Understanding unmet need: Measurement in the Demographic and Health Surveys

Sarah E.K. Bradley, Trevor Croft, and Joy Fishel

MEASURE DHS
ICF Macro

Presented November 11, 2009 at the International Conference on Family Planning
Unmet Need Indicator

• Understood by many as
  – the percentage of women who are not currently using a method of family planning and want to stop or delay childbearing

• Complete calculation
  – Is complex
  – Has changed over time
  – Is not widely understood
  – Is difficult to calculate using data other than Demographic and Health Surveys (DHS)
Unmet Need Indicator

• As unmet need is increasingly used for
  – advocacy
  – development of family planning policies
  – implementation and monitoring

• And has been adopted as a Millennium Development Goal (MDG) indicator (target 5b, indicator 5.6):
  1. Understanding this indicator has become crucial
  2. New urgency to find a definition that can be applied consistently over time and across DHS, MICS, RHS, and other surveys
Goals of presentation

1. Describe complete definition of unmet need calculation as currently applied in DHS
   - Variations
   - Changes to definition over time

2. Define issues with using current definition in other national surveys or over time

3. Present initial thoughts on simplification
   - Very preliminary results
Unmet need as commonly presented (simplified)

Currently Married Women
Not Using Any Method

Pregnant or Amenorrheic

- Intended
- Mistimed
- Unwanted

Not Pregnant or Amenorrheic

- Fecund
  - Want Later
  - Need for Spacing

- Infecund
  - Want No More
  - Need for Spacing
  - Want Soon
  - Need for Spacing

Total Unmet Need
Unmet need as actually calculated

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**Current contraceptive use**

- **Yes**
  - **Wants no more children; sterilized; or states they can’t get pregnant = USING TO LIMIT**
  - **Want children; unsure; plans uncertain prospect, or states they can’t get pregnant = USING TO SPACE**
  - **Desire for more children; missing = USING TO SPACE**
  - **Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING**
  - **Desire for more children; missing = UNMET NEED FOR LIMITING**

- **No**
  - **Currently married OR had sex in last 30 days = NOT IN FEECU**
  - **Not married AND had sex in last 30 days = NOT IN FEECU**
  - **Not married AND has not had sex in last month = NOT IN FEECU**
  - **Never married AND has not had sex in last month = NOT IN FEECU**

**Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**

- **Did not want last birth/ current pregnancy at all = FAIL-SPACING**
- **Wanted last birth/ current pregnancy at all, or undecided = FAIL-SPACING**
- **Wanted next birth in 2+ years; wants birth and undecided timing, or undecided if want another birth = UNMET NEED FOR SPACING**
- **Wants child within 2 years = DESIRE BIRTH WITHIN 2 YEARS**

**Increased desire for more children = FAIL-LIMITING**

- **Desire for more children = FAIL-LIMITING**
- **Wants another child within 2 years, or wants, undecided timing = FAIL-SPACING**
- **Wants no more children or undecided whether wants more children = FAIL-LIMITING**
- **Desire for more births missing = FAIL-LIMITING**

**Response to “time since last period” is >6 months or menopausal or had hysterectomy or never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**

**Said “Can’t get pregnant” on future birth intentions or “menopause” on reason not intending to use a contraceptive method in the future = INFECUND**

**Married 5+ years ago, had no children in past 5 years, and never used a method = INFECUND**

**Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = INFECUND**

**Did not want last birth/ current pregnancy at all = NOT IN FEECU**

**Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING**

**Wanted last birth/ current pregnancy missing = UNMET NEED FOR SPACING**

**Did not want last birth/ current pregnancy at all = NOT IN FEECU**

**Not pregnant/ PP amenorrheic = INFECUND**

**Not pregnant/ PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**

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Note: The diagram above outlines the classification of unmet needs based on contraceptive use and desired family planning outcomes.
Women using contraception

- Wants no more children OR sterilized OR states they can’t get pregnant = USING TO LIMIT
- Want children soon/later OR wants unsure of timing OR undecided = USING TO SPACE
- Desire for more children is missing= USING TO SPACE
Unmet need definition (v626) – as calculated since ~ 2003

