Migration and health behaviour during pregnancy

Immigrant women adopt poorer health behaviour after migration

MARK THOMAS

RESEARCH, p 1052

Krista M Perreira associate professor, Carolina Population Center and Department of Public Policy, University of North Carolina, NC, 27516-2524 USA
perreira@email.unc.edu

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The accompanying prospective national cohort study by Hawkins and colleagues adds to the literature on acculturation (the social and psychological exchanges that take place when different cultural groups interact), health disparities, and the use of alcohol and tobacco during pregnancy.[1] It finds that after women immigrate to England, their maternal health behaviours worsen as their length of residency increases.

Smoking and alcohol consumption during pregnancy are common in the United States and Europe and are important preventable causes of maternal morbidity during pregnancy, poor fetal development, and poor infant health.[1 2] As smoking and alcohol consumption increase in developing countries, such as those in South East Asia and the Western Pacific region,[3 4] taboos against these behaviours in women weaken, and more women are at risk of smoking and drinking alcohol during pregnancy.

The World Health Organization predicts that 20% of all women will smoke by 2025, up from 12% in 2005. Although similar worldwide data on trends are not available for alcohol use by sex, a proportional rise in consumption of alcohol in women of childbearing age can be expected. Overall, these increases in tobacco and alcohol use are worrying because they may lead to a rise in alcohol and tobacco related problems during pregnancy.

As the number of international migrants continues to increase worldwide, smoking and alcohol consumption patterns among women in developing countries will have consequences for medical providers throughout Europe and North America. In 2005, 9% of the European population and 14% of the North American population were foreign born residents, primarily from Africa, Central and South America, or Asia.[5] Moreover, many new immigrants to European and North American countries were women (53% and 50%).[5] Therefore, it is increasingly important that medical and public health professionals in Europe and North America understand the maternal health behaviours of these growing segments of their populations and how they differ from majority white populations.

Women who migrate from developing regions of the world to more economically developed countries bring with them the health beliefs, traditions, and cultural practices of their home countries. Thus, not surprisingly, research on migration and maternal health has found that foreign born women who move to Europe or the US from developing countries with historically lower levels of smoking and alcohol consumption continue to be less likely to smoke and drink after migration. With more time in their new host country, however, greater access to alcohol and tobacco and fewer normative restrictions on the use of these substances result in an increase in these women's use of alcohol and tobacco during pregnancy. Second generation children of immigrants have rates of smoking and alcohol consumption during pregnancy more similar to those of majority white populations in their communities. As they acculturate, other aspects of maternal health behaviours (such as breastfeeding and diet) also worsen and come to resemble those of the majority white population in their communities.[6 7]

A variety of explanations for the transformation of maternal health behaviours over time and across generations have been offered.[2 7 8] Firstly, increasing socioeconomic wellbeing can make alcohol and tobacco more affordable for immigrants. Secondly, minority populations in the US and elsewhere tend to live in urban areas where advertisers and retail outlets that promote alcohol and tobacco are concentrated. Thus, they and their children may be increasingly exposed to messages that encourage the use of these substances. Thirdly, over time, immigrants and their children may move out of immigrant minority communities with close ties to their homelands and strong, informal community supports for traditional health beliefs and practices, including norms that discourage smoking and alcohol consumption. Fourthly, increasing use of alcohol and tobacco by first and second generation immigrant men may increase their use in women. Support for reducing smoking and alcohol consumption during pregnancy, especially from a cohabitating partner, can be essential.[2 9] If her partner smokes or drinks, a woman is continually inundated with social and psychological queues that can trigger the desire to use these substances.

Despite its importance for designing prevention and intervention programmes that promote health behaviours during pregnancy, researchers have only just begun to evaluate what factors explain the changes in maternal health behaviour that occur after migration. Moreover, intervention studies have typically concentrated on middle class, white, non-Hispanic women.[10] Nevertheless, results from one recent intervention study conducted with ethnic minorities in the US suggest that a brief 10-15 minute counselling session with a trained health educator can decrease alcohol consumption.[10] Similarly, recent studies of smoking cessation during pregnancy suggest that interventions

that include a mother's partner, encourage smoking restrictions in the home, and include brief counselling or education components that highlight the negative aspects of smoking promote its reduction during pregnancy.[9 11]

Future research on health disparities, migration, and substance use should investigate differences in risk and protective factors in relation to nativity and race-ethnicity. In addition, more attention should be paid to conditions—especially depression and domestic violence—that co-occur with maternal substance use. In the US, 20% of women who were using alcohol, tobacco, or illicit drugs one year after delivery had symptoms of depression or anxiety and 32% had experienced domestic violence.[12] The co-occurrence of these conditions may be even higher among immigrant women. The research by Hawkins and colleagues is an important first step in developing programmes and policies that promote the health of immigrant women and their children.

