Unintended Pregnancy

Toward understanding the issues and addressing the need gaps

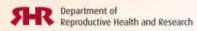
Shyam Thapa, PhD, Scientist *With assistance from* Jacqueline D. Marks and Elizabeth Corey Department of Reproductive Health and Research **World Health Organization, Geneva**

Contact e-mail: thapas@who.int

For online course (elective) in Sexual & Reproductive Health Geneva Foundation for Medical Research and Training Geneva, August 2011





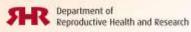


Objectives

- I. Context and Rationale
- II. What do we mean by unintended pregnancy? What do we know about its correlates and determinants (proximal and distal factors)?
- III. What do we know about addressing the need gaps? What works?
- IV. Research agenda /Assignment





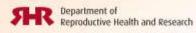


The Context: Social Transformation in Childbearing

- Changes in individual aspirations
- Changing role especially of women; empowerment
- Schooling/educational attainment, especially for girls
- Economic independence—joint families to nuclear family; joint residence to nuclear residence
- Emphasis from quantity to quality of children; cost of rearing too many children
- When to have, how many to have, and when to have or not to have from chance to within the control of individuals
- Greater number of children is better to fewer is better -- Declining desired family size

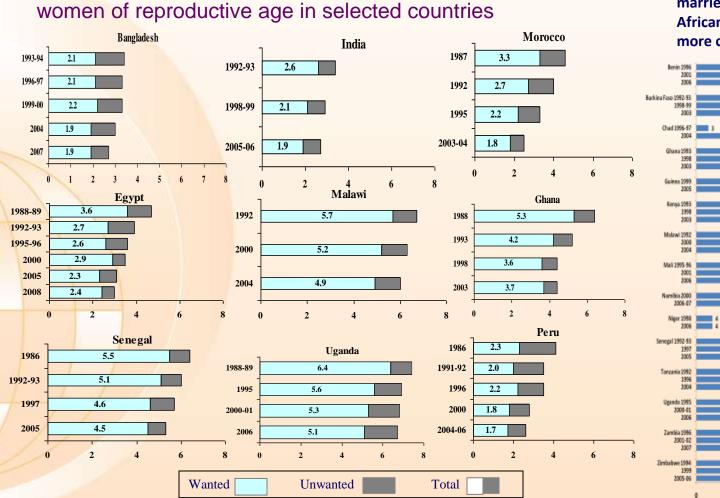






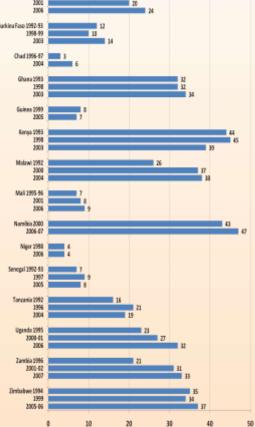


Trends in Preference for Smaller Family Size among Both Women and Men in Developing Countries



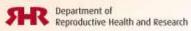
Trends in wanted, unwanted and total fertility rates among

Trends in the proportion of married men in sub-Saharan African countries that want no more children

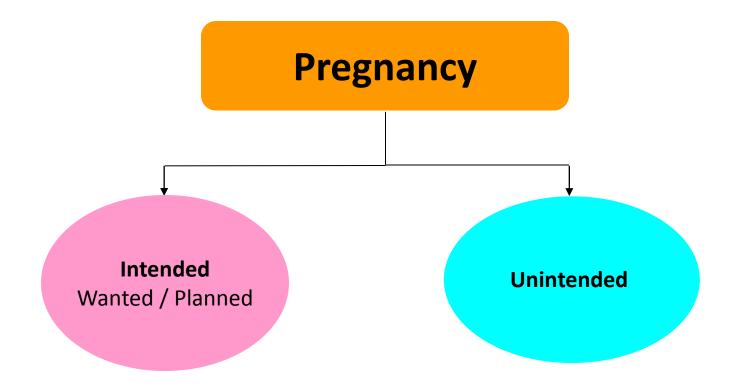


Westoff, C. Desired Number of Children: 2000-2008. Report prepared for Marco International, 2009.









Globally, it is estimated that approximately two-thirds (62%) of all pregnancies are intended and the rest (38%) are unintended.

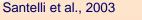
Source: Bongaarts J & Johansson E (2002)

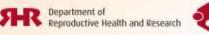
Health implications of unintended pregnancies

Adverse child health outcomes and risk factors for poor health outcomes (Unintended compared to Intended)

- Delayed or no prenatal care
- Physical abuse and violence during pregnancy
- Household dysfunction and exposure to psychological or physical abuse
- Negative impact on children's long-term psychosocial development
- Many unintended pregnancies end in abortion
- Mistimed less breastfeeding; shorter gestation; higher risk of low birth weight
- Unwanted low-birth weight infants; delayed prenatal care



