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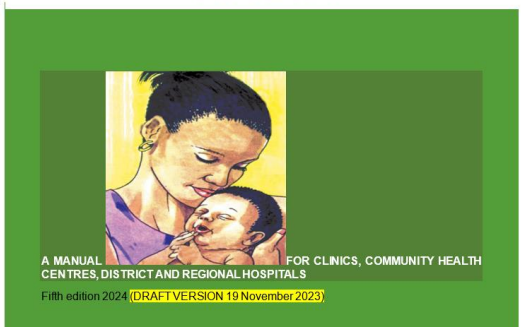
NATIONAL INTEGRATED MATERNAL AND PERINATAL CARE GUIDELINES FOR SOUTH AFRICA



PRECONCEPTION CARE
SAFE CONCEPTION
INFERTILITY CHALLENGES
TEENAGE PREGNANCY

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&

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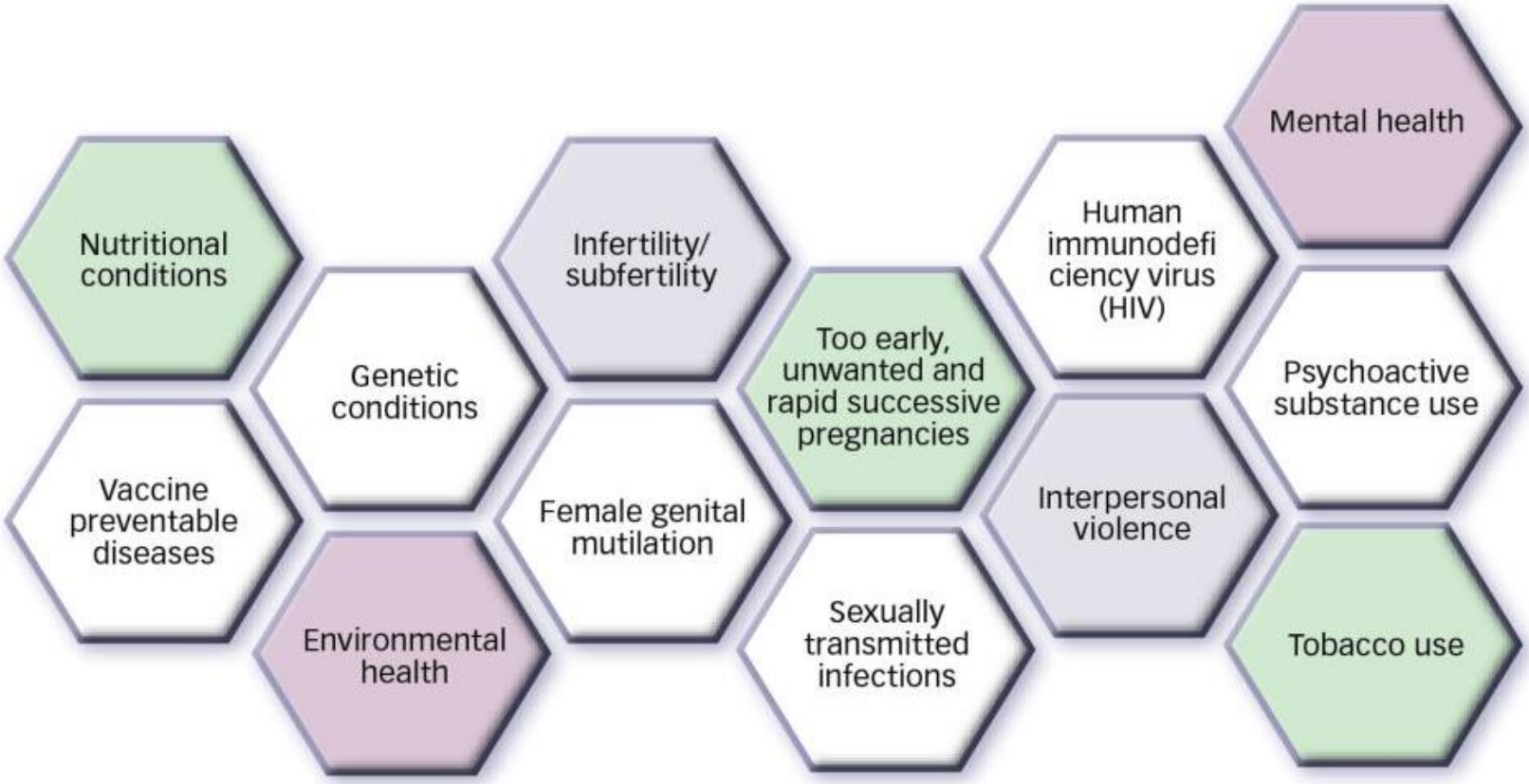
PRECONCEPTION CARE

