WHO recommendations on home-based records for maternal, newborn and child health

Background
A home-based record is a health document used to record the history of health services that an individual receives. It is kept at home, in either paper or electronic format, by the individual or caregiver. The use of these records is intended to be integrated into the health information system and to complement records maintained by health facilities. Home-based records range from antenatal notes or vaccination-only cards, to more expanded vaccination-plus cards, child health books or integrated maternal and child health books, which often include health education messages. Some form of home-based record is used in at least 163 countries, although they vary greatly in terms of their design and the information recorded in them. In some countries, almost everyone keeps a home-based record, while in others, retention and use is lower. While home-based records have been widely implemented for decades, evidence of their benefits has not previously been systematically reviewed and summarized. WHO has recently published a guideline that addresses this gap and provides updated, evidence-based recommendations on the use of home-based records for MNCH outcomes.

Methods
The guideline was developed using the standard WHO process for guideline development, overseen by a WHO Steering Group, Systematic reviews of both quantitative and qualitative evidence and a framework analysis of grey literature and key informant interviews were commissioned. The quality, certainty and confidence of the evidence were rated using the Grading of Recommendations

Table 1. Recommendations on home-based records

RECOMMENDATION 1. The use of home-based records, as a complement to facility-based records, is recommended for the care of pregnant women, mothers, newborns and children, to improve care-seeking behaviours, male involvement and support in the household, maternal and child home care practices, infant and child feeding, and communication between health providers and women/caregivers. (Low-certainty evidence).

RECOMMENDATION 2. There was insufficient evidence available to determine if any specific type, format or design of home-based records is more effective. Policy-makers should involve stakeholders to discuss the important considerations with respect to type, content and implementation of home-based records.

Remarks of the Guideline Development Group (GDG)
- Some of the studies showed positive effects on the following outcomes:
  - maternal health immunization care-seeking
  - outcomes related to a supportive home environment for maternal and child health (MCH) care
  - infant feeding and other child health care practices
  - child growth and development
  - continuity of care across MCH and
  - communication with health care providers.
- Qualitative evidence indicates that women, caregivers and providers from a variety of settings value home-based records.
- Limitations of the evidence include:
  - Few studies were found.
  - Half of the studies were conducted in high-income countries.
  - Some of the studies are outdated, having been conducted before 2000.
  - There is wide variation in the studies (i.e. different types of home-based records in different settings and different outcomes were assessed).
  - For many outcomes, no significant effects were reported or no studies on home-based records were found.
- There are some settings where home-based records may be of greater value; for example, in remote and fragile settings, where health systems are weak or where health information systems are absent or poor, and in locations where caregivers may use multiple health facilities.
Assessment, Development and Evaluation (GRADE) and the Confidence in the Evidence from Reviews of Qualitative Research (CERQual) approaches. Meetings of the Guideline Development Group (GDG), an international group of experts, were convened in November 2017 and April 2018, to discuss and review the evidence, and to develop recommendations. The GDG reviewed evidence on the following criteria: effects (impact and potential harms), value for stakeholders, resources required, cost-effectiveness, equity, acceptability and feasibility. The draft guideline was reviewed by external reviewers and the WHO Guidelines Review Committee. The final guideline was published in September 2018.

Implementation considerations

The ability of home-based records to contribute to MNCH outcomes depends on the quality of implementation. The main implementation considerations for countries to take into account, listed below, apply to national and subnational levels. They deal with the content and design of home-based records, the importance of integrating them into health services and systems, keeping costs down, and effectively addressing the needs of health workers, women and caregivers. Government and policy-makers should discuss these issues with partners when moving forward. Programme managers also need to consider these points before proceeding or continuing with home-based record implementation.

Key stakeholders should be involved at every stage of the implementation process, from the content and design of home-based records to the training of providers and use by end-users. Each step should be planned and budgeted, to maximize the potential impact of home-based records on outcomes.

Design and content

Careful consideration should be given as to what personal information is necessary to be included to avoid stigma and discrimination. Privacy needs to be considered, especially in the case of electronic home-based records, in relation to potentially sensitive information that clients may wish to keep confidential, e.g. HIV testing, status or treatment. The design and content of home-based records need to be adapted for appropriate use in local contexts, considering health priorities, available services and language. For countries with multipurpose home-based records, planners should ensure content is harmonized to promote continuity of care. Where literacy levels are low, home-based records should include more images and less text.

Training

Health workers will require initial and refresher training and supervision to ensure records are completed correctly and that individuals and caregivers are reminded to keep their home-based records and bring them to every facility visit.

Sustainability

Sustainable financing and lower prices need to be secured for all of the costs of home-based records, including durable paper and printing services.

Planning

Strong government ownership and leadership – including planning, integration and budgeting – are key to the prioritization and sustainability of home-based records. Regular redesigns of home-based records are important for keeping health information up to date. Redesign timelines should be set and adhered to, in order to avoid delays and stock-outs. Health system planners should ensure continuous supply and availability of updated home-based records, which can be distributed through existing health system supply chains and structures.

Health education

Relying solely on home-based records to provide health education messages and information may not improve care practices and care-seeking. Comprehensive health promotion and communication strategies are needed, wherein home-based records may be one component.

Potential for harm

While responsible advertising can bring valuable revenues, advertising on home-based records may present potential conflicts of interests and have the potential to cause harm, e.g. advertisements for formula milk or political parties. A country programme should carefully assess the risks and benefits.

Research gaps

In general, more robust evidence is needed on how best to implement home-based records to ensure impact on MNCH and health service outcomes. It would be good to have consensus on the key implementation components of home-based records and key outcome measurements for evaluating them. Additional research is particularly needed on the benefits of using home-based records for recording information on single aspects of health, versus home-based records for multiple aspects and those that are also designed for health education purposes.

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