HPV vaccine safe and reduces risk of cervical cancer, anti-misinformation review finds

- Summary

- Cervical cancer remains a major global health issue and the **fourth most common cause of cancer related death** among women worldwide. Over 95% of cases are caused by HPV.

- Two major recent Cochrane reviews show that HPV vaccination **reduces cervical cancer incidence by 80% when given at or before age 16.**

- The reviews also found **no increased risk of long-term side effects, infertility, chronic fatigue syndrome or paralysis.**

- Researchers conducted these reviews to **counter misinformation** circulating on social media that has lowered vaccination uptake. In the UK, **HPV vaccine uptake has fallen** from 90% to 72% amongst girls and from 81% to 68% amongst boys.

- Cochrane reviews are known as the gold standard in healthcare because the researchers follow strict methods and are independent

    o The researchers look at all the best studies on a health topic

    o They check the studies carefully to make sure the evidence is trustworthy and unbiased

    o Then they summarise everything in one clear conclusion

    o They aim to give the public and doctors the most reliable information about what works in healthcare

- The first Cochrane review examined randomised controlled trials. It included **60 studies with 157,414 participants**. It found:

    o **High-certainty evidence of no increased risk of serious adverse events** with the HPV vaccine

- The second review examined a further **225 studies including over 132 million people** across the world. It found:

    o **63% lower risk** of cervical cancer overall after HPV vaccination

    o **80% reduced risk** when vaccinated at ≤16 years

    o Several studies reported **zero cervical cancer cases** among vaccinated groups

- This review also found that HPV vaccination **reduces precancerous cells** (74% reduction in those vaccinated before age 16) and **anogenital warts** (53% reduction).