PRECONCEPTION CARE

- This is the optimisation of a woman's health or knowledge before she plans or conceives a pregnancy.
- If a woman is considering pregnancy, the following considerations will assist in preparing her in terms of her own health and that of the baby that will be conceived:

- The presence of any medical conditions (including HIV) controlled or uncontrolled
- Medication (prescribed, over the counter, herbal or traditional)
- Family history and genetic risks
- Use of tobacco, alcohol, cocaine and other recreational drugs
- Possible occupational and environmental exposures
- Social, economic and family issues (include paternal involvement)
- The past obstetric history
- Nutritional issues, e.g., underweight or obesity
- Mental health issues (see mental health chapter)

Areas addressed by Preconception Care



https://www.who.int/maternal_child_adolescent/documents/preconception_care_policy_brief.pdf?ua=1

What is the package of preconception care interventions?

Areas addressed by the preconception care package	Examples of evidence-based interventions[1]
Nutritional conditions 	▪ Screening for anaemia and diabetes ▪ Supplementing iron and folic acid ▪ Information, education and counselling ▪ Monitoring nutritional status ▪ Supplementing energy- and nutrient-dense food ▪ Management of diabetes, including counselling people with diabetes mellitus ▪ Promoting exercise ▪ Iodization of salt
Tobacco use 	▪ Screening of women and girls for tobacco use (smoking and smokeless tobacco) at all clinical visits using "5 As" (ask, advise, assess, assist, arrange) ▪ Providing brief tobacco cessation advice, pharmacotherapy (including nicotine replacement therapy, if available) and intensive behavioural counselling services ▪ Screening of all non-smokers (men and women) and advising about harm of second-hand smoke and harmful effects on pregnant women and unborn children
Genetic conditions 	▪ Taking a thorough family history to identify risk factors for genetic conditions ▪ Family planning ▪ Genetic counselling ▪ Carrier screening and testing ▪ Appropriate treatment of genetic conditions ▪ Community-wide or national screening among populations at high risk
Environmental health 	▪ Providing guidance and information on environmental hazards and prevention ▪ Protecting from unnecessary radiation exposure in occupational, environmental and medical settings ▪ Avoiding unnecessary pesticide use/providing alternatives to pesticides ▪ Protecting from lead exposure ▪ Informing women of childbearing age about levels of methyl mercury in fish ▪ Promoting use of improved stoves and cleaner liquid/gaseous fuels
Infertility/sub-fertility 	▪ Creating awareness and understanding of fertility and infertility and their preventable and unpreventable causes ▪ Defusing stigmatization of infertility and assumption of fate ▪ Screening and diagnosis of couples following 6–12 months of attempting pregnancy, and management of underlying causes of infertility/sub-fertility, including past STIs ▪ Counselling for individuals/couples diagnosed with unpreventable causes of infertility/sub-fertility

1. *Meeting to develop a global consensus on preconception care to reduce maternal and childhood mortality and morbidity.* Geneva, World Health Organization, 2013.

Interpersonal violence 	▪ Health promotion to prevent dating violence ▪ Providing age-appropriate comprehensive sexuality education that addresses gender equality, human rights, and sexual relations ▪ Combining and linking economic empowerment, gender equality and community mobilization activities ▪ Recognizing signs of violence against women ▪ Providing health care services (including post-rape care), referral and psychosocial support to victims of violence ▪ Changing individual and social norms regarding drinking, screening and counselling of people who are problem drinkers, and treating people who have alcohol use disorders
Too-early, unwanted and rapid successive pregnancies 	▪ Keeping girls in school ▪ Influencing cultural norms that support early marriage and coerced sex ▪ Providing age-appropriate comprehensive sexuality education ▪ Providing contraceptives and building community support for preventing early pregnancy and contraceptive provision to adolescents ▪ Empowering girls to resist coerced sex ▪ Engaging men and boys to critically assess norms and practices regarding gender-based violence and coerced sex ▪ Educating women and couples about the dangers to the baby and mother of short birth intervals
Sexually transmitted infections (STIs) 	▪ Providing age-appropriate comprehensive sexuality education and services ▪ Promoting safe sex practices through individual, group and community-level behavioural interventions ▪ Promoting condom use for dual protection against STIs and unwanted pregnancies ▪ Ensuring increased access to condoms ▪ Screening for STIs ▪ Increasing access to treatment and other relevant health services
HIV 	▪ Family planning ▪ Promoting safe sex practices and dual method for birth control (with condoms) and STI control ▪ Provider-initiated HIV counselling and testing, including male partner testing ▪ Providing antiretroviral therapy for prevention and pre-exposure prophylaxis ▪ Providing male circumcision ▪ Providing antiretroviral prophylaxis for women not eligible for, or not on, antiretroviral therapy to prevent mother-to-child transmission ▪ Determining eligibility for lifelong antiretroviral therapy
Mental health 	▪ Assessing psychosocial problems ▪ Providing educational and psychosocial counselling before and during pregnancy ▪ Counselling, treating and managing depression in women planning pregnancy and other women of childbearing age ▪ Strengthening community networks and promoting women's empowerment ▪ Improving access to education for women of childbearing age ▪ Reducing economic insecurity of women of childbearing age