**Women not using contraception**

**Current contraceptive use**

- **Yes**
  - Wants no more children; sterilized; or states they can't get pregnant = USING TO LIMIT
  - Want children soon/later, wants unsure of timing, or undecided = USING TO SPACE
  - Desire for more children = USING TO SPACE
  - Last birth/current pregnancy was wanted = DESIRE BIRTH IN <2 YEARS
  - Did not want last birth/current pregnancy = FAIL-SPACING
  - Undecided whether wants more children = UNMET NEED FOR LIMITING
  - Did not want last birth/current pregnancy at all = FAIL-SPACING
  - Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING
  - Response to "time since last period" is "menstrual" or "menopausal" OR reason not intending to use a contraceptive method in the future = INFECUND

- **No**
  - Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure
  - Did not want last birth/current pregnancy at all, or undecided = FAIL-SPACING
  - Want another child within or after 2 years, or wants, undecided timing = FAIL-SPACING
  - Did not want last birth/current pregnancy at all, or undecided = FAIL-LIMITING
  - Did not want last birth/current pregnancy = FAIL-LIMITING
  - Response to "time since last period" is "menstrual" OR amenorrheic OR reason not intending to use contraceptives in the future = INFECUND
  - Last birth/current pregnancy was wanted = DESIRE BIRTH WITHIN 2 YEARS
Women not using contraception

- Currently married OR had sex in last 30 days
- Never had sex = NEVER HAD SEX
- Never married AND has not had sex in last month = NO SEX, WANT TO WAIT
- Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure (this selection applies first)
Unmet need definition (v626) – as calculated since ~ 2003

Pregnant or PP amenorrheic women who experienced contraceptive failure

- Current contraceptive use
  - Yes
    - Wants no more children; sterilized; or states they can't get pregnant = USING TO LIMIT
    - Want children now or later, or unsure of timing = USING TO SPACE
    - Desire for more children = USING TO SPACE
  - No
    - Pregnant or PP amenorrheic women who experienced contraceptive failure
      - Wants no more children, sterilized; or states they can't get pregnant = USING TO LIMIT
      - Want children now or later, or unsure of timing, or undecided = USING TO SPACE
      - Desire for more children = USING TO SPACE
    - Currently married OR had sex in last 30 days
      - Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING
      - Not pregnant/ PP amenorrheic
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING
        - Did not want last birth/ current pregnancy at all = UNMET NEED FOR SPACING
      - Nad not had sex in last month = NO SEX, WANT TO WAIT
        - Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure
          - Did not want last birth/ current pregnancy at all = FAIL-SPACING
          - Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING
          - Desire for more children = FAIL-LIMITING
          - Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING
        - Did not want last birth/ current pregnancy at all = UNMET NEED FOR SPACING
      - Not pregnant/ PP amenorrheic
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING
        - Did not want last birth/ current pregnancy at all = UNMET NEED FOR SPACING

Desire for more births is missing = UNMET NEED FOR SPACING

Response to “time since last period” is >=6 months, or menopausal, or had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND

Desire for more children= UNMET NEED FOR LIMITING

No to all = Fecund

Wants no more children = UNMET NEED FOR LIMITING

Wants child within 2 years or DESIRE BIRTH WITHIN 2 YEARS

Wants next birth in 2+ years, wants birth and undecided timing, or undecided if want another birth = UNMET NEED FOR SPACING

Wants another child in or after 2 years, or wants, undecided timing = FAIL-SPACING

Said “Can’t get pregnant” on future birth intentions or “menopausal” on reason not intending to use a contraceptive method in the future = INFECUND

Did not want last birth/ current pregnancy at all = FAIL-SPACING

Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING

Want children sooner/later, wants unsure of timing, or undecided = USING TO SPACE

