

Preconception Care Can Reduce Risks of Stillbirth

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Background

Preventive strategies for stillbirth (SB) and other adverse pregnancy adverse outcomes (AOs) are underappreciated.



Evidence-Based

Life Habits

- Nutrition: quality food, safe, “style,” and frequency
- Be active: fit
- Timing: > 17yrs; interval > 6mo < 3 yr
- Body: > 19 body mass index (BMI) , < 26/ 34 BMI

Checklists

- Manage stress
- Partner violence /abuse intervention
- “Agency”: family planning, CONCEPTION, economic circumstances, health insurance, housing, food security
- REDUCE/ ELIMINATE: smoking (indoor/outdoor), pollution (indoor/outdoor), toxicants, substances, ETOH, THC
- Learn family history, genetics
- **PREVENT MATERNAL AND FETAL INFECTION:** exposure vectors, update vaccinations, MMR, HA, HB, pertussis, tetanus

Start

- Daily supplements, multivitamins, folic acid, vitamin D, iodine, LDASA

Medical Consult

- Prior complications, loss
- Screens TSH, CBC, urine, bacteruria, SS, syphilis, HIV, IPV, depression

Work

- Standing, exposure, toxic stress

Document Education

- “TORCHES,” STI, GBS, B-19, RTIs, vaginitis, herpes viruses, CMV

“New Century Preconception Care”

Inspired by research-based advances in reproductive care science and clinical obstetrics, we suggest

1. Expanding the purview of pregnancy care to include recognition of
 - a. Transgenerational benefits
 - b. Optimization of pregnancy outcomes
 - c. Individual and trauma-informed care as well as developmental outcomes for each child including EPIGENETIC and future progeny benefits as well as optimized societal goals
2. We suggest that the benefits and practices of Preconception Care Principles be included in Universal Medical and Family Life Education availability

Goals

1. Utilize a Logic Model analysis to identify and prioritize life course, lifestyles, and medical strategies to reduce risks of SB
2. Suggest individual family community payor and public health opportunities to utilize preconception care and education to reduce SB incidence
3. Establish an annotated bibliography

Results

1. Recommendations are authoritatively available (CDC-P, ACOG, AAFP, WHO, Cochrane and Gates/Aga Khan)
2. The authors estimated the efficacy of consensus recommendations for reducing SB
3. The most applicable strategies for individual and family were suggested as:
 - a. Age > 17 years
 - b. Interpregnancy interval > 1 ½ year < 3 years
 - c. Avoidance of toxic substances and environment
 - d. Maintenance of recommended BMI
4. The most effective medical strategies were judged to be:
 - a. Pregnancy planning/spacing service
 - b. Nutritional and BMI counseling
 - c. Fetal supplementation started preconception
 - d. Prevision of genetic and vaccination services
 - e. Prevision of evidence-based SB prevention services

Discussion

All women and families require life course, lifestyle, and fertility knowledge and services including: recommended nutrition, STI prevention, family planning and means to avoid toxicants and environmental hazards, as well as screening for ACEs and violence or abuse.

Conclusion

1. Recommendations for PC services are available and can reduce risks of SB
2. Specific evidence-based, high level studies were not found including nutrition, violence and bad stress
3. Because of generalized applicability, life course, lifestyles and evidence-based modeled strategies will likely be most effective for reducing SB in differing populations
4. Public health approaches can be effective in both rich and poor country settings, family planning, violence, nutrition, and general medical services are deemed most likely to reduce risks of SB
5. Specialized PC services should be implemented and measured for efficacy

Preconception life influences pregnancy outcomes



Methods

We employed electronic databases (PubMed, Medline, Google) to search information using “preconception care” and “stillbirth” or “fetal death” as search terms (1990 -2018).



All men, mothers, future children and generations benefit from preconception knowledge and performance

Make your plan and take action!

No one expects an unplanned pregnancy

**Life course and life skills progression
“future is real”**



Preconception care ideally starts

- in previous generations
- in early childhood and adolescent/adult development
- with Universal Health Care and knowledge
- formally beginning more than a year before conception in both women and men

Preconception personal health and health knowledge are individual, family and public responsibilities.