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SAFE CONCEPTION

Safe Conception

Safe conception and Reproductive options for

1. People living with HIV

2. People with Medical conditions

3. Disabilities

SAFE CONCEPTION

- Persons with medical conditions and physical disabilities should be managed by a multidisciplinary team

- Important issues to consider are:
  - the effects of pregnancy on the disease/disability
  - the effects of the disease/disability on the pregnancy
  - effects of the medication on pregnant woman and fetus

- All persons with medical diseases should be optimised before pregnancy

- In WLHIV, take antiretroviral therapy to minimise viral load and ensure viral replication is suppressed (viral load<50 copies per ml)

- The value of peri-conceptual folate in prevention of neural tube defects (5mg daily, starting one month prior to conception continuing into the first trimester of pregnancy)

RISK FOR GENETIC DISORDERS AND TERATOGENIC EXPOSURE

Risk for genetic disorders and teratogenic exposure

The following are risk factors for congenital disorders:

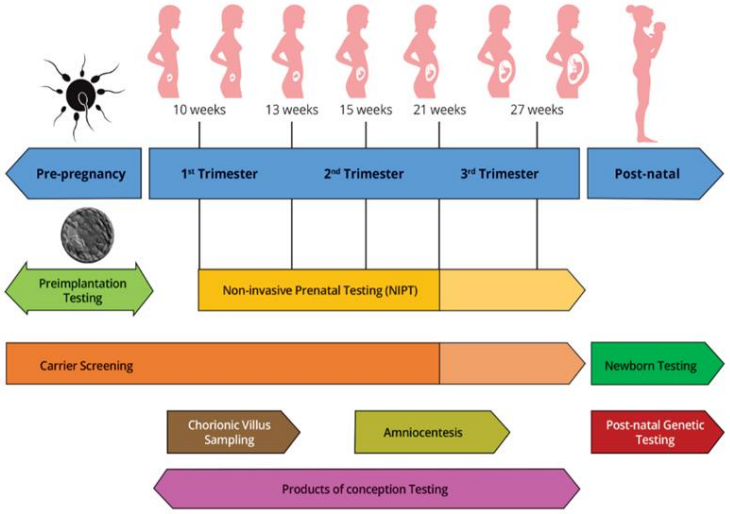
- Mother aged 37 years or more at conception
- Alcohol and recreational drug and smoking use by the mother
- A child conceived of a consanguineous relationship
- A family history of genetic disorders
- Poorly controlled medical conditions in pregnancy (e.g. diabetes, epilepsy, hypothyroidism- see chapter on medical conditions)
- Iodine deficiency
- Teratogenic or unapproved medications in pregnancy (see Appendix III in the Adult STG for a complete list of medicines associated with congenital disorders).
- Maternal infections, e.g. rubella and syphilis, during pregnancy

Genetic screening

There are two types of prenatal tests for genetic disorders:

1. **Prenatal screening tests:**
   - Tests determine chances that your fetus has an aneuploidy and other disorders.
     a. Carrier screening – done on parents
     b. Karyotyping - done on products of conception
     c. Prenatal genetic screening tests- combined screening or NIPT

2. **Prenatal diagnostic tests:**
   - These tests can tell you if a fetus actually has certain disord
   - They are done on cells from the fetus or placenta obtained through amniocentesis or chorionic villus sampling (CVS)



Preimplantation genetic testing (PGT)

- Testing of early stage embryos (up to 5 days old) for genetic abnormalities.
- Evaluate embryos before transfer to the uterus
- Cells from each embryo obtained from IVF/ICSI is sent for genetic testing

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INFERTILITY CHALLENGES

World Health Organization

human reproduction programme hrp
research for impact
UNDP·UNFPA·UNICEF·WHO·WORLD BANK

Global infertility prevalence estimates

2022 global infertility prevalence estimates are:

Approximately **one in six** people have experienced infertility at some stage in their lives, globally.