Never married AND has not had sex in last month = NO SEX, WANT TO WAIT

Never married AND has not had sex = NO SEX, WANT TO WAIT

Not pregnant/ PP amenorrheic

Unwanted need definition (v626) – as calculated since ~ 2003

Pregnant or PP amenorrheic women who experienced contraceptive failure

- Current contraceptive use
  - Yes
    - Wants no more children; sterilized; or states they can't get pregnant = USING TO LIMIT
    - Want children now or later, or unsure of timing, or undecided = USING TO SPACE
    - Desire for more children = USING TO SPACE
  - No
    - Pregnant or PP amenorrheic women who experienced contraceptive failure
      - Wants no more children, sterilized; or states they can't get pregnant = USING TO LIMIT
      - Want children now or later, or unsure of timing, or undecided = USING TO SPACE
      - Desire for more children = USING TO SPACE
    - Currently married OR had sex in last 30 days
      - Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING
      - Not pregnant/ PP amenorrheic
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING
        - Did not want last birth/ current pregnancy at all = UNMET NEED FOR SPACING
      - Nad not had sex in last month = NO SEX, WANT TO WAIT
        - Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure
          - Did not want last birth/ current pregnancy at all = FAIL-SPACING
          - Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING
          - Desire for more children = FAIL-LIMITING
          - Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING
        - Did not want last birth/ current pregnancy at all = UNMET NEED FOR SPACING
      - Not pregnant/ PP amenorrheic
        - Did not want last birth/ current pregnancy at all = FAIL-SPACING
        - Wanted last birth/ current pregnancy later = UNMET NEED FOR SPACING
        - Did not want last birth/ current pregnancy at all = UNMET NEED FOR SPACING

Desire for more births is missing = UNMET NEED FOR SPACING

Response to “time since last period” is >=6 months, or menopausal, or had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND

Desire for more children= UNMET NEED FOR LIMITING

No to all = Fecund

Wants no more children = UNMET NEED FOR LIMITING

Wants child within 2 years or DESIRE BIRTH WITHIN 2 YEARS

Wants next birth in 2+ years, wants birth and undecided timing, or undecided if want another birth = UNMET NEED FOR SPACING

Wants another child in or after 2 years, or wants, undecided timing = FAIL-SPACING

Said “Can’t get pregnant” on future birth intentions or “menopausal” on reason not intending to use a contraceptive method in the future = INFECUND

Did not want last birth/ current pregnancy at all = FAIL-SPACING

Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING

Want children sooner/later, wants unsure of timing, or undecided = USING TO SPACE

Never married AND has not had sex in last month = NO SEX, WANT TO WAIT

Never married AND has not had sex = NO SEX, WANT TO WAIT

Not pregnant/ PP amenorrheic

- \[\text{Desire for more births is missing = UNMET NEED FOR SPACING}\]
- \[\text{Response to “time since last period” is >=6 months, or menopausal, or had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND}\]
- \[\text{Desire for more children= UNMET NEED FOR LIMITING}\]
- \[\text{No to all = Fecund}\]
- \[\text{Wants no more children = UNMET NEED FOR LIMITING}\]
- \[\text{Wants child within 2 years or DESIRE BIRTH WITHIN 2 YEARS}\]
- \[\text{Wants next birth in 2+ years, wants birth and undecided timing, or undecided if want another birth = UNMET NEED FOR SPACING}\]
- \[\text{Wants another child in or after 2 years, or wants, undecided timing = FAIL-SPACING}\]
- \[\text{Said “Can’t get pregnant” on future birth intentions or “menopausal” on reason not intending to use a contraceptive method in the future = INFECUND}\]
- \[\text{Did not want last birth/ current pregnancy at all = FAIL-SPACING}\]
- \[\text{Wanted last birth/ current pregnancy then later, or undecided = FAIL-SPACING}\]
- \[\text{Want children sooner/later, wants unsure of timing, or undecided = USING TO SPACE}\]
- \[\text{Never married AND has not had sex in last month = NO SEX, WANT TO WAIT}\]
- \[\text{Never married AND has not had sex = NO SEX, WANT TO WAIT}\]
- \[\text{Not pregnant/ PP amenorrheic}\]
Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure

- Did not want last birth/ current pregnancy at all
- Wanted last birth/ current pregnancy then, later, or undecided = FAIL-SPACING
- Wantedness of last birth/ current pregnancy missing = FAIL - SPACING