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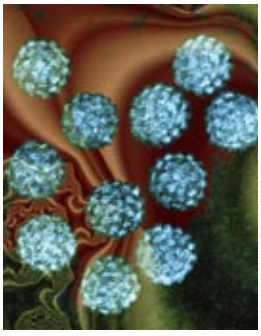
HPV vaccination in the UK

Acceptable uptake is possible in schools, but important practical barriers exist



LINDA STANNARD, UCT/SPL

RESEARCH, p 1056

Jo Waller senior research fellow
j.waller@ucl.ac.uk
Jane Wardle professor of clinical psychology, Cancer Research UK Health Behaviour Research Centre, Department of Epidemiology and Public Health, UCL, London WC1E 6BT

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In the accompanying study, Brabin and colleagues report findings from a pilot study of routine human papillomavirus (HPV) vaccination in advance of the implementation of a £100m (€124m; $197m) national HPV immunisation programme in the United Kingdom this autumn.[1] The study achieved 70.6% uptake for the first dose of the vaccine, with a drop of only 2.1% for the second dose. The third dose has yet to be delivered, and the authors emphasise the crucial importance of maintaining high uptake for the final dose.

These are the first published data on the uptake of HPV vaccine, and they are both encouraging and consistent with studies of intentions to vaccinate in the UK and elsewhere.[2-4] However, uptake was lower than the 87.2% achieved in the same age group for a school based meningitis C catch-up programme in 2000,[5] or the 91% uptake of the first dose in a comparable study of hepatitis B vaccination.[1]

Achieving acceptable coverage in the absence of national publicity, and before HPV vaccination becomes a normative part of the immunisation schedule, is encouraging. However, we must be cautious about generalising from the primary care trusts and schools that elected to take part in this study, as they are likely to provide a more positive environment for delivering the vaccine.

The study identified some logistical challenges for national implementation. A substantial proportion of girls received the first (16.3%) dose and second (23.6%) dose later than planned, and this number will probably be equally high for the third dose. Vaccinating these girls outside the scheduled sessions necessitated a flexible implementation strategy, and this may be more difficult in routine practice. If this is the case, the present results could overestimate the uptake that can be expected across the country. When the programme is implemented nationwide, general practitioners will be involved in immunising girls who miss the vaccine in school, and from 2009, they will also be involved in immunising girls who are no longer at school but are eligible for the catch-up programme. The likely coverage in primary care remains unknown.

Concerns about safety and efficacy were the main reasons that parents cited for refusing consent—consistent with studies of acceptability.[2 3 6 7] This is to be expected given that, as yet, no data are available on the long term efficacy or adverse effects for either of the candidate vaccines. Exploring such concerns will be key to understanding the reasons for refusal. One study found that mothers who believed that their general practitioner took their concerns about vaccinations seriously were more likely to intend accepting the HPV vaccine.[8] This shows how important it is that general practitioners listen to parents' views and talk about their concerns. However, in the wake of the controversy about the measles, mumps, and rubella (MMR) vaccine, work needs to be done to restore public confidence in immunisation.

Only four parents (0.1%) cited fears about condoning sexual activity as a reason for refusing consent. The notion that vaccinating against a sexually transmitted infection might encourage risky sexual behaviour (so called "risk compensation") has received media and academic interest. At present, though, it is unclear whether and when this phenomenon occurs, or if fear of risk compensation is a significant barrier to acceptance

of vaccination.[9 10] However, given that 20% of parents in Brabin and colleagues' study passively refused the vaccine, giving no reason, risk compensation beliefs may be more prevalent than the figures suggest. More work is needed to understand the motives for passive refusal of the vaccine and the practical barriers to providing consent.

Some of the girls whose parents refused consent might have wished to be vaccinated, and it could be argued that 12-13 year old girls are "Gillick compentent" to make this decision for themselves.[11] It is not clear how best to balance girls' own wishes and the possibility of increasing uptake against parents' desire to be involved in the decision making process, or school nurses' likely preference for written parental consent.[12] Decisions need to be made about whether girls should have access to the vaccine through primary care if their parents have refused consent via the school based programme.