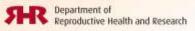


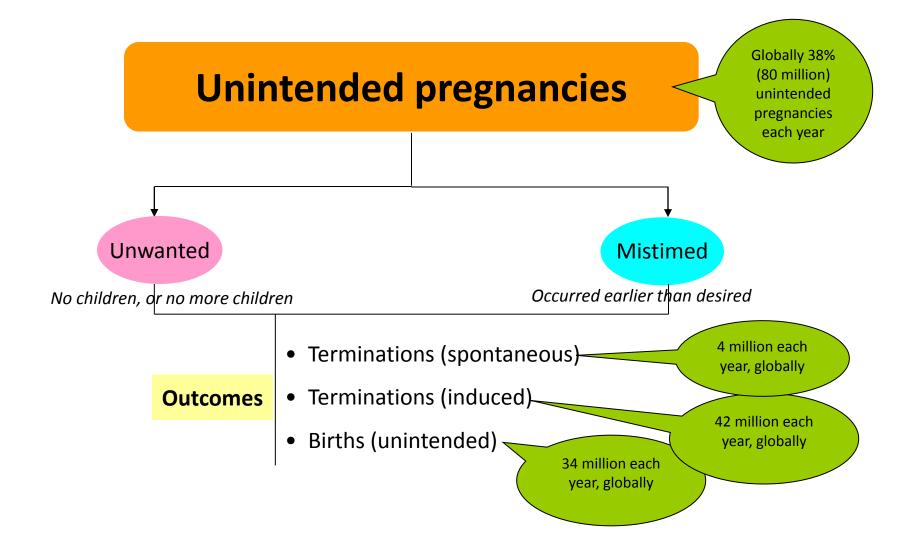


Defining, Measuring, and Assessing Unintended Pregnancy





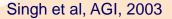




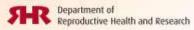
Importance of Access to and Use of Services

If contraceptive services were provided to 201 million women at risk of unintended pregnancies worldwide ...

- Unwanted pregnancies prevented (52 million, globally)
- Abortions reduced (by 64%, globally)
- Maternal and child deaths prevented (1.5 million, globally)
- Pregnancy-related illness reduced and healthy life years preserved (2.7 million, globally)









Ascertaining Pregnancy Intention

Quantitative/Surveys

Retrospective

"At the time you became pregnant with [*name*], did you want to become pregnant then, did you want to wait until later, or did you not want to become pregnant at all?"

Prospective

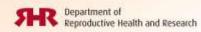
Those currently not pregnant or unsure of pregnancy: "Would you like to have (a/another) child or would you prefer not to have any more children?" Those desiring for additional children: "How long would you like to wait from now before the birth of (a/another) child?"

Retrospective vs. Prospective studies

(Recall of intentions significantly underestimates levels of unwanted pregnancies-- Koenig et al., 2006)

Qualitative

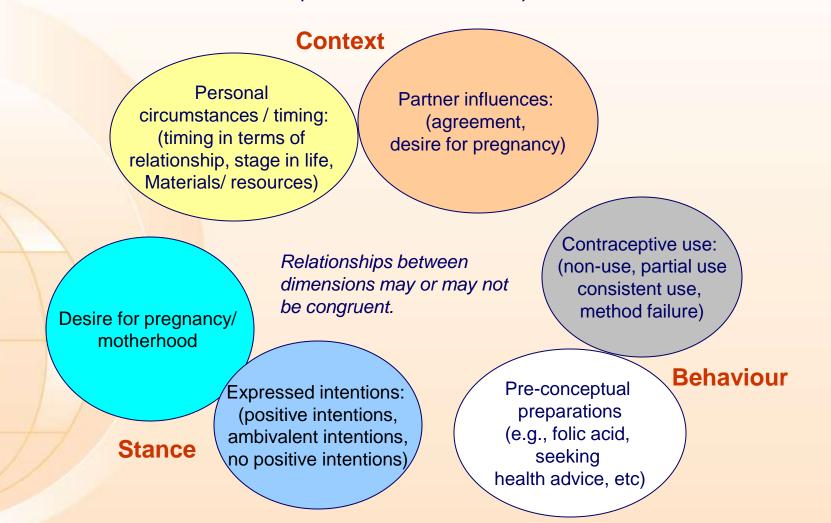
In-depth Interviews, Focus Group Discussions





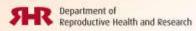


Towards Understanding Planned / Unplanned (Unintended) Pregnancy: Dimensions and Sub-dimensions (Based on UK data)



Barrett G, Smith SC, Wellings K. Conceptualization, development, and evaluation of a measure of unplanned pregnancy. *J Epidemiol Community Health*. 2004;58;426-433.