- Wants another child w/in or after 2 years, or wants, undecided timing = FAIL-SPACING
- Wants no more children or undecided whether wants more children = FAIL-LIMITING
- Desire for more children is missing = FAIL - LIMITING
Currently married or sexually active, and pregnant or PP amenorrheic

Unmet need definition (v626) – as calculated since ~ 2003

- **Currently married or sexually active, and pregnant or PP amenorrheic**
  - **Yes**
    - Last birth/current pregnancy was wanted at that time = **DESIRE BIRTH IN <2 YEARS**
    - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
    - Desire for more children = **FAIL-LIMITING**
    - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
    - No = **Fecund**
    - **Response to “time since last period” is >=6 months or menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
    - **Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
    - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
    - Wanted last birth/current pregnancy later = **UNMET NEED FOR SPACING**
    - Wont another child within or after 2 years, or wants, undecided timing = **FAIL-LIMITING**
    - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
    - **Desire for more births is missing = INFECUND**
    - **Rt “time since last period” is >=6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
    - **No to all = Fecund**

- **No**
  - Pregnant or PP amenorrheic
    - Not pregnant/PP amenorrheic
      - Did not have sex IN last 30 days = **NOT HAD SEX, WANT TO WAIT**
      - Ever had sex but never married AND has not had sex in last month = **NO SEX, WANT TO WAIT**
      - Never married AND had sex in last 30 days = **NEVER HAD SEX**
      - **If calendar** Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = **INFECUND**
      - **If no calendar** Married 5+ years ago, had no children in past 5 years, and never used a method = **INFECUND**
      - **Wanted last birth/current pregnancy at all =** **DESIRE BIRTH IN <2 YEARS**
      - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
      - Wanted last birth/current pregnancy later = **UNMET NEED FOR SPACING**
      - Wont another child within or after 2 years, or wants, undecided timing = **FAIL-LIMITING**
      - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
      - **Desire for more births is missing = INFECUND**
      - **Response to “time since last period” is >=6 months or menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
      - **No to all = Fecund**
  - Not pregnant/PP amenorrheic
    - Did not have sex IN last 30 days = **NOT HAD SEX, WANT TO WAIT**
      - Ever had sex but never married AND has not had sex in last month = **NO SEX, WANT TO WAIT**
      - Never married AND had sex in last 30 days = **NEVER HAD SEX**
      - **If calendar** Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = **INFECUND**
      - **If no calendar** Married 5+ years ago, had no children in past 5 years, and never used a method = **INFECUND**
      - **Wanted last birth/current pregnancy at all =** **DESIRE BIRTH IN <2 YEARS**
      - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
      - Wanted last birth/current pregnancy later = **UNMET NEED FOR SPACING**
      - Wont another child within or after 2 years, or wants, undecided timing = **FAIL-LIMITING**
      - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
      - **Desire for more births is missing = INFECUND**
      - **Response to “time since last period” is >=6 months or menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
      - **No to all = Fecund**
    - Ever had sex but never married AND has not had sex in last month = **NO SEX, WANT TO WAIT**
      - **If calendar** Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = **INFECUND**
      - **If no calendar** Married 5+ years ago, had no children in past 5 years, and never used a method = **INFECUND**
      - **Wanted last birth/current pregnancy at all =** **DESIRE BIRTH IN <2 YEARS**
      - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
      - Wanted last birth/current pregnancy later = **UNMET NEED FOR SPACING**
      - Wont another child within or after 2 years, or wants, undecided timing = **FAIL-LIMITING**
      - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
      - **Desire for more births is missing = INFECUND**
      - **Response to “time since last period” is >=6 months or menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
      - **No to all = Fecund**
    - Never married AND had sex in last 30 days = **NEVER HAD SEX**
      - **If calendar** Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = **INFECUND**
      - **If no calendar** Married 5+ years ago, had no children in past 5 years, and never used a method = **INFECUND**
      - **Wanted last birth/current pregnancy at all =** **DESIRE BIRTH IN <2 YEARS**
      - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
      - Wanted last birth/current pregnancy later = **UNMET NEED FOR SPACING**
      - Wont another child within or after 2 years, or wants, undecided timing = **FAIL-LIMITING**
      - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
      - **Desire for more births is missing = INFECUND**
      - **Response to “time since last period” is >=6 months or menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
      - **No to all = Fecund**
  - Never had sex = **NEVER HAD SEX**
    - **If calendar** Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = **INFECUND**
    - **If no calendar** Married 5+ years ago, had no children in past 5 years, and never used a method = **INFECUND**
    - **Wanted last birth/current pregnancy at all =** **DESIRE BIRTH IN <2 YEARS**
    - Did not want last birth/current pregnancy at all = **FAIL-SPACING**
    - Wanted last birth/current pregnancy later = **UNMET NEED FOR SPACING**
    - Wont another child within or after 2 years, or wants, undecided timing = **FAIL-LIMITING**
    - Undecided whether wants more children; wants no more = **UNMET NEED FOR LIMITING**
    - **Desire for more births is missing = INFECUND**
    - **Response to “time since last period” is >=6 months or menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
    - **No to all = Fecund**