17.5%

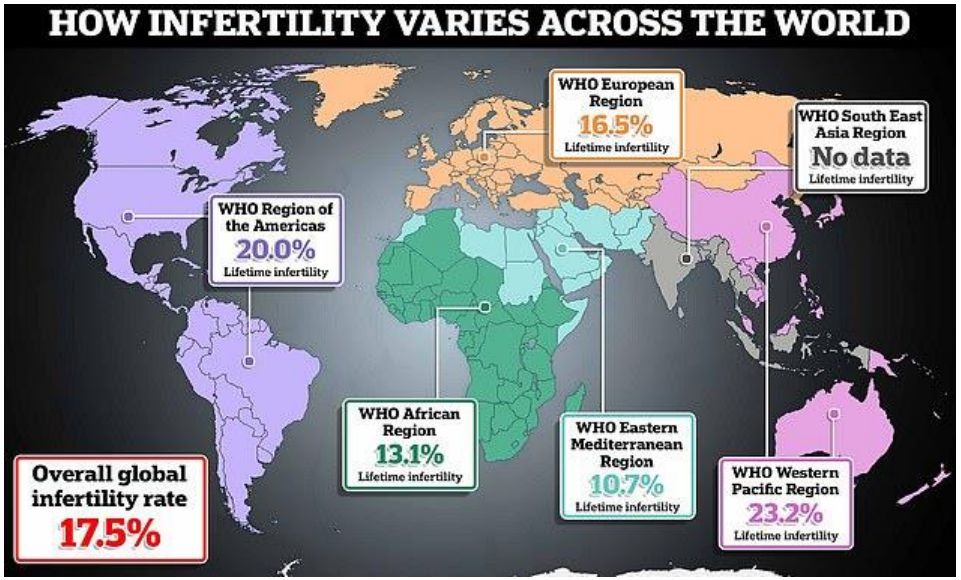
Estimated lifetime prevalence of infertility (95% confidence interval: 15.0, 20.3).

Lifetime prevalence is defined as the proportion of a population who have ever experienced infertility in their life.

12.6%

Estimated period prevalence of infertility (95% confidence interval: 10.7, 14.6).

Period prevalence is defined as the proportion of a population with infertility at a given point or interval in time, which may be current or in the past.



World Health Organization. Infertility prevalence estimates: 1990–2021, Jan 2022
Systematic Review of 133 studies. Pooled estimates

Prevention of infertility

- Safe sexual practices – Prevent STI's
- Maintain healthy weight
- Avoid delaying pregnancy
- Avoid smoking, drugs and alcohol
- Avoid steroids in men as it affects semen parameters
- Avoid exposure to certain environmental toxins, pesticides and chemicals

Factor	Impact on fertility
Obesity (BMI >35)	Time to conception increased 2-fold
Underweight (BMI <19)	Time to conception increased 4-fold
Smoking	RR of infertility increased 60%
Alcohol (>2 drinks/d)	RR of infertility increased 60%
Caffeine (>250 mg/d)	Fecundability decreased 45%
Illicit drugs	RR of infertility increased 70%
Toxins, solvents	RR of infertility increased 40%

Teenage Pregnancy

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Engaging with adolescents

- Adolescents are often harshly judged by health workers, other staff and adult women in the maternity setting.
- They face higher risks of eclampsia, puerperal endometritis and systemic infections that older pregnant women. Babies are at greater risk of being pre-term, underweight and having a severe neonatal condition.
- Young women and girls may not have sufficient information about their sexual and reproductive health and rights, suffered from sexual abuse, been pressured to have sex by peers or to have transactional sex by older men for support. They often face stigma or rejection from family or community.
- Adolescents often feel very alone and scared – and may not have disclosed their pregnancy to anyone. They need gentle and welcoming help. If not treated respectfully, they are less likely to attend regular antenatal care which increases poor birth outcomes.