A conceptual framework for researching unintended pregnancy

Antecedent Factors

Intra-personal

- Age (life stage)
- Marital status
- Education
- Economic situation
- Attitude towards pregnancy
- Previous pregnancy
- Past experiences / history
- Self efficacy

Inter-personal

- Partner Support
- Relationship type
- Family background

Structural / Institutional

- Region
- Residence (urban/rural)
- Woman's autonomy
- Family support & values
- Community support, system, norms and values

Services

- Availability of information / counseling / services
- Access to Information / counseling / services

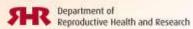
Intermediate Factors

- Contraception use / failure
- Emergency contraception use / failure
- Abortion / failure
- Safe sex practice / failure



Unintended pregnancy

- Unwanted pregnancy
- Mistimed pregnancy







A Micro-Macro (Ecological) Framework for Understanding Unintended Pregnancy

Public policy

Community factors

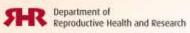
Institutional factors

Interpersonal factors

Intrapersonal factors

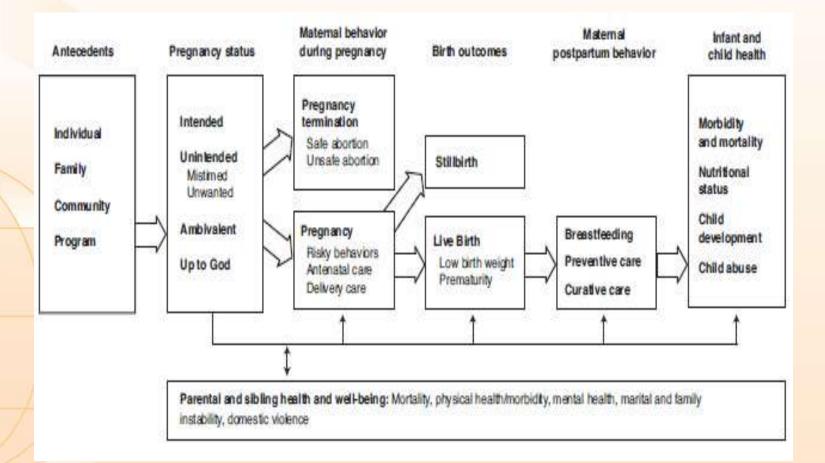
Adapted from Koren A, Mawn B. The context of unintended pregnancy among married women in the USA. *J Fam Plann Rerod Health Care* 2010: 36(3):150-158.





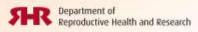


A framework for examining potential effects of unintended pregnancy on infant, child, and parental health outcomes



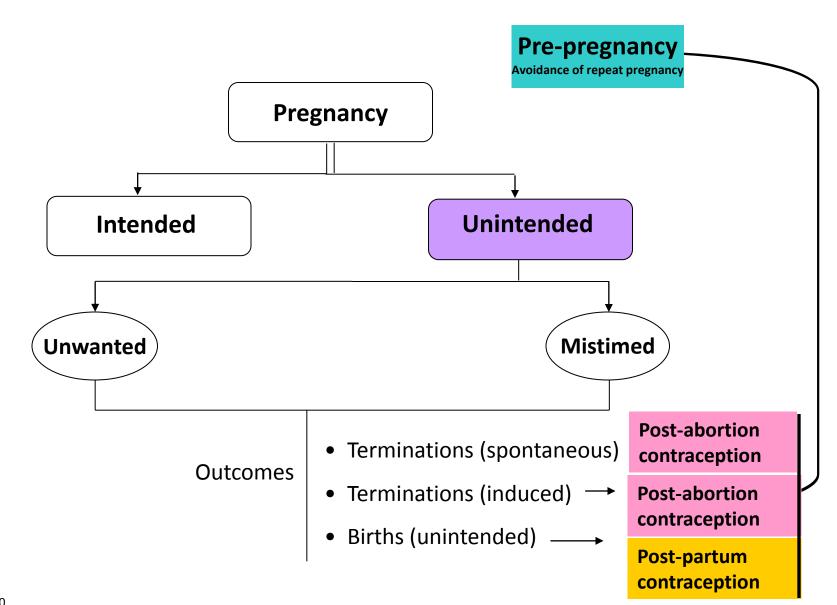
Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: A review of the literature. *Studies in Family Planning* 2008; 39(1):18-38.







Places of intervention through a family planning program



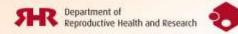
What works (evidence) in preventing unintended pregnancy with a focus on adolescents?

Evidence from Systematic Reviews (SRs) and other Reviews

What is a Systematic Review?

Each systematic review addresses a clearly formulated question; for example: Can antibiotics help in alleviating the symptoms of a sore throat? All the existing primary research on a topic that meets certain criteria is searched for and collated, and then assessed using stringent guidelines, to establish whether or not there is conclusive evidence about a specific treatment. The reviews are updated regularly, ensuring that treatment decisions can be based on the most up-to-date and reliable evidence.

Cochrane Reviews and the Campbell Collaboration (C2) are *systematic reviews* of primary research in human health care and health policy. They investigate the effects of interventions (literally meaning to intervene to modify an outcome) for prevention, treatment and rehabilitation. (www.thecochranelibrary.com; www.campbellcollaboration.org)





Why focus on adolescents?

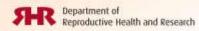
Disproportionate percentage of unintended births among women of less than 25 years of age.

