconception care for men can result in their own improved capacity for parenthood and fatherhood

- Men's maturation to be an effective and present parent should begin with preconception care
 - Existing literature on men's development as fathers could and should starting from the preconception period
- Efforts to address men's (especially adolescent men's) social and gender norms can be created in preconception period
- Fatherhood initiatives often focus on men's development, but perhaps too late
- Pregnancy and pre-pregnancy contemplation impacts on men's development
- Men's understanding of his responsibilities and roles as a parent evolves over the course of preconception, pregnancy, birth, and early infancy

Preconception care can be a venue for enhancing the health of men through access to primary health care

- Men's health is of importance for both himself and his capacity to be a parent
- Preconception care promotes men's HP&DP health issues like depression, smoking, physical fitness, nutrition that
 - can be addressed prior to pregnancy
 - and impact his lifetime health
- A “tuneup” for pregnancy- why should only the wife/partner be healthy before delivery
- Lifetime health – be around for your child's growth and development- why only life/ death insurance why not positive life assurance



Men's Preconception Health Knowledge Base Research

- New topic area – existing research is not usually conceptualized under this rubric
- There is limited research on the impact of men's health and mental health broadly on infant well being or fatherhood
- There is very extensive and epidemiologic and clinical Risk Research on some siloed topics
 - Infertility; occupational and environmental exposures; negative behavioral factors leading to unwanted pregnancies; contraceptive efficacy
 - Mostly about “sperm” quality, quantity and exposure

Knowledge base research – future directions

- Continued more basic clinical/causal risk research
 - Epidemiologic risks of occupational and medicinal exposures
 - Men's genetic contributions to birth defects
- More men's health and development research
- More adult male developmental studies.
 - Generativity; young adult development studies
 - Development of men's conception of fatherhood.
- Explore social and health antecedents of poor paternal pre-conception health and development
- More bi-directional; dyadic studies
 - The impact of a child with SHCNs on the father's physical and mental health?

New Fatherhood Research (5 Taxi drivers)

- Strongly believe healthier fathers create healthier children
- His well-being supports mother when pregnant or after C-Section
- Role model for child
- Be around for child as he grows
- Not be a burden when older
- Aware of social factors influencing him as a financial supporter
- MK- Lots of opportunities for paternal health promotion

Men's Preconception Health Social Strategy Intervention (T3) research

- There is very limited research on the provision of men's preconception health care.
 - By contrast, research on women's preconception care is a more thriving field
- There is moderate amount of research on father presence at the time of conception onward (an implicit "intervention" given their relative absence of many fathers)
- Men's non-participation in reproductive and early child health programs has not been examined st
 - "Men not welcomed in MCH programs"
 - Black fathers and well-child visits, Moore and Kotelchuck (2004)