- **Desire for more children**
  - **Missing = UNMET NEED FOR SPACING**
Currently married/sexually active Pregnant or PP amenorrheic women (period not returned since last live birth in last 5 years)

- Last birth/current pregnancy was wanted at that time = DESIRE BIRTH IN <2 YEARS
- Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING
- Did not want last birth/current pregnancy at all
- Wantedness of last birth/current pregnancy missing = UNMET NEED FOR SPACING
  - Desire for more children = wants w/in or after 2 years, or wants, undecided timing = UNMET NEED FOR SPACING
  - Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING
  - Desire for more children is missing = UNMET NEED FOR LIMITING
Currently married/sexually active and Not pregnant/PP amenorrheic

(If no calendar)
Married 5+ years ago, had no children in past 5 years, and never used a method = INFECUND

(If calendar)
Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = INFECUND

Said “Can’t get pregnant” on future birth intentions or “menopausal” on reason not intending to use a contraceptive method in the future = INFECUND

Response to “time since last period” is >=6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND

No to all = FECUND
Fecund women

- Wants no more children = UNMET NEED FOR LIMITING
- Wants child within 2 years = DESIRE BIRTH WITHIN 2 YEARS
- Wants next birth in 2+ years; wants birth and undecided timing, or undecided if wants another birth = UNMET NEED FOR SPACING
- Missing on desire for future birth = MISSING
Unmet need definition (v626) – as calculated since ~ 2003