For example, in 42 sub-Saharan African countries, there were about 42 million unintended pregnancies among all women of reproductive ages, 15-49, during a 5-year period. Of all the unintended pregnancies, 44% was among women under 25 years of age. (Hubacher et al., 2008)

Many adolescents become pregnant again within a year after giving birth. (Reviewed in Lopez et al. 2010; Cochrane Review)

Adolescents (10-19 years old) who have an unintended pregnancies face a number of challenges, including abandonment by their partners, inability to complete school education (which ultimately limits their future societal and economic opportunities), and increased adverse pregnancy outcomes. (Oringanje et al. 2010)

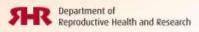




Evidence Reviews on

- Effects of multi-faceted interventions
- Effects of counseling in a clinical setting
- Induced abortion
- **WHO SR for developing guidelines**





SR1: Interventions intended to reduce pregnancy-related outcomes among adolescents

Outcomes

Reducing sexual experience, Unprotected sexual activity, Pregnancy rates

Interventions

- 1. One time consultation
- 2. Sex education programs with an abstinence focus (and no contraceptive focus)
- 3. Sex education programs with a contraception component
- 4. Multi-component youth development programs

Studies:

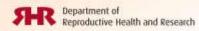
31 studies on 38 randomized trials (mostly in developed countries); meta-analysis

Findings (with respect to each intervention)

- 1. Too little evidence
- 2. No significant effect; limited data
- 3. No consistent evidence
- 4. Multi-component (comprehensive sex education) programs show the "most promising" results (particularly more favourable for females)

Scher SL, Maynard RA, Stagner M. Interventions intended to reduce pregnancy-related outcomes among adolescents. *Campbell Systematic Reviews*, Oct 2006







SR1: Teen Pregnancy Prevention

Pooled Impact Estimates by Outcome

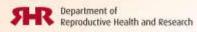
			Measured Outcomes		Estimated Impacts	
	# of studies and impact		Intervention	Control	Percentage point	90% confidence
Outcome	estimates	Sample size	group mean	group mean	difference	interval
Sexual Experience	21 studies; 40 estimates	37,705	37.9%	39.1%	-1.2%	+/- 1.6%
Pregnancy Risk	24 studies; 34 estimates	33,405	13.7%	15.0%	-1.3%	+/- 1.7%
Pregnancy	13 studies; 25 estimates	19,012	8.2%	8.6%	-0.4%	+/- 1.1%

Source: For detailed results see Tables 4, 5 and 6.

Note: Estimates are based on random-effects models estimated using *Comprehensive Meta-analysis* (Borenstein and Rothstein 1999). None of the pooled impact estimates is statistically significant.

Scher SL, Maynard RA, Stagner M. Interventions intended to reduce pregnancy-related outcomes among adolescents. *Campbell Systematic Reviews*, Oct 2006





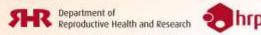


SR2: Interventions for preventing unwanted pregnancies among adolescents

- 2009 SR with the objective of evaluating the effects of primary prevention on unintended pregnancies. The interventions included school-based, community-home-based, clinic-based, and faith-based.
- Studies included individual and RCTs aimed to increase knowledge and attitudes relating to risk of unintended pregnancies, promote delays in the initiation of sexual intercourse and encourage consistent use of birth control methods to reduce unintended pregnancies in adolescents aged 10-19 years. The SR excluded all quasi experimental and cross over trials.

Oringanje et al. Interventions for preventing unintended pregnancies among adolescents. *Cochrane Database of Systematic Reviews* 2009, Issue 4.





SR2: Interventions for preventing unwanted pregnancies among adolescents (cont'd)

No of interventions: 41 RCTs (only two were in developing countries), 1986-2007.

Interventions:

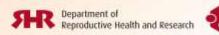
- Educational interventions
 - Health education
 - HIV/STD education
- Contraception promotion
 - Contraception education
 - With or without contraception distribution
- Multiple interventions
 - Combination of educational and contraceptive promotion/ distribution

[Examples of the interventions – Safer Choices, Becoming a Responsible Teen, Sex can Wait, SHARE, RIPPLE, REAL, Reach for Health Service Learning Program, Teen Outreach Program, STEP)

Control

No additional activity/intervention to existing conventional population-wide activities





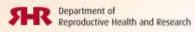
SR2: Interventions for preventing unwanted pregnancies among adolescents (cont'd)

Main Finding and Conclusion

Concurrent multiple interventions (combination of educational, skillbuilding and contraception promotion/distribution) reduces the rate of unintended pregnancy among adolescents. Was not possible to identify which particular type of intervention was most effective.

Interventions that are designed to reduce teen pregnancy is most effective when a multi-faceted approach is used, as the problem is multifaceted and multidimensional.





Kirby's review (not a SR) of 85 Intervention Programs

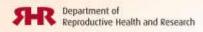
- 27 studies in developing countries (32% of all the studies)
- ✤ 48 studies in the US
- 10 studies in other developed countries

International Technical Guidance on Sexuality Education, Vol I and II. UNESCO 2009.

Kirby D, Rolleri L. Impact of Sex and HIV Education Programmes on Sexual Behavior on Youth in Developing and Developed Countries. Washington DC: Family Health International, 2005.

Kirby DB, Laris BA, Rolleri LA. Esx and HIV education programs: Their impact impact on sexual behaviros of young people throughtout the world. *Journal of Adolescent Health* 2007;40:206-217.