As with many new health technologies, uptake of the vaccine in this study was highest in girls from affluent, white backgrounds, who have the lowest incidence of cervical cancer. In addition, cultural or religious beliefs seem to have been important, with two schools refusing to participate in the study on religious grounds. It is essential to engage with groups and communities who have concerns about the vaccine and take steps to ensure that existing disparities are not widened by inequitable uptake. Problems with access and delivery can be tackled partly by sharing best practice from areas that achieve high uptake, but parental concerns also need to be identified and dealt with. As the immunisation programme is implemented across the country, monitoring uptake and identifying subgroups in which uptake is particularly low will be vital.

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Personal electronic health records: MySpace or HealthSpace?

Report of the NHS pilot is too premature to provide answers

Michael R Kidd professor of general practice, Discipline of General Practice, University of Sydney, NSW, 2006, Australia
michael@gp.med.usyd.edu.au

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The NHS, through Connecting for Health, is introducing two types of online health record for everybody in England—the summary care record and HealthSpace.[1 2] The summary care record is being introduced in five "early adopter" pilot sites. An independent evaluation of this implementation was released this week.[3] Delays in deployment, with summary care records in only two sites to date, mean that the evaluation cannot provide the concrete answers that many people were hoping to see regarding consent, patient acceptance, and clinical benefits.

The summary care record is a centrally stored summary of health information created initially from general practitioner records. It contains information on current medications, adverse reactions, and allergies. Proponents of the summary care record expect to see improved patient safety, with reductions in preventable errors, improved access to vital information, and better informed patients.[1]

HealthSpace is a separate initiative that allows patients to record selected data in their own internet based health record, with control over how they share this record with healthcare providers.[2]

The implementation of personal health records by the NHS has been closely scrutinised. Reports by a ministerial taskforce in 2006 and the House of Commons Health Committee in 2007 raised concerns, including "dismay" at the unclear arrangements for the summary care record and the need for "easy to use" products.[4 5] HealthSpace is voluntary and people opt-in to create their own record, but people must actively opt-out if they do not wish to have a summary care record. This consent model has been criticised, with the BMA stating that explicit consent should be obtained.[6] Past commentators have raised the need to select the right patient consent model for the implementation of electronic health initiatives.[7]

The evaluation reported that the current level of development of the summary care record means that it is not yet readily "trialable." NHS staff reported "clunky" technology, which interfaces poorly with other electronic health systems. HealthSpace is even less well developed, with users reporting frustration with the technical processes of registration and use. While the level of development affects the evaluation and the wider applicability of its findings, the reasons for delayed implementation highlight factors that will affect its eventual national roll-out.

By the end of March 2008, only 153 188 summary care

records had been created for patients attending general practices in the first two pilot sites. In four sites, 614 052 patients had been sent a letter informing them about the program and their ability to opt-out or to restrict access. Only 0.76% actively opted out of having a summary care record and 0.03% requested restricted access. Uptake of HealthSpace was very low, with only 0.12% of those invited to open an account completing the process.[3]

Consistent with previous reports supporting the potential of electronic personal health records,[8] most NHS staff and patients saw the summary care record as "a good thing" with potential for improving efficiency of care and patient safety. Some participating general practitioners expressed concerns about the ethics and legality of creating a record for a patient who has not given full informed consent and the extra workload in uploading patient's details into the summary care record.

The evaluation reported the positive impact of "national clinical leads" and local champion general practitioners and practice managers in encouraging participation by their peers. It also stressed the importance of facilitators visiting practices to provide training and support on the implementation of summary care records. Elements that contributed towards success in pilot sites included strong leadership and past success in implementation of electronic health systems, and differences between the two successful early adopters and other sites might be so great that their experiences may not translate well to other settings.

Despite media reports that the summary care record risks civil liberties, many patients said they were "not bothered" whether they had one or not but would welcome ways to remember details of their medical history and current drugs. Many patients did not recall receiving any information about the summary care record or HealthSpace, despite extensive public information campaigns. Patients with potentially stigmatising conditions were more positive about the summary care record than expected. Although most people wanted to have a summary care record, they wanted to control who could access it, and most people were not interested in recording their own medical details on HealthSpace.