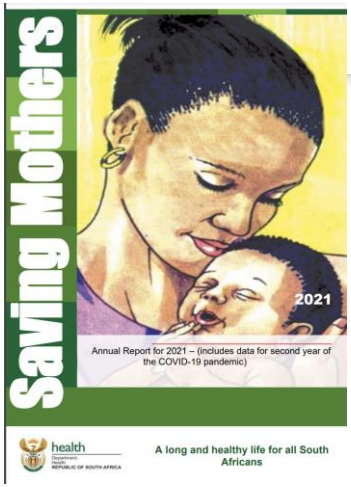


Figure 10: iMMR per age category for the 2020-2022 triennium

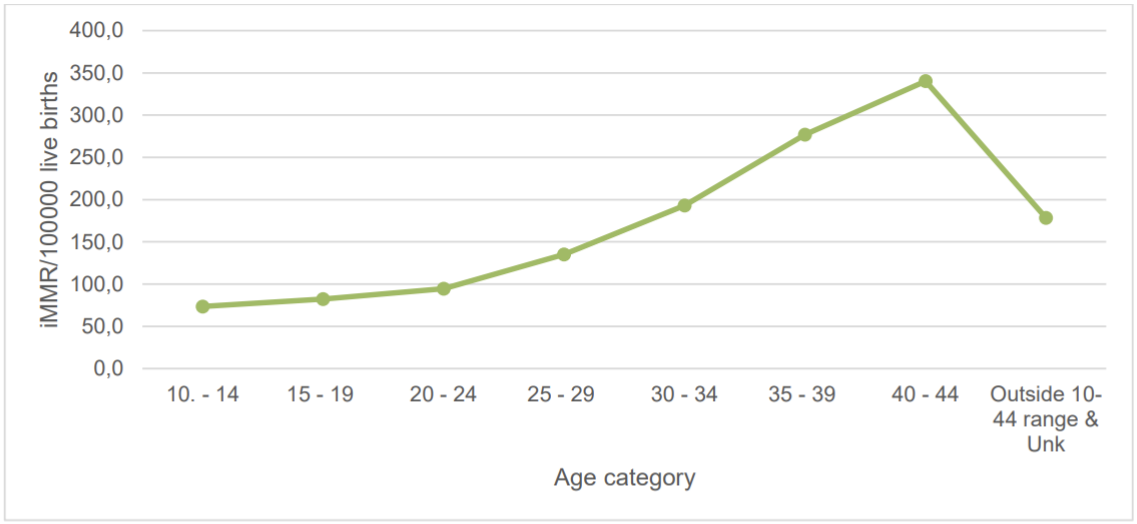
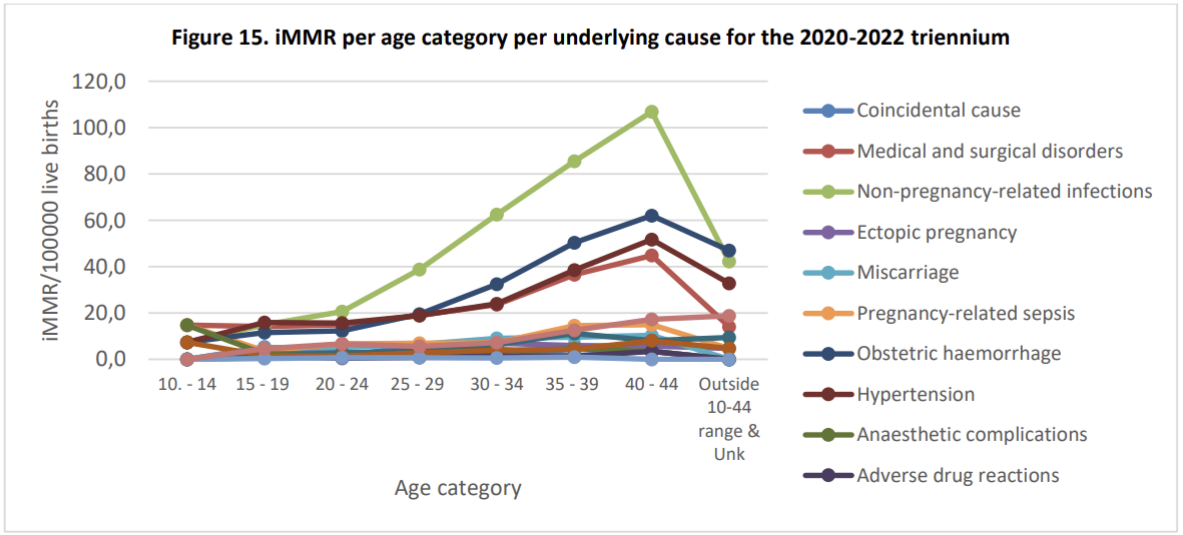


Figure 11: iMMR per age category per underlying cause 2020-2022



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WHO Preconception Care

Too-early, unwanted and rapid successive pregnancies

- Keeping girls in school
- Influencing cultural norms that support early marriage and coerced sex
- Providing age-appropriate comprehensive sexuality education
- Providing contraceptives and building community support for preventing early pregnancy and contraceptive provision to adolescents
- Empowering girls to resist coerced sex
- Engaging men and boys to critically assess norms and practices regarding gender-based violence and coerced sex
- Educating women and couples about the dangers to the baby and mother of short birth intervals

Thank You

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