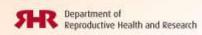


Interventions with Indicated Effects on Sexual Behaviors: 85 Program Interventions

			Other	All
	Developing	United	Developed	Countries
	Countries	States	Countries	in the World
	(N=27)	(N=48)	(N=10)	(N=85)
Initiation of Sex				
Delayed initiation	6	15	2	23 (39%)
Had no sig impact	12	17	7	36 (61%)
Hastened initiation	0	0	0	0 (0%)
Frequency of Sex				. ,
Decreased frequency	5	6	0	11 (34%)
Had no sig impact	4	15	1	20 (63%)
Increased frequency	0	0	1	1 (3%)
# of Sexual Partners				
Decreased number	4	11	0	15 (43%)
Had no sig impact	7	12	0	19 (54%)
Increased number	0	1	0	1 (3%)

Kirby D. The Effects of Sex, Relationships and HIV/STI Education Programs and Characteristics of Effective Programs. ETR Associates- UNESCO meeting, February 2009





hrp 25

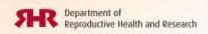
0

Interventions with Indicated Effects on Sexual Behaviors: 85 Program Interventions

			Other	All
	Developing	United	Developed	Countries
	Countries	States	Countries	in the World
	(N=27)	(N=48)	(N=10)	(N=85)
Use of Condoms				
Increased use	9	15	1	25 (43%)
Had no sig impact	11	17	4	32 (55%)
Decreased use	1	0	0	1 (2%)
Use of Contraception				
Increased use	1	4	1	6 (43%)
Had no sig impact	2	4	1	7 (50%)
Decreased use	0	1	0	1 (7%)
Sexual Risk-Taking				
Reduced risk	2	15	1	18 (60%)
Had no sig impact	2	9	1	12 (40%)
Increased risk	0	0	0	0 (0%)

Kirby D. The Effects of Sex, Relationships and HIV/STI Education Programs and Characteristics of Effective Programs. ETR Associates- UNESCO meeting, February 2009





hrp 26 Conclusions about the Impact of Sex and STD/HIV Education Programs: Review of 85 Program Interventions (cont'd)

Sex/HIV education programs

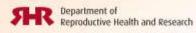
Do not increase sexual activity

Sex/HIV education programs:

- Only less than half (34%-43%) of the interventions showed the intended effects (reducing timing of initiating sex, reducing frequency of sex or reducing number of sexual partners)
 - Only 43% of the programs succeeded in increasing use of condoms or use of other contraceptives

More than half of all the 85 interventions throughout the world did not achieve it intended effects







SR3: Effects of Counselling in Clinics

Five Key Questions

Question 1

How effective is counselling in a clinical setting to prevent unintended pregnancy in changing knowledge, skills, and attitudes?

Question 2

What influences contraceptive use and adherence (compliance)?

Question 3

What is the association between behaviours that support fertility desires and the prevention of unintended conceptions?

Question 4

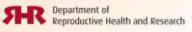
What are the potential harms of contraceptive counselling?

Question 5

What is the cost-effectiveness of counselling to prevent unintended pregnancy?









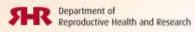
SR3: Effects of Counselling in Clinics (cont'd)

- Articles in databases from 1985-2000
- 74 articles that met the study inclusion criteria
 - Findings published in 2003

Moos MK, Bartholomew NE, Lohr KN. Counseling in the clinical setting to prevent unintended pregnancy: an evidence-based research agenda. *Contraception* 2003;67:115-132



>



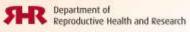
SR3: Effects of Counselling in Clinics (cont'd)

Conclusion: No experimental or observational literature reliably answers questions about the effectiveness of counselling in the clinical setting to reduced unintended pregnancies (in the US). No basis for discontinuing the existing practices either.

The quality of the existing research does not provide strong guidance for recommendations about clinical practice but does suggest directions for future investigations. Numerous issues warrant rigorous investigation.







SR4: Induced Abortion among Unmarried Women

Background

- ✓ Until 2003, premarital examination for both men and women was a legal requirement before marriage in China.
- Contraceptives are available, but targeted at married couples. Unmarried, young people, have little access to counselling and services.

Abortion legally available

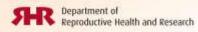
Key Question for SR

Incidence of pregnancy and induced abortion among the unmarried Chinese women attending premarital medical examination.

Nine studies (1995-2000) —7 in urban areas and 2 in rural areas

SR published in 2004: Qian A, Tang Shenlang, Garner P. Unintended pregancy and induced abortion among unamrried women in China: a systematic review. *BMC Health Services Research* 2004.







SR4: Induced Abortion among Unmarried Women (cont'd)

Findings

- Premarital sex was common; ranged from an average of 54% to 82%
- Induced abortion was also high; in urban areas it ranged from an average of 20% to 55%

Conclusion

Large unmet need for temporary methods of contraception among unmarried women in China

Policy and Programmatic Implication

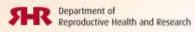
Even where contraception and abortion are legal, if unmarried people's needs are not addressed through effective services, many women with unintended pregnancy will end up resorting to induced abortion.

If abortion were not easily available, might be a stronger motivation either to abstain or look for contraceptives and/or resort to "backstreet" abortion services.