- **Current contraceptive use**
  - Yes
    - **Wants no more children; sterilized; or states they can’t get pregnant = USING TO LIMIT**
    - **Want children soon/later, wants unsure of timing, or undecided = USING TO SPACE**
  - No
    - **Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
    - **Did not want last birth/current pregnancy at all**
      - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
      - **Did not want last birth current pregnancy at all**
        - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
        - **Desire for more children = missing = USING TO SPACE**
      - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
    - **Desire for more births is missing = FAIL-LIMITING**
    - **No to all = Fecund**
  - Never had sex/NEVER HAD SEX
    - **Never married AND has not had sex in last month = NO SEX, WANT TO WAIT**
    - **Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
    - **Did not want last birth/current pregnancy at all**
      - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
      - **Did not want last birth current pregnancy at all**
        - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
        - **Desire for more children = missing = USING TO SPACE**
      - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
    - **Desire for more births is missing = FAIL-LIMITING**
    - **No to all = Fecund**
  - Currently married OR had sex in last 30 days
    - **Pregnant or PP amenorrheic (period not returned since last live birth in last 5 years)**
    - **Not pregnant/PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
      - **Did not want last birth/current pregnancy at all**
        - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
        - **Did not want last birth current pregnancy at all**
          - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
          - **Desire for more children = missing = USING TO SPACE**
        - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
      - **Desire for more births is missing = FAIL-LIMITING**
      - **No to all = Fecund**
    - **Have sex in last 30 days**
      - **Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
        - **Did not want last birth/current pregnancy at all**
          - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
          - **Did not want last birth current pregnancy at all**
            - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
            - **Desire for more children = missing = USING TO SPACE**
          - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
        - **Desire for more births is missing = FAIL-LIMITING**
        - **No to all = Fecund**
      - **Not pregnant/PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
        - **Did not want last birth/current pregnancy at all**
          - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
          - **Did not want last birth current pregnancy at all**
            - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
            - **Desire for more children = missing = USING TO SPACE**
          - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
        - **Desire for more births is missing = FAIL-LIMITING**
        - **No to all = Fecund**
      - **Have sex in last 30 days**
        - **Pregnant or PP amenorrheic (period not returned since last live birth in last 5 years)**
          - **Not pregnant/PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
            - **Did not want last birth/current pregnancy at all**
              - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
              - **Did not want last birth current pregnancy at all**
                - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
                - **Desire for more children = missing = USING TO SPACE**
              - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
            - **Desire for more births is missing = FAIL-LIMITING**
            - **No to all = Fecund**
          - **Have sex in last 30 days**
            - **Pregnant or PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
              - **Did not want last birth/current pregnancy at all**
                - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
                - **Did not want last birth current pregnancy at all**
                  - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
                  - **Desire for more children = missing = USING TO SPACE**
                - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
              - **Desire for more births is missing = FAIL-LIMITING**
              - **No to all = Fecund**
            - **Not pregnant/PP amenorrheic and last birth/current pregnancy was result of contraceptive failure**
              - **Did not want last birth/current pregnancy at all**
                - **Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING**
                - **Did not want last birth current pregnancy at all**
                  - **Wanted last birth/current pregnancy missing = UNMET NEED FOR SPACING**
                  - **Desire for more children = missing = USING TO SPACE**
                - **Response to “time since last period” is >6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND**
              - **Desire for more births is missing = FAIL-LIMITING**
              - **No to all = Fecund**
        - **Desire for more births is missing = FAIL-LIMITING**
        - **No to all = Fecund**
Variations: Unmet need as calculated since ~ 2003 surveys without marriage data in calendar or reasons for discontinuation in calendar

(a) marriage data in calendar or
(b) reasons for discontinuation in calendar

Current contraceptive use

Yes

No

Wants no more children; sterilized; or states they can't get pregnant = USING TO LIMIT

Want children soon/later, wants unsure of timing, or undecided = USING TO SPACE

Currently married OR had sex in last 30 days

Pregnant or PP amenorrheic (period not returned since last live birth in last 5 years)

Not pregnant/PP amenorrheic

Never had sex = NEVER HAD SEX

Never married AND has not had sex in last month = NO SEX, WANT TO WAIT

Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure

Did not want last birth/ current pregnancy at all

Wanted last birth/ current pregnancy then, later, or undecided = FAIL-SPACING

Wantedness of last birth/ current pregnancy missing = FAIL-SPACING

Desire for more children = missing = USING TO SPACE

Last birth/current pregnancy was wanted at that time = DESIRE BIRTH IN <2 YEARS

Wanted last birth/current pregnancy later = UNMET NEED FOR SPACING

Did not want last birth/ current pregnancy at all

Desire for more children = wants w/in or after 2 years, or wants, undecided timing = UNMET NEED FOR SPACING

Wantedness of last birth/ current pregnancy missing = UNMET NEED FOR SPACING

(b) reasons for discontinuation in calendar

If no calendar

Married 5+ years ago, had no children in past 5 years, and never used a method = INFECUND

If calendar

Continuously married and not using contraception for past 5 years (from calendar) and not had a birth in past 5 years and not currently pregnant = INFECUND

Wants another child w/in or after 2 years, or wants, undecided timing = FAIL-SPACING

Wants no more children or undecided whether wants more children = FAIL-LIMITING

Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING

Desire for more births is missing = FAIL-LIMITING

Desire for more children = missing = UNMET NEED FOR LIMITING

Response to "time since last period" is >=6 months OR menopausal OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND

No to all = Fecund

Wants no more children = UNMET NEED FOR LIMITING

Wants next birth in 2+ years; wants birth and undecided timing, or undecided if want another birth = UNMET NEED FOR SPACING

