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Recommendation 13 for Policy-makers on Hormone replacement therapy

- **Make provisions for:**
  - **Easy access to health-care professionals for women to discuss their menopausal symptoms and the benefits and harms of using hormone replacement therapy (HRT) and non-hormonal alternatives.**
  - **Assessment of baseline cancer risk, including mammography before starting to use HRT, where applicable.**
  - **Availability, on a prescription-only basis, of various formulations to personalize use of HRT and minimize risks.**
  - **Periodic re-evaluation of symptoms and HRT use.**

Executive summary

Menopausal HRT is a medicine to treat the symptoms of menopause. It involves the external use of estrogen, either alone or in combination with progesterone, to replicate the premenopausal internal hormonal environment in women who are approaching or have attained menopause. Menopausal women experience several symptoms that adversely affect their quality of life and mental health.

HRT use is associated with an increased risk of breast cancer. However, the increase in risk depends on the formulation of the medication, the duration of its use, and the method of delivery. Several HRT formulations with lower risks are now available. HRT use may also be associated with an increased risk of ovarian and endometrial cancers. The originally anticipated benefits of HRT use for cardiovascular and neurocognitive health have not been observed. Therefore, HRT should not be used as a preventive intervention.

In 2002, the Women's Health Initiative trial showed an excess of breast cancer risk in the combined HRT arm of the trial, leading to a sharp decline in the use of HRT worldwide. However, since 2015, the rate of HRT prescriptions appears to have increased again.

Some consequences of menopause, for example osteoporosis, can be treated with specific medications. However, a significant proportion of menopausal symptoms, for which alternative interventions do not exist or are not as effective, may merit the use of HRT as the most effective form of treatment. Therefore, the potential harms of HRT use in terms of the increased risk of breast cancer need to be weighed against its benefits in improving quality of life and mental health. This requires health systems to have certain protocols and guidelines in place to ensure effective and responsible prescription of HRT for menopausal women.

Integrated approaches through policy actions that support training of health professionals to minimise risks, improving accessibility to health professionals for personalised patient assessments and regulating the availability of HRT formulations are particularly important. This policy brief describes international policies and guidelines that support policy-makers and other stakeholders to implement the European Code Against Cancer, 5th edition (ECAC5) policy recommendation to address the cancer burden caused by HRT use.

Key policy actions to reduce the use of HRT

Menopausal women experience several symptoms that adversely affect their quality of life and mental health. A significant proportion of menopausal symptoms merit use of HRT as the most effective form of treatment. Therefore, it is important to make provisions for:

- **Easy access to health-care professionals for women to discuss their menopausal symptoms and the benefits and harms of using HRT and non-hormonal alternatives.**
  - Provisions should be made for access to appropriately trained health-care professionals to assess a woman's symptoms and perform a thorough clinical assessment.
- **Assessment of baseline cancer risk, including mammography, before starting to use HRT, where applicable.**
  - Because use of HRT is associated with an increased risk of breast cancer, any HRT use needs a careful consideration of benefits and harms. The key principles in any potential use of HRT are:

    an individualized risk assessment, including baseline mammograpy[1] (and some form of integration with, or provision of specific access to, regional or national breast cancer screening programmes would be desirable);

    an informed decision, after a thorough discussion with a health-care professional about the balance of benefits and harms, including a discussion about the most suitable HRT formulation;

    that service provision should be made in such a manner that allows sufficient time for these assessments.
- **Availability, on a prescription-only basis, of various formulations to personalize use of HRT and minimize risks.**
  - HRT use should only be considered in women with menopausal symptoms and on a prescription-only basis, to prevent misuse by asymptomatic individuals. A legislative/administrative framework is also needed to prevent over-the-counter sales or online sales of HRT without prescription. Health-care professionals should have a wide range of formulations available to prescribe; this may require procurement and distribution at the national or regional level.
- **Periodic re-evaluation of symptoms and HRT use.**
  - A periodic reassessment of symptoms and HRT use should be undertaken so that HRT is used for as short a duration as possible.
- **Ongoing professional development for health-care professionals.**
  - Health-care professionals need to be able to educate women about the risk of cancer, the clinical need to use HRT, the risk factors, and the risks associated with individual HRT formulations. They need to be able to carry out baseline risk assessments and conduct a thorough discussion about balancing benefits and harms. Therefore, improving knowledge among health-care professionals is an essential step; this could be achieved by developing specific courses and formularies, mandatory training, and providing information to share with patients.

[1] The starting age of mammographic screening varies in different countries. If the person seeking HRT use has not had a mammogram within the preceding year, a baseline mammogram needs to be performed to rule out presence of any significant pathology, including cancer, and to ascertain mammographic breast density, a known breast cancer risk factor. The latter will be useful in that individual's risk assessment.

Risk of cancer

- A large body of evidence supports the increase in the risk of breast cancer with the use of combined (estrogen plus progesterone) HRT. Updated evidence now shows that even short-term use increases risk.
- The increase in breast cancer risk is less pronounced in postmenopausal women who are overweight and obese, who already have a higher baseline risk due to excess internal estrogen synthesized in body fat.
- The risk of breast cancer is smaller with estrogen-only HRT than with combined HRT.
- HRT use also increases the risk of ovarian and endometrial cancers and may decrease the risk of bowel cancer.
- The originally anticipated benefits of HRT use for cardiovascular and neurocognitive health have not been observed. The evidence is mixed, and a possibility of increased risk of dementia exists. Therefore, HRT should not be used as a preventive measure.

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References

Genazzani et al. (2024). Int J Gynaecol Obstet. 164(2):516–30. PMID: 38178609

International Agency for Research on Cancer (2012). Pharmaceuticals. IARC Monographs Vol. 100A

National Institute for Health and Care Excellence (2024). Menopause: diagnosis and management (NG23)

Neves-E-Castro et al. (2015). Maturitas. 81(1):88–92. PMID: 25757366

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