Research Agenda

Need for better understanding of the context of unplanned / unintended pregnancies among the unmarried





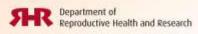


SR5: Effect of Peer-Education Interventions in Increasing Condom Use among Adolescents

- 7 trials -- 3 randomized and 4 quasi-experimental
- Study Sites Zambia, Italy, Ghana, Nigeria, USA, Cameroon, and UK
- Results: Peer-led interventions on condom use during last sex found no overall effects
- Research Agenda: Better understanding of why peer-led interventions failed to achieve the intended effects?

Kim CR, Free C. Recent evaluations of the peer-led approach in adolescents sexual health education: A systematic review. *International Family Planning Perspectives* 2008:34(2):89-96.





SR6: Effectiveness of repeat (secondary) pregnancy prevention programs among adolescents in the US (a meta analysis)

Context

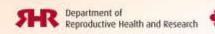
- Teenage pregnancy in the US one of the highest in the developed countries, although some recent declines
- Secondary pregnancy among the teens not uncommon

Adverse Consequences (to teen mothers and infants)

- Less likely to complete high school
- Higher rates of poverty and dependence
- Health risks to the infant born to teens higher risk of low-birth-weight, premature, small-for-gestational-age, risk of abuse and neglect, cognitive and behavioural deficits
- -/Health costs to the system
- Risk of abuse and neglect

Corcoran J, Pillai VK. Effectiveness of secondary pregnancy prevention programs: A meta analysis. *Research on Social Work Practice* 2007;17(1):5-18.





SR6: Effectiveness of repeat (secondary) pregnancy prevention programs among adolescents (cont'd)

Study Selection Criteria

- Aged between 11 and 20 years
- Pregnant or parenting adolescents
- Study reported on a secondary pregnancy
- Study implemented an intervention

• No. of studies

16, all in the US

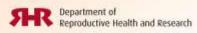
Findings

 At, on average, 19 months of follow-up, interventions showed 50% reduction in the odds of pregnancy compared to control / comparison group, but by the second follow-up the effect had dissipated

Comment

No data focused specifically on secondary pregnancy from developing countries







WHO Guidelines

Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries (2010)

Experts panel to review evidence re:

Outcome:

Reduced pregnancy before age 20

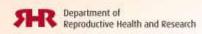
Outcome: Increase use of contraception by adolescents at risk of unintended pregnancy

Outcome: Reduce unsafe abortion among adolescents

Recommendations of Action

Recommendations for Further Research





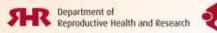


SR for WHO Guidelines: Reducing Pregnancy in Girls Under the Age of 20

Questions for SR

- Is there evidence that efforts directed at adolescents and other stakeholders are effective in reducing pregnancy among girls under age 20?
- Is there evidence that efforts to improve the economic situation of girls are effective in reducing pregnancy among girls under age 20?
- Is there evidence that efforts to expand the availability of formal and non-formal education for girls are effective in reducing pregnancy among girls under age 20?
 - Is there evidence that sexuality education programs for adolescent boys and girls are effective in reducing pregnancy among girls under age 20?
- Is there evidence that efforts to provide postpartum and post-abortion contraception are effective in reducing second pregnancies among adolescents?
- Is there evidence that social support programs are effective in reducing second pregnancies during adolescence?



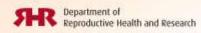


SR for WHO Guidelines: Increasing use of contraception by adolescents at risk of unintended pregnancies

Questions for SR

- Is there evidence that efforts directed at political leaders/planners, including those at the community level, have resulted in the formulation of laws and policies that increase access to contraceptive services and information for adolescents?
- Is there evidence that efforts directed at political leaders/planners, including those at the community level, have resulted in the formulation of laws and policies that increase access to emergency contraception for adolescents?
- Is there evidence that efforts directed at community members and leaders are effective in increasing access to contraceptives for adolescents?
- Is there evidence that efforts to improve health services are effective in increasing access to contraceptive information and services (including emergency contraception) for adolescents?
- Is there evidence that efforts to make contraceptive methods, including emergency contraception, available over-thecounter are effective in increasing the access to contraceptives by adolescents?
- Is there evidence that efforts to provide accurate information and education about contraceptives to adolescents are effective in increasing contraceptive use among adolescents?
- Is there evidence that efforts to involve males in contraceptive decisions 'by the couple' are effective in increasing contraceptive use among adolescents?
- Is there evidence that efforts to reduce the financial cost of contraceptives for adolescents are effective in increasing contraceptive use among adolescents?





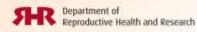


SR for WHO Guidelines: Outcome – Reduce unsafe abortion among adolescents

Questions for SR

- Is there evidence that efforts directed at policy leaders/planners and community leaders are effective in improving access to safe abortion for adolescents according to the existing law?
- Is there evidence that efforts to inform adolescents and other stakeholders about the conditions under which abortions are legal are effective in reducing unsafe abortions among adolescents?
- Is there evidence that efforts to reduce barriers are effective in increasing access to and use of safe abortion services among adolescents according to existing laws?
- Is there evidence that efforts to increase the availability of post-abortion services are effective in reducing post-abortion morbidity and mortality among adolescents?
- Is there evidence that efforts to make available post-abortion contraceptive services are effective in reducing post-abortion morbidity and mortality among adolescents?