Wants child within 2 years = DESIRE BIRTH WITHIN 2 YEARS
Changes over time: Unmet need definition – as calculated in 1998-2003

**Current contraceptive use**

- **Yes**
  - Wants no more children, sterilized or states they can’t get pregnant – USING TO LIMIT
  - Want children: if not sterilized, want children, or states they can’t get pregnant – USING TO SPACE

- **No**
  - Currently married OR had sex in last 30 days
  - Pregnant or PP amenorrheic: period not returned since last live birth in last 5 years
  - Not pregnant/PP amenorrheic: Last birth/current pregnancy was result of contraceptive failure
  - Did not want last birth/current pregnancy: no problem if became pregnant soon = NO NEED
  - Did not want last birth/current pregnancy then, later, or undecided = FAIL-SPACING

**Desire for more children**

- **Yes**
  - Desires for more children, want children within or after 2 years, or wants, undecided timing – FAIL-LIMITING

- **No**
  - Response to “time since last period” is >6 months OR menopause OR had hysterectomy OR never menstruated OR last period was before last birth & last birth 5+ years ago = INFECUND

**Want children soon/later**

- **Yes**
  - Wants child within 2 years, DESIRE BIRTH WITHIN 2 YEARS

- **No**
  - Wants no more children = UNMET NEED FOR LIMITING

**Desire for more children**

- **Yes**
  - Desire for more children = FAIL-LIMITING

- **No**
  - Desire for more children = UNMET NEED FOR SPACING
Changes over time: Unmet need definition – as calculated in 1994-1998

Yes
- Wants no more children, sterilized or states they can't get pregnant = USING TO LIMIT
- Wanted children someday, wants unsure of timing, or undecided US USING TO SPACE

No
- Pregnant or PP amenorrheic or last birth/current pregnancy was result of contraceptive failure

Currently married OR had sex in last 30 days
- Not pregnant/PP amenorrheic
  - Wont children someday, wants unsure of timing, or undecided = USING TO SPACE

Wearer last birth/current pregnancy at time DESIRE BIRTH IN <2 YEARS
- Desire for more children = USING TO SPACE
  - Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING

Wanted last birth/current pregnancy later = USE TO SPACE
- Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING

Did not want last birth/current pregnancy at time
- No to all = Fecund

Wanted last birth/current pregnancy missing = USING TO SPACE
- Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING

Desire for more births is missing = FAIL-LIMITING
- Would be "happy" if became pregnant soon = NO NEED

Other responses to "happy if became pregnant soon" question = UNMET NEED FOR SPACING

Wants next birth in 2+ years; wants birth and undecided timing, or undecided if want another birth = UNMET NEED FOR SPACING

Desires for more children as of 5+ years ago, had no children in past 5 years, and never used a method = INFECUND

Response to "time since last period" is >=6 months OR menopause or had hysterectomy OR never menstruated OR last period was before last birth & last birth > 5+ years ago = INFECUND

Other responses to "happy if became pregnant soon" question = NO NEED

Wanted last birth/current pregnancy then, later, or undecided = FAIL-SPACING

Wanted another child in or after 2 years, or wants, undecided timing? = FAIL-SPACING

Would be "happy" if became pregnant soon = USE TO SPACE

Wants no more children or undecided whether wants more children = FAIL-LIMITING

Wants child within 2 years = DESIRE BIRTH WITHIN 2 YEARS

Wants child within 2 years DESIRE BIRTH WITHIN 2 YEARS
- Undecided whether wants more children; wants no more = UNMET NEED FOR LIMITING

Wanted last birth/current pregnancy missing = USING TO SPACE
Before 1990

- Definition of unmet need was dramatically different from later definitions
Issues with the current definition of unmet need

- Within DHS:
  - Variations in definition across surveys (calendar data)
  - Variations in definition over time
    - Data not completely comparable even within DHS surveys

- In other surveys:
  - Data requirements are extensive (14 different questions needed)
    - Not all surveys collect necessary data
  - Calculation is extremely complex and difficult to replicate
  - Computation, especially handling of missing data, is inconsistent
  - Different, simpler definitions used by other national surveys (e.g. MICS, RHS)
    - Results not comparable with DHS
Thinking about a new, simpler definition

- Contraceptive prevalence rate (CPR) is widely accepted
  - Crude
  - Simple to define
  - Easy to calculate
  - Widely used
  - Widely understood

- Could a simpler, cruder definition of “need” work also?

