

Definition and measurement of reproductive health

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Abstract An internationally agreed conceptual definition of reproductive health is applied to the development and testing of practical indicators for use in the community. Basic criteria are proposed for an interview-based tool to measure reproductive health — as opposed to morbidity or mortality — adapting methods from the health status measurement field. Proposed domains and indicators linked to the definition of reproductive health adopted at the International Conference on Population and Development (ICPD) should be comparable across and within diverse populations. Two sets of domains that describe reproductive health are recommended for further development and testing, seven domains that focus directly on health and six others that assess related areas of well-being.

Keywords Reproductive medicine/classification; Health status indicators; Morbidity; Health surveys/methods; Interviews/standards (source: MeSH, HLM).

Mots clés Médecine reproduction/classification; Indicateur état sanitaire; Morbidité; Enquête santé/méthodes; Entretien/normes (source: MeSH, INSERM).

Palabras clave Medicina reproductiva/clasificación; Indicadores de salud; Morbilidad; Encuestas epidemiológicas/métodos; Entrevistas/normas (fuente: DeCS; BIREME).

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Introduction

Since the International Conference on Population and Development (ICPD) held in Cairo in 1994 and, more recently, the ICPD+5 Forum in The Hague, organizations and research groups have underlined the need for improved methods to monitor reproductive health in the community (1, 2). One potential approach is to refine interview-based methods to estimate the prevalence of reproductive illness; but, although much effort has been directed towards this technique, a recent review of validation studies shows that women's self-reported morbidity does not provide valid estimates of professionally observed morbidity in clinical or laboratory settings (3). Even so, researchers consistently argue for greater value to be placed on women's self-reporting of reproductive illness or their health state (4–6), as many reproductive conditions are not considered life-threatening but have a considerable impact on daily life. Rather than an estimate of morbidity, interview-based surveys may be better suited to measure health status and estimate the burden associated with reproductive illnesses and conditions. To measure *health* rather than morbidity requires an appropriate concept of reproductive health and relevant operational indicators, as outlined below.

Framework for reproductive health

Delegates to the ICPD adopted the first internationally recognized, normative definition of reproductive health, which incorporates — like WHO's constitutional definition of health in general — aspects of physical, mental, and social well-being (7). It reduces family planning to only one aspect of reproductive health services and raises the importance of a life-cycle perspective beyond the child-bearing years. It also

refers to the complex links between direct and indirect determinants of health and between the individual and the environment, and suggests that the awareness of and entitlement to health — as well as the provision of appropriate services — are also part of reproductive health. In 1999, delegates to the ICPD+5 Forum continued to call for the development of tangible ways to monitor reproductive health (8–10). Although many researchers discuss the importance of indicators of health, most continue to report indicators of mortality, service utilization and, to a growing extent, morbidity (11).

Two basic challenges need to be taken up in order to develop and test practical indicators of reproductive health. The first is one of description. Consensus is clear on the need to define and measure reproductive health, identify requirements and evaluate alternative interventions. However, the actual selection of priorities and effective interventions will vary across populations and geographical locations, taking stock of context-specific aspects including the epidemiology of reproductive morbidity, the ways that illness affects people's lives, and the health care system. For operational purposes it is therefore recommended to distinguish the definition of reproductive health from a potential core set of reproductive health priorities or essential interventions. Along these lines, WHO distinguishes three dimensions of reproductive health: as a human condition (including the level of health and related areas of well-being); as an approach (policies, legislation and attitudes); and as services (the provision of services, access to them, and their utilization) (1).

The second challenge is how a conceptual definition of reproductive health — focusing on the human condition — may serve as a basis for operational indicators. This requires adapting the internationally negotiated language of the ICPD

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definition to different contexts and at the same time understanding what may be generalized from local, alternative conceptions of reproductive health. Although detailed ethnographic and applied anthropological studies provide insights into the experience of reproductive health conditions (e.g. 12), these descriptions usually assess small samples and the findings are not easily comparable across or even within populations. Rendering a definition meaningful across populations also requires an assessment of terms that may not exist in many languages (13). Furthermore, the interests of those being assessed must be considered while indicators are constructed and tested in different sites. For example, whether local populations prefer different ways of collecting data, or describe and value health states differently, shapes the interpretation and legitimacy of indicators developed (14).

A wide range of standardized approaches exists to measure health in interview-based surveys, largely growing out of the desire to measure the quality of health as a separate outcome from mortality or morbidity, within clinical trials or among sub-populations particularly burdened by the consequences of illness (15, 16). Generic instruments, developed to measure health status irrespective of a particular disease or condition, investigate multiple domains that cover key aspects of health. For example, the Short-Form 36 Health Survey covers eight domains of health: physical functioning, physical and emotional roles, social functioning, mental health, general health perceptions, bodily pain and vitality (17). Standardized instruments are increasingly being used in industrialized countries to provide additional information on health status associated with different reproductive morbidity, events or conditions (18). Different instruments use different sets of domains, reflecting an implicit difference in how health is conceptualized and an explicit difference in how health is operationally measured. Although such applications quantify individual or group experiences, none explicitly refers to a conceptual definition of reproductive health as the basis for the selection of domains or operational indicators.