WHO Guidelines 2011 Outcome: Reduce pregnancy before age 20

Recommendations for Action

Strong Recommendations:

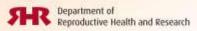
- Advocate among all stakeholders for adolescent pregnancy prevention through interventions such as: information provision, sexuality and health education, life skills building, contraceptive counselling and service provision, and the creation of supportive environments.
- Maintain and improve efforts to retain girls in schools, both at the primary and the secondary level.
- Offer interventions that combine curriculum-based sexuality education with contraceptive promotion to adolescents to reduce pregnancy rates.
- Offer and promote postpartum and post-abortion contraception to adolescents through multiple home visits and/or clinic visits to reduce second pregnancies among adolescents.

Recommendations for Further Research

Undertake research:

- to determine the effectiveness of interventions among adolescents and other stakeholders to reduce pregnancy among girls under the age of 20; this research should address varying socio-cultural contexts.
- to explore the effect of socio-economic improvements brought about by employment and school retention on adolescent pregnancy and its mediating determinants.
- to determine the effect of the availability of formal and non-formal education on adolescent pregnancy prevention; this research should consider potential mediating factors such as socio-economic status and marital status.
- to determine the effect of targeted interventions for education retention (e.g. conditional or unconditional cashtransfer interventions) and policies (including support for adolescent mothers) on delaying pregnancy and reducing second pregnancy.
 - to design and assess the feasibility and effectiveness of social support interventions to reduce repeat pregnancies among adolescents.







WHO Guidelines 2011

Outcome: Increase use of contraception by adolescents at risk of unintended pregnancy

Recommendations for Action

Strong Recommendations:

- Undertake efforts with political leaders and planners to formulate laws and policies to increase adolescent access to contraceptive information and services, including emergency contraceptives.
- Undertake interventions to influence community members to support access to contraceptives for adolescents.
- Implement interventions to improve health service delivery to adolescents as a means of facilitating their access to and use
 of contraceptive information and services.
- Implement interventions at scale that provide accurate information and education about contraceptives, in particular curriculum-based sexuality education (CBSE), to increase contraceptive use among adolescents.

Conditional Recommendation:

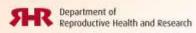
Implement interventions to reduce the financial cost of contraceptives to adolescents

Recommendations for Further Research

Undertake research:

- to identify feasible and effective interventions that result in the formulation of such laws and policies.
- to identify and evaluate interventions that influence community members' support of adolescent access to contraceptives.
- to identify feasible and effective interventions to improve the availability of over-the-counter hormonal contraceptives to adolescents.
- to determine the effectiveness of interventions that provide accurate information and education about contraceptives in various settings and populations (both in-school and out-of-school).
- to identify feasible and effective interventions that aim to involve adolescent and adult males in decisions about contraceptive use by partners as well as by themselves, including interventions that aim to transform gender norms.
- to determine the feasibility, sustainability and impact of reducing the financial cost of contraceptives specifically to adolescents.







WHO Guidelines 2011

Outcome: Reduce unsafe abortion among adolescents

Recommendations for Action

Strong Recommendations:

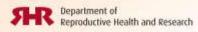
- Ensure that laws and policies enable adolescents to obtain safe abortion services.
- Enable adolescents to obtain safe abortion services by informing them and other stakeholders about:
 - the dangers of unsafe methods of interrupting a pregnancy,
 - the safe abortion services that are legally available, and
 - where and under what circumstances these services can be obtained legally.
- Identify and overcome barriers to the provision of safe abortion services to adolescents.
- Ensure access by adolescents to post-abortion care as a life-saving medical intervention, whether or not the abortion or attempted abortion was legal.
- Ensure that those adolescents who have had abortions can obtain post-abortion contraceptive information and services, whether or not the abortion was legal.

Recommendations for Further Research

Undertake research:

- to assess their enforcement and impact of laws and policies that enable safe abortion services for adolescents (where they exist).
- to determine the feasibility and effectiveness of interventions to reduce barriers to the provision of safe, legal abortion services to adolescents.
- to investigate the feasibility and effectiveness of interventions to ensure access to post-abortion care by adolescents.



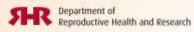




Overall Conclusions

- Unintended pregnancies are a huge problem, especially among the adolescents in both developing and developed countries
- Evidence on what works largely weak, especially in low-income countries
- Large scope for policy and programmatic research toward understanding the nature of unintended pregnancy and addressing needs through effective services
- Need to invest more in research, program development and evaluation of interventions to reduce unintended pregnancies, especially in low-income countries





Addressing Unintended Pregnancy: Priority for Donors

DFID and USAID have made unintended pregnancy a priority with their programming and research agendas in recent years.

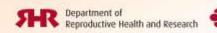
DFID identified the avoidance of unintended pregnancy as an important primary preventive strategy

In FY2012, USAID committed to prevent 54 million unintended pregnancies by increasing the modern contraceptive prevalence rate

UKAID Department for International Development. Improving Reproductive, Maternal and Newborn Health: Reducing Unintended Pregnancies- Evidence Overview. *UKAID*, 2010.