- Focus on finding a definition that could be calculated
  - Consistently across countries
  - Consistently across time points
  - By surveys other than DHS
Thoughts on a new definition of unmet need

Current contraceptive use

Using contraception
- Wants no more, sterilized = USING TO LIMIT
- All others = USING TO SPACE

Not using contraception
- Desire for future birth reported “Says she cannot get pregnant” OR Reason not using contraception reported: “Menopausal/hysterectomy” OR “Subfecund/infecund” = INFECUND

All others = Fecund
- Reason not using contraception reported: “Not having sex”, “Infrequent sex” = NO NEED
- Wants future birth now or within 2 years = WANTS WITHIN 2 YEARS
- Wants after 2 years, wants but unsure of timing, or undecided = UNMET NEED FOR SPACING
- Does not want a future birth = UNMET NEED FOR LIMITING
Elements of a new definition

• Desire for births
  – Purely prospective
  – No retrospective information for pregnant or PP amenorrheic

• Infecundity, lack of need
  – Self reported
  – Not based on behavioral data
  – Defined as:
    • Desire for future birth reported “Says she cannot get pregnant”, or
    • Reason not using contraception reported:
      – “Menopausal/hysterectomy”, “Subfecund/infecund”
      – “Not having sex”, “Infrequent sex” (No need)
## Data needs for standard definition and new definition

<table>
<thead>
<tr>
<th>Standard Definition</th>
<th>New Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive use</td>
<td>Contraceptive use</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Currently pregnant</td>
<td></td>
</tr>
<tr>
<td>Birth in past 5 years and period not returned since last birth</td>
<td></td>
</tr>
<tr>
<td>Desire for future birth</td>
<td>Desire for future birth</td>
</tr>
<tr>
<td>Desire for current pregnancy</td>
<td></td>
</tr>
<tr>
<td>Desire for last birth</td>
<td></td>
</tr>
<tr>
<td>Time since last period</td>
<td></td>
</tr>
<tr>
<td>Time since last sex</td>
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</tr>
<tr>
<td>Reason not using contraception</td>
<td>Reason not using contraception</td>
</tr>
<tr>
<td>Reason for discontinuation prior to last birth/current pregnancy</td>
<td></td>
</tr>
<tr>
<td>Marital status throughout last 5 years</td>
<td></td>
</tr>
</tbody>
</table>

*No new data are needed – all data are already collected in DHS and some other surveys*
Percentage of currently married women with unmet need for contraception using standard DHS definition and proposed new definition: Tanzania

![Graph showing the percentage of currently married women with unmet need for contraception using standard DHS definition and proposed new definition over the years 1990 to 2005. The graph indicates a decrease in the percentage over time.](image-url)
Percentage of currently married women with unmet need for contraception using standard DHS definition and proposed new definition: Egypt
### Comparing current and potential new definitions of unmet need

<table>
<thead>
<tr>
<th>Current Definition</th>
<th>Potential New Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex</td>
<td>Simpler</td>
</tr>
<tr>
<td>Difficult to understand</td>
<td>Easier to understand</td>
</tr>
<tr>
<td>Difficult to calculate</td>
<td>Easier to calculate</td>
</tr>
<tr>
<td>Requires 14 separate questions</td>
<td>Requires 4 questions</td>
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<tr>
<td>Not calculated consistently across different DHS surveys</td>
<td>Can be calculated consistently across different DHS surveys</td>
</tr>
<tr>
<td>Not calculated consistently over time</td>
<td>Can be calculated consistently over time for comparable results</td>
</tr>
<tr>
<td>Cannot be calculated consistently from other surveys</td>
<td>Can be calculated from DHS, MICS, RHS, PapFam</td>
</tr>
<tr>
<td></td>
<td>Can be calculated by national surveys, not just global survey programs</td>
</tr>
</tbody>
</table>