The evaluation identified the risk of creating a "credibility gap" if patients see mistakes, either real or perceived, in their summary care record. As more information is added to the record, the scope for errors increases, as does the risk of a credibility gap. "If data do not accurately reflect the patient's real record . . . this may affect the patient's level of trust in the competence of their clinicians."[3]

But perhaps this whole development by the NHS is all too little, too late. Is the NHS summary care record a 20th century healthcare solution being overtaken by 21st century technology and increased sophistication in the use of the internet in the community? Will the people of England be content to participate in government funded initiatives like HealthSpace or will they decide to take more direct control of their own personal health information? Will the locus of control over personal health information shift from health services and governments into the hands of individual patients supported by private internet based organisations?

For example Microsoft's HealthVault and Google Health are personally controlled health record products already available to some patients in the United States.[9-12] Social networking sites, like Facebook and MySpace, offer alternative ways of storing and sharing personal information, including health details, and are being used by some people in ways that should alarm advocates of privacy. Future technology may allow patients to store their full genetic profile on a website and provide access not only to chosen healthcare providers, but also to commercial organisations and private researchers.

Given the choice of having governments create and exert a degree of control over your internet based personal health record, and being able to do it yourself with a little help from Microsoft or Google, which would you choose?

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How much control would you want over your health record?

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Scalpel injuries in the operating theatre

International evidence based guidelines are needed to standardise approaches to reducing risk

Amber M Watt research officer, surgical director, Australian Safety and Efficacy Register of New Interventional Procedures—Surgical (ASERNIP-S), Royal Australasian College of Surgeons, Stepney SA 5069, Australia
asernips@surgeons.org
Michael Patkin lecturer, Discipline of Surgery, University of Adelaide, Adelaide SA 5000, Australia
Michael J Sinnott senior staff specialist in emergency medicine
Robert J Black otolaryngology head and neck surgeon Mater Hospital, South Brisbane QLD 4101, Australia
Guy J Maddern surgical director, Australian Safety and Efficacy Register of New Interventional Procedures—Surgical (ASERNIP-S), Royal Australasian College of Surgeons, Stepney SA 5069, Australia

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Despite recognition of the need to reduce injuries from sharp instruments in healthcare settings, the focus has been more on reducing needlestick injuries than on other causes of injury, such as those caused by scalpel blades in operating theatres.

The operating theatre is a unique environment in which many healthcare professionals work in close proximity, often over long periods, and often under emergency conditions. This environment increases the chances of healthcare workers sustaining serious injuries from scalpel blades.

Scalpel injuries represent a multi-faceted risk as they cause mechanical injury and expose both the injured worker and the patient to the risk of contracting blood borne infection. The sequelae of scalpel injuries are time consuming, emotionally fraught, and potentially expensive for the people and institutions involved.

Data on the number of percutaneous injuries sustained by healthcare workers as a result of scalpels are scarce. A quarter of all percutaneous injuries are sustained in the operating theatre; scalpels are the second most frequent cause of injury, after needles.[1] The Exposure Prevention Information Network (EPINet), a data sharing programme that has been adopted by many healthcare facilities in the United States, has shown that reusable and disposable scalpels cause 8% of injuries to healthcare workers in all hospital settings.[2] However, the reliability of data on injury from sharp instruments is compromised by under-reporting.[3]

Where available, the policies and procedures governing the use and disposal of scalpel blades are highly variable and are inconsistently followed by surgeons and theatre staff. This lack of compliance relates to the poor performance of safety devices; a perception that safety procedures slow or interrupt operations; the lack of equipment or training; and the inability to implement cultural change because of prevailing attitudes among operating theatre staff.[4] Adherence to safety practices might not even reduce rates of injury because there is little evidence to support their effectiveness.

The Australian Safety and Efficacy Register of New Interventional Procedures—Surgical (ASERNIP-S) undertook a systematic review to evaluate the evidence for a variety of safety devices and procedures designed to prevent scalpel injuries.[5] Very little high quality evidence was available, with a small number of studies reporting that cut resistant gloves and glove liners, hands-free passing, "sharpless" surgery, and single handed scalpel blade removers had all been used with varying degrees of success. However, the studies had methodological shortcomings. This lack of high quality evidence highlights the need for empirical research geared towards prevention of injury and strategies to reduce risk.

Future research should begin with detailed audits of injuries from sharp instruments, so that the incidence, prevalence, and epidemiology of scalpel injuries within specific healthcare environments can be assessed. These data will enable interventions to be targeted to where they are needed most.