Research challenge

Cumulative research into health status measurement offers a variety of approaches to constructing operational indicators of reproductive health. Three basic criteria are suggested for any standardized instrument: 1) the range of domains and subsequent indicators tested are linked to the ICPD definition; 2) the full range of health states (spanning gynecological, obstetric, contraceptive morbidity and related events) may be measured with acceptable levels of reliability and validity; and 3) measurements allow for the comparison and interpretation of reproductive health within and across populations. Different approaches exist in order to select domains and develop operational indicators based on them. Box 1 proposes two sets of domains for further development and testing, which together describe reproductive health as a human condition: the first focuses on health and the second considers selected health-related aspects of well-being. The conceptual bases of these domains are either found in the ICPD definition or reflect important dimensions consistently cited in qualitative

Box 1. Proposed operational domains to measure reproductive health and well-being

Reproductive health: seven domains

- Physical health and illness
- Psychological health and illness
- Physical functioning
- Safe and satisfying sexual life
- Energy and fatigue
- Cognitive functioning
- Pain and discomfort

Selected health-related aspects of well-being: six domains

- Social sanctions and stigma
- Relations with partner
- Need for support fulfilled
- Productive role (work, education, housework, provision of care)
- Social role
- Burden on household and family members

Other criteria

- Reflect local, contextualized definitions of reproductive health
- Able to describe events and conditions across reproductive life course, from adolescence to post-menopause
- Amenable to self-reporting in interviews based on households, communities or health services
- Acceptable estimates of reliability and validity
- Salient and comparable across diverse populations
- Useful as inputs to policies and programmes

and quantitative studies on reproductive health (19). Additional criteria are noted that should be considered as operational indicators are developed and tested. Rather than disease-specific assessment approaches — such as different domains for gynecological, obstetric or contraceptive morbidity — a general set of domains is proposed. This is justified because developing and testing an instrument that is applicable to a wide range of conditions and both sexes enhances comparability. Specific questions and response scales that would make up each indicator are not suggested here: they may be culled from other sources, for example, existing standardized questionnaires or in-depth qualitative investigations.

The interpretation and usefulness of multidimensional profiles of reproductive health will be strengthened by testing, in advance, hypothesized relationships with different illness and disease groups, socioeconomic and demographic groups (including vulnerable or marginalized sub-populations), or other external criteria. That individuals, groups or populations may have the same level of morbidity, but different levels of health, would emphasize the value of measuring health. The inclusion of quantitative indicators of reproductive health — not merely the absence of disease — within the tool-kit of descriptive epidemiology will serve to quantify and legitimate concerns to improve reproductive health as it is experienced in daily life, beyond the reduction of morbidity and mortality. Further work specifically adapting and refining approaches from the health status measurement field is therefore recommended as a means to develop practical tools to assess reproductive health in the community. ■

Conflicts of interest: none declared.

Résumé

Définition et mesure de la santé génésique

Une définition conceptuelle de la santé génésique, acceptée au niveau international, est appliquée au développement et à l'essai d'indicateurs pratiques destinés à être utilisés dans la communauté. Des critères de base sont proposés pour l'élaboration d'un outil permettant de mesurer la santé génésique – par opposition à la morbidité et la mortalité – lors d'entretiens, en adaptant les méthodes de mesure de l'état de santé. Les domaines et indicateurs proposés en relation avec la

définition de la santé génésique adoptée lors de la Conférence internationale sur la population et le développement (CIPD) doivent être comparables d'une population à l'autre et au sein d'une même population. Deux séries de domaines décrivant la santé génésique sont recommandés en vue de leur développement et de leur essai : sept qui concernent directement la santé et six autres qui évaluent des aspects du bien-être en relation avec la santé.

Resumen

Definición y medición de la salud reproductiva

En este trabajo se aplica una definición conceptual acordada internacionalmente de la salud reproductiva al desarrollo y ensayo de indicadores prácticos para uso en la comunidad. Se propone una serie de criterios básicos para un instrumento de medición de la salud reproductiva basado en entrevistas — por oposición a la morbilidad o la mortalidad —, adoptando para ello métodos procedentes del campo de la medición de los estados de salud. Los dominios e indicadores propuestos

en relación con la definición de salud reproductiva adoptada en la Conferencia Internacional sobre la Población y el Desarrollo deben ser comparables entre poblaciones y dentro de las diversas poblaciones. Se recomiendan dos conjuntos de dominios que describen la salud reproductiva para su ulterior desarrollo y ensayo: siete dominios centrados directamente en la salud, y otros seis que valoran aspectos relacionados con el bienestar.

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