Statement by Amie Batson, Deputy Assistant Administrator for Global Health. FY2012 Global Health and Child Survival Budget. USAID, 2011. Available here: http://www.usaid.gov/press/speeches/2011/ty110331.html

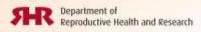




Developing a Research Agenda

- Need to make sure that knowledge generation through research helps advance policy reforms and strengthens information and services such that the incidence of UIP is reduced. Agenda must, therefore, be grounded in reality.
- What is known already provides basis as well as clues for what knowledge gaps still exist.
- More evidence is needed on what works in a particular context. Because of high burden of unintended pregnancies among adolescents, more research efforts need to focus on adolescents.
- Need better understanding of the circumstances resulting in unintended pregnancies (contextual factors); use/non use or failure of contraception; use of induced abortion. Improved understanding can help inform and influence designing and testing interventions.
- Formative research may help assess the needs, what information and services (including counselling) exist, and if are meeting the needs of those with unmet need.







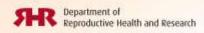
Assignment

(depending on your interest, you can undertake all, some or none)

- Conduct a literature search on what is known about unintended pregnancies (UIPs) in your setting/country of interest and prepare a synthesis of the findings.
- Based on what is known, identify 3-5 key questions for further research in your country/setting.
- Develop a causal framework for analyzing unintended pregnancy (either unwanted or mistimed or both) as outcome/s of interest that includes contextual/intervening factors.
- Identify the "population" for your proposed study (third bullet, above) and develop a strategy for selecting women with unintended pregnancies. Discuss potential bias, if any, in the proposed sampling strategy.
- Assuming that you plan to do an in-depth interviews (IDI) with women (ages 16-20) who are attending a clinic, develop 8-10 guidance questions for the interview.
- Develop 10-12 guidance questions toward understanding reasons for not using contraception among pregnant women (ages 16-20) who have an unintended pregnancy.
- Assuming that you are interested in examining community values and norms regarding UIP through IDI with key informants, develop 6-8 questions for ascertaining community values and norms.

Please feel free to send thapas@who.int your assignment for review / comments.

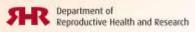






- Key references are in the attached. Hope you find them useful in stimulating research ideas. Feel free to check with me if you need specific references that are not included in the core materials.
- Good luck in reviewing the papers and working on the assignment.
- Thank you for your time and interest!





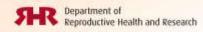
Key Reading Materials

- Barrett G, Smith SC, Wellings K. Conceptualization, development, and evaluation of a measure of unplanned pregnancy. *Journal of Epidemiology and Community Health* 2004; **58**: 426-433.
- Barrett G, Wellings K. What is 'planned' pregnancy? Empirical data from a British study. Social Science and Medicine 2002; 55: 545-557.
- DiCenso A, Guyatt G, Griffith W. Interventions to reduce unintended pregnancies among adolescents: systematic review of randomized controlled trials. *BMJ* 2002; **324**:1426.
- Fischer R, Stanford J, Jameson P, DeWitt M. Exploring the concepts of intended, planned, and wanted pregnancy. *The Journal of Family Practice* 1999; **48**: 117-122.
- Gipson J, Koenig M, Hindin M. The effects of unintended pregnancy on infant, child, and parental health: A review of the literature. *Studies in Family Planning* 2008; **39**: 18-38.
- Higgins J, Hirsch J, Trussel J. Pleasure, prophylaxis and procreation: A qualitative analysis of intermittent contraceptive use and unintended pregnancy. *Perspectives on Sexual and Reproductive Health* 2008; 40: 130-137.
 - Hubacher D, Mavranezouli I, McGinn E. Unintended pregnancy in sub-Saharan Africa: magnitude of the problem and potential role of contraceptive implants to alleviate it. *Contraception* 2008; **78**: 73-78.
- Kirby D, Laris BA, Rolleri L. Sex and HIV education programs: Their impact on sexual behaviors of young people throughout the world. *Journal of Adolescent Health* 2007; **40**: 206-217.



•

٠





Key Reading Materials cont'd

- Koenig M, Acharya R, Singh S, Roy T. Do current measurement approaches underestimate levels of unwanted childbearing? Evidence from rural India. *Population Studies* 2006; **60**: 243-256.
- Koren A, Mawn B. The context of unintended pregnancy among married women in the USA. J Fam Plann Reprod Health Care 2010; 26(3):150-158.
- Otoide V, Oronsaye F, Okonofua F. Why Nigerian adolescents seek abortion rather than contraception: Evidence from focus-group discussions. International Family Planning Perspectives 2001; 27: 77-81.
- Rosenfeld JA, Everett K. Lifetime patterns of contraception and their relationship to unintended pregnancies. *Journal of Family Practice* 2000; **49**: 823-828.
- Santelli J, Roachat R, et al. The measurement and meaning of unintended pregnancy. *Perspectives on Sexual and Reproductive Health* 2003; **35**: 94-101.
- Trussell J, Lalla A, Doan Q, et al. Cost effectiveness of contraceptives in the United States. *Contraception* 2009; **79**: 5-14.