SPL

Scalpels are the second most frequent cause of injury, after needles

Large well designed randomised controlled trials with standardised methodology and assessment of outcomes are needed to investigate the effectiveness of proposed safety devices and procedures. Results from these trials should be used to develop feasible and robust guidelines, which take into account the complexity of the operative environment and encompass consensus regarding minimum standards of performance. These guidelines must be flexible enough to be responsive to the preferences and clinical judgment of individual surgeons, so that compliance can be increased across a broad range of specialties.

A large part of preventing injuries from scalpels involves creating a culture of safety within an institution and its operative personnel. This culture must be supported by evidence and reinforced through best practice and education. Furthermore, governments and institutions should develop evidence based guidelines so that approaches to occupational health, safety, and welfare can be standardised.

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Misoprostol in resource poor countries

Is cheap and effective, yet its availability remains restricted

Staffan Bergström professor, AMDD Program, Columbia University, New York, NY 10032, USA
Staffan.Bergstrom@ ki.se
Annette Aronsson senior obstetrician, Division of International Health, Karolinska Institutet, SE-171 76 Stockholm, Sweden

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An evidence based guideline on the use of misoprostol for women's reproductive health has recently been published.[1] It underlines the value of misoprostol for specific clinical indications in obstetrics and gynaecology despite the remarkable absence of marketing efforts by producers. Misoprostol is a prostaglandin E_1 analogue, which is effective, cheap, and can be used safely for a variety of obstetric and gynaecological indications.[2] It is rare that a new drug can potentially save tens of thousands of maternal lives, particularly in the poorest countries in the world.

The uterotonic action of misoprostol was discovered as a side effect of its main intended use of treating peptic ulcer.[3] For more than 20 years it has been a focus of global interest among obstetricians and gynaecologists, although the patent holder consistently refuses to acknowledge its tremendous potential value for women in the poorest countries. The reasons for this refusal seem to be related mostly to its wide use for induction of abortion. Threats of boycott activities from antiabortion groups have allegedly prevented it being marketed for use in gynaecology.

The uterotonic properties of misoprostol can reduce mortality in two ways. Firstly, the drug can be used to terminate unwanted pregnancies.[4] Secondly, it can reduce the risk of life threatening postpartum haemorrhage.[5] About 15% of maternal deaths globally are caused by unsafe abortions,[6] and around 30% are caused by postpartum haemorrhage.[7]

About 42 million pregnancies are terminated annually worldwide. Reasons include lack of access to adequate information and a failure of contraception. Even if all women and men used contraceptives perfectly, nearly six million unwanted pregnancies would occur each year.[8]

Unsafe abortions kill an estimated 67 000 women annually.[6] In addition, 5 million women each year experience temporary or permanent disability as a result of complications of unsafe abortions, including haemorrhage; sepsis; peritonitis; and trauma to the cervix, vagina, uterus, and abdominal organs.[8] Such complications are entirely preventable when abortions are performed safely.

An induced abortion is associated with minimal morbidity and a negligible risk of death when performed by trained healthcare providers with proper equipment, the correct technique, and sanitary standards.[9] Misoprostol can be used for medical abortion, cervical ripening before surgical abortion, and evacuation of the uterus for various medical reasons, including incomplete abortion and missed abortion. It can be used in oral, sublingual, or vaginal form.[1]

The main cause of postpartum haemorrhage is uterine atony, which can usually be prevented by the use of conventional uterotonic drugs. Oxytocin is generally preferred but seldom available outside hospital based settings. One randomised controlled trial in resource poor communities found that misoprostol is effective for preventing postpartum haemorrhage in the active management of the third stage of labour. However, it is not yet standard care in such settings.[5]

Because parenteral oxytocin is not available in resource poor settings, it is important for alternative drugs to be made available. The simplified administration of oxytocin using the prefilled disposable UniJect device has been tried in Angola, but it requires refrigerated storage and is most appropriate for hospital settings.[10] For these reasons, misoprostol holds great promise for the prevention of postpartum haemorrhage, but it will certainly not completely eliminate abundant postpartum haemorrhage.

Misoprostol is a cheap and effective drug for terminating unwanted pregnancies and preventing potentially fatal postpartum haemorrhage. It has the benefit of being a heat stable tablet that does not need to be injected but can be taken orally, sublingually, or vaginally. Tragically, because of resistant attitudes among companies marketing the drug, it is not yet an essential drug in many countries, although it is readily available on the black market. The end of the original producer's global patent might improve its availability among the most deprived women in the poorest countries.

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