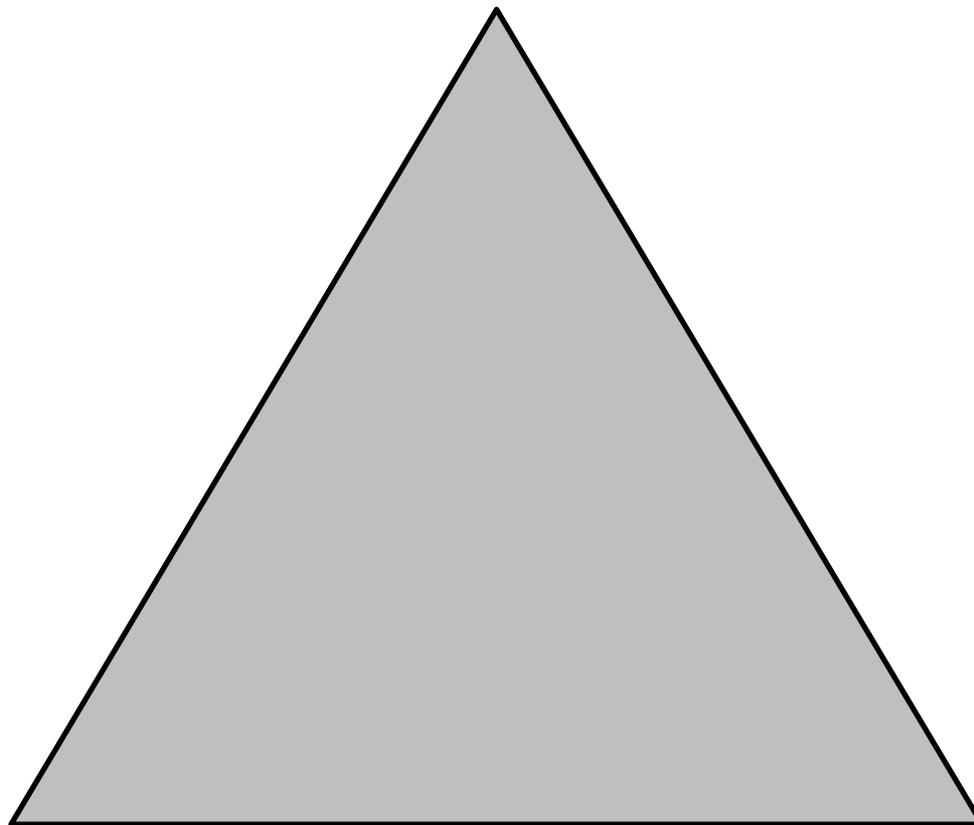
Research on Men's Preconception Health Care

- Very limited
- Mitchell, Levis, and Prue documented that in 2007, 52% of men and 43% of women had never heard a preconception health message
- Frey, Engle and Noble (2012) reported that only 8.3% of men discussed any preconception health issues with their health care provider
- Barriers to (men's) PCC reflect both low demand and very low supply issues
- But we may be conceptualizing preconception health care interventions too narrowly

Triangulation of MCH Life Course Services: Preconception Care

Paternal/family focused resilience and responsibility interventions

Clinical care and systems interventions



Social determinant interventions

Social Strategies Intervention research – future directions

- We need much more T3 translational research
- More men's preconception health care interventions and their evaluations – with preconception health broadly conceived
- We need to study barriers and facilitators to men's involvement in male health, development, fatherhood programs
- And we need to explore a wider range of outcomes – not solely infant outcomes or paternal continued presence – but on men's health and parenting health outcomes
- And developmentally, explore the best preconception time to educate men to be more sensitive and responsible fathers – in high school, before conception,...

Men's Preconception Health Political Will (Policy, T4) research

- Policy (T4) research is a less well developed area – the political science of getting financial, professional and legal resources for preconception/fatherhood initiatives
- The policy motivations for a fatherhood initiatives need greater clarification
- The impact of ACA on men's preconception health needs policy exploration

Political Will (Policy) research – future directions

- Employ more fatherhood policy analysts
- Encourage more research on policies that influence the social determinants of fathers' health, wellbeing, and even his presence
 - Employment and wage policies; criminal justice policies; poverty alleviation programs (family allowances/family leave programs);
- Assess the ACA for men's preconception health benefits

Public Policy Goals for Fatherhood Involvement

Child Oriented Policy Goals

1. Enhance the infant's social development by expanding opportunities for social interaction
2. Improve the infant and child's cognitive development and gender role development

Adult Oriented Policy Goals

3. Enhance adult male development
4. Increase male and female gender role equality

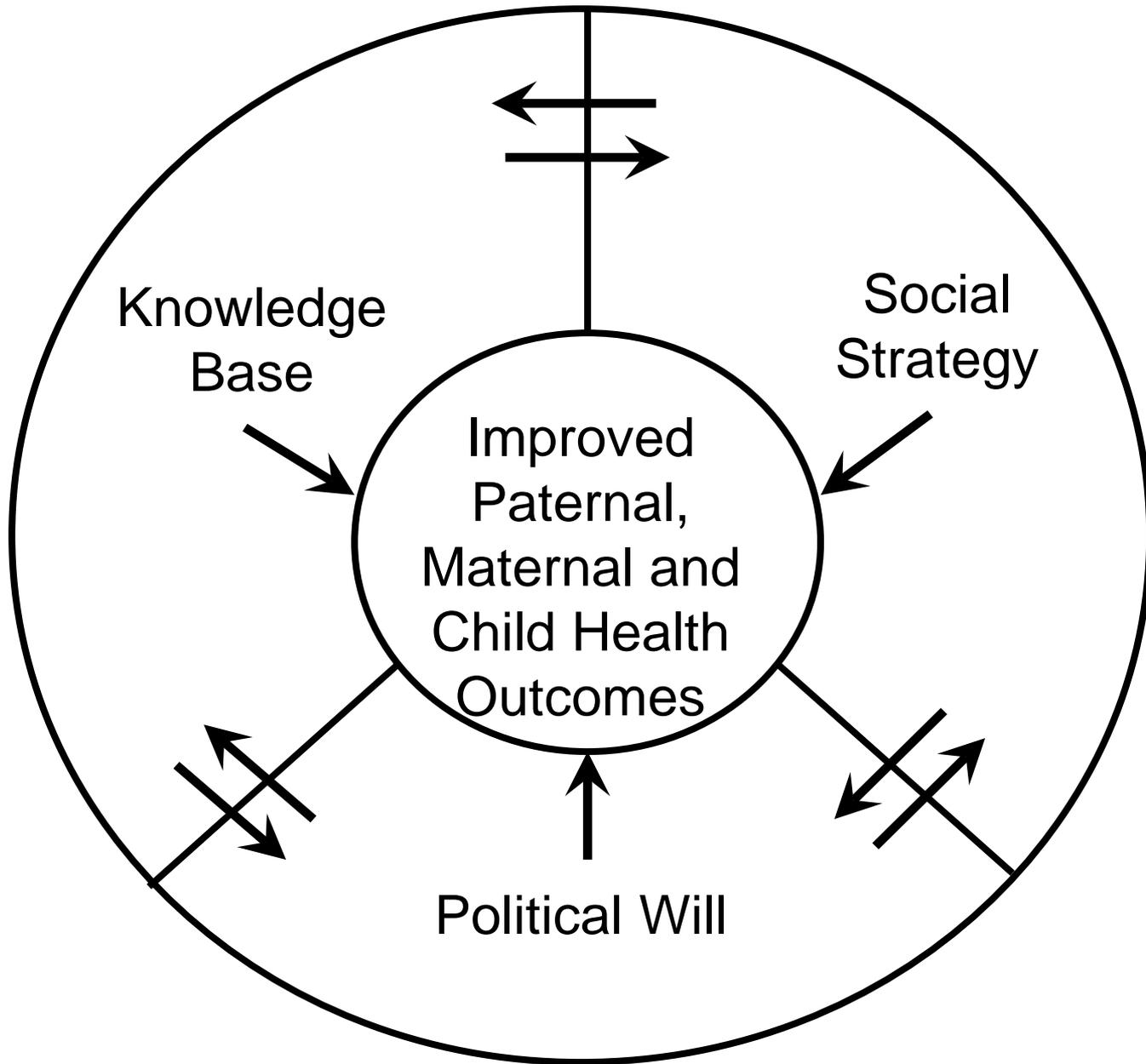
Societal Public Policy Goals

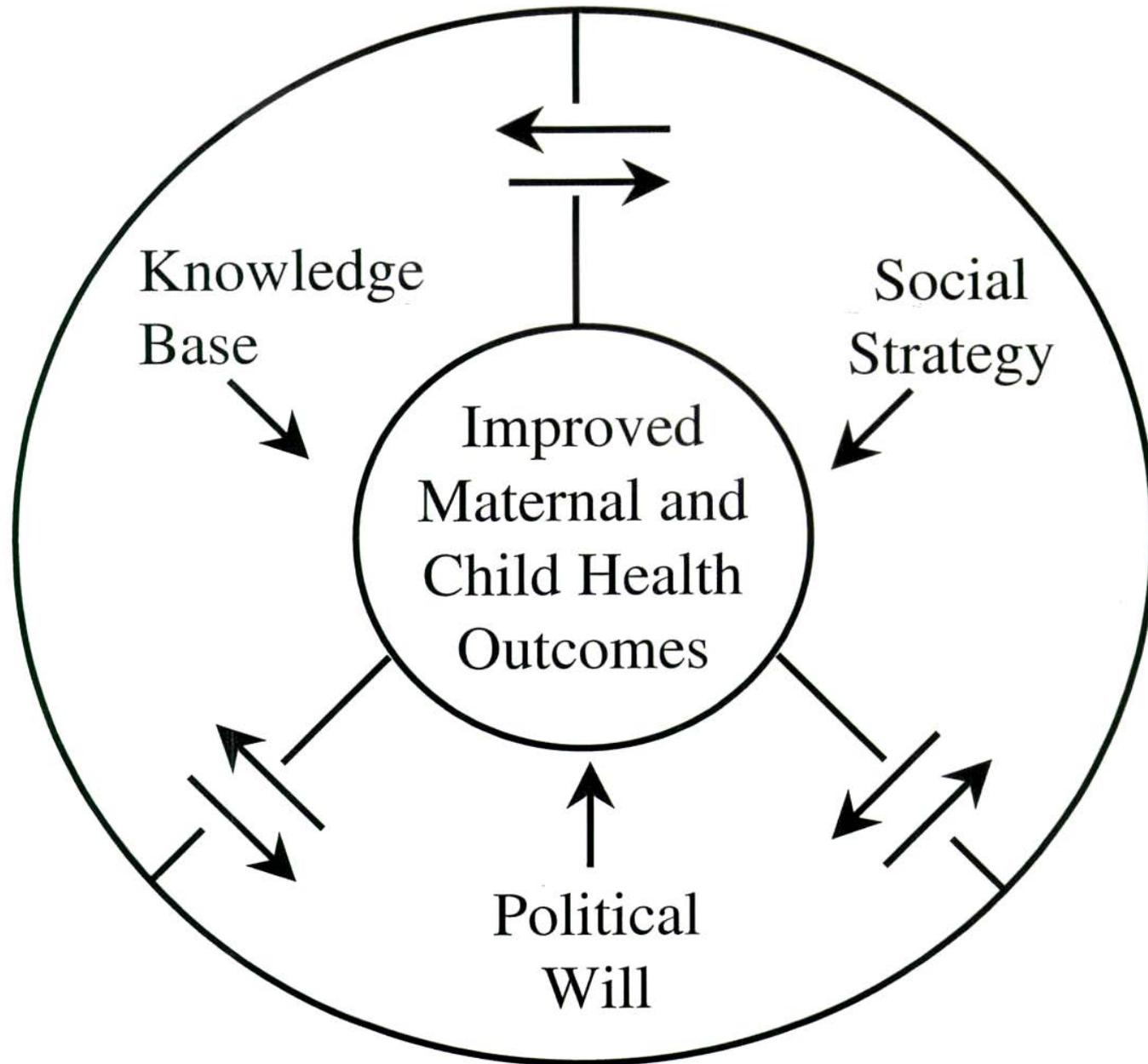
5. Equalize the child care burden between men and women
6. Encourage marriage (and paternal responsibility) to reduce the societal burdens of single parenthood
7. Strengthen families and community

(Kotelchuck, 2002)

ACA contributions to men's Preconception Health

- Insurance coverage for 18-26 year olds
- Medicaid expansion
- Home visiting expansion
- Preconception health care for women (as an essential free preventive service requirement)
- HPV vaccine coverage for males 9-26





Practice suggestions

- Family Pre-conception Health
- Test triangle
- Family allowances and father involvement outcomes
- Men's role in obesity onset research

LA Twelve-Point Plan

1. Provide interconception care to women with prior adverse pregnancy outcomes
2. Increase access to preconception care for African American women
3. Improve the quality of prenatal care
4. Expand health care access over the life course
5. Strengthen father involvement in African American families
6. Enhance service coordination and systems integration
7. Create reproductive social capital in African American communities
8. Invest in Community building and urban renewal
9. Close the education gap
10. Reduce poverty among black families
11. Support working mothers and families
12. Undo racism

Preconception Health and Men

- Complement Conference that blends population based public health and individual level developmental perspectives – with a possible focus on common programs and policies
- My interests derive from my interests in life course models of reproductive health, and my personal and professional interests on fathers
- Like the broader pre to post conception/early life focus of the conference

The New 21st Century Scientific Basis for the MCH Life Course

- Provides an understanding of how the social environment gets built into or embodied into our physical bodies (epigenetics; microbiome; allostatic load: etc)
- Bridges our intuitive understanding of the social causes of ill health (poverty, malnutrition, stress) with our understanding of its clinical manifestations and treatment
- Incorporates our growing scientific understanding of the biology of human development into our health trajectories
- Focuses on root causes of illness and disparities

Interconception Care

- Strategy to address women's health (longitudinally and post-delivery)
- Strategy to enhance the health of the parent and caregiver
- Strategy to reduce subsequent infant mortality
- Possible strategy to reduce racial disparities in birth outcome

It takes 2 to make a baby

- Men are are more than just their (healthy) sperm
- Can we improve men's health more generally as a contribution to reproductive health
- Is there any evidence that Men's health, especially preconception health (beyond his economic contributions) makes a difference?

Male preconception visit – same as women

- Risk assessment
 - Reproductive lifespan
 - Past medical and surgical history
 - Medication
 - Family history and genetic risks
 - Social and occupational history
- Risk behaviors
 - Tobacco drugs alcohol steroids hobbies
 - Nutrition
 - Mental Health
 - Physical examination
- Health promotion
 - Healthy weight and nutrition
 - Stress reduction in enhancing resilience
 - Inflammation and immunization
 - Avoidance of harmful substances/ exposures
- Clinical and psychosocial interventions

Inter-conception/Preconception Health Interventions

- (Irony, that I must speak here for health bucket) –but clinical health is a new topic in this fatherhood arena
- Male preconception health visits
- Healthy Male initiatives
- Bring men's health to men
- More men's emotional/psychological health efforts

Inter-conception Social Determinant Interventions

- Child and Family Allowances
- Earned Income Tax Credit
- Paid Family Leave (including for fathers)
- BBZ, Harlem Children's Zone
- Nutrition, Physical Activity and Community Development Initiatives
- Enhanced employment and a living wage
- Undoing racism
- Justice system reform

Inter-conception Maternal/Family-focused Resilience Enhancement Interventions

- Parenting support groups
- Paternal empowerment initiatives
 - Financial literacy/empowerment
- Centering Parenting - Centering Fatherhood
- Teen parenting support programs
- Fatherhood initiatives
- Family Planning
- Paternal stress reduction initiatives
 - Yoga
- Mental Health Support Initiatives
 - Depression, IPV treatment and prevention
- Healthy Start/BIH initiatives (in part)
- Home Visiting (in part)

Research Needs

- More life course research
- More general health research
- More fatherhood spanning data bases
- More practice (T3/T4) research

Research on Men's Preconception Health

- Extremely limited
- Very siloed
- With deep pockets of research on sperm quality, infertility and STIs
- Few conceptualize men's involvement as a life course concept
 - Even expanding this conference pre- to early fatherhood is an achievement

Tensions in Preconception Health

- Is it a period just before pregnancy
- Or is it a life time issues
- Over 50% of pregnancies are not planned
- Fatherhood initiatives (often have an economic and ideologic basis) and start too late
- Are Men good (healthy fathers) or bad (cause problems -IPV, STIs, irresponsible) fathers
- Men's focus takes away resources from women's health