A Literature Review on the Sexual and Reproductive Health Rights of Women Migrant Workers in the Asian Region

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Executive Summary

Globalisation has opened up opportunities for women to migrate across national borders to seek employment. It is estimated that women constitute almost 50 percent of the global migrant population today, a significant change from previous decades. Women's migration also has wide-reaching implications for their sexual and reproductive health. Sexual and reproductive health rights are upheld in many international instruments and are firmly regarded as part of the basic human rights of peoples everywhere. Nonetheless, women migrant workers' sexual and reproductive health and access to health care have not attracted sufficient attention from governments, employers, health care providers, civil society or researchers. Thus, little is known about the difficulties these women face in coping with sexual and reproductive health illnesses or when seeking treatment, of policies which have been enacted to clarify their entitlements, or indeed, of practical interventions which have successfully met their sexual and reproductive health needs.

This review addresses the following question:

What does the literature identify are the barriers and challenges to meeting the sexual and reproductive health needs of women migrant workers in Asia, and to what extent can/have they be/been overcome?

Migrants, including women migrant workers, are typically regarded as "economic" rather than "human" actors. The literature often represents them as contributors to economic growth through the "remittances" which they send to their home countries, the skills which they possess, or their labour which they exchange for financial return. Their "human" side, i.e. their health and well-being in host countries, are often overlooked.

Existing literature reveals the multiple barriers women migrant workers face in meeting sexual and reproductive health needs. Many do not understand what sexual and reproductive health is, whilst others are embarrassed about the sexual and reproductive health issues which they face. Many women migrant workers fear if they sought medical help for sexual and reproductive health illnesses, their employment would be terminated. Others experience difficulties when accessing health care, because they are unable to leave the workplace. Only a small proportion have adequate health insurance cover. Additionally, many women migrant workers do not speak the local language and are unable to relate to medical staff. They perceive that health care providers discriminate against them, due to their migrant status. Meanwhile, financial demands from their families often mean that women migrant workers cannot pay for health services. All these weaken their ability to exercise sexual and reproductive health rights or access health care.

Migration policies in many Asian countries typically revolve around ensuring a continual supply of cheap labour and reducing the unwanted social effects of migration. Few prioritise, if at all, the sexual and reproductive health needs of women migrant workers. On the contrary, reproductive status is often a pre-requisite for work. Some countries, such as Malaysia and Singapore, prohibit women migrant workers from becoming pregnant and require them to undergo pregnancy tests before they start work. Pregnancies automatically result in cancellation of work permits and deportation. Children born in host countries acquire "stateless" status and cannot attend school or access medical services. Fearing that they will lose their jobs, many women migrant workers endanger their lives by resorting to illegal abortions. In addition, most of the host countries, such as

Japan, Thailand, Malaysia and Singapore prevent integration of unskilled and semi-skilled migrants into their societies by prohibiting their marriage to local citizens or imposing stringent terms and conditions. For example, in Singapore, while marriage between local and unskilled migrant are generally prohibited, rarely when an intermarriage does occur, there will be a discouragingly lengthy bureaucratic process of registration to recognise that marriage. In Thailand, a Thai who is married to a non-Thai will lost her rights to own property. Furthermore, in many Asian countries, migrant workers are often excluded from the legal protections offered to local workers. Many employers also disregard their legal entitlements, even when these are provided in the law. These approaches toward migrants are instrumental; migrant workers are truly only a means to an end.

For women migrant workers, all these have a profound effect on their sexual and reproductive health. Where they are denied freedom of movement, they are not able to travel to hospitals or clinics to seek medical treatment. When they are prohibited from joining unions, they are not able to negotiate their sexual and reproductive health needs. When employers fail to renew the work permits of women migrant workers, the latter become undocumented or illegal migrants. They consequently become an invisible population, with no rights in the societies in which they live and work. It is almost impossible to verify the numbers of undocumented women migrant workers in Asia, but estimates suggest that their numbers at least equal that of documented women migrants. They have the same sexual and reproductive health needs as documented workers, but their rights are the most difficult to enforce because legally, they have no rights in their societies.

In conducting this review, we identified a growing body of research in China which investigates how the sexual and reproductive health needs of their migrant women can be met. This research is likely incentivised by emerging public health and social development concerns resulting from rapid growth in migration levels from rural to urban areas. There is also a small cluster of research on meeting the sexual and reproductive health needs of female entertainment workers and beer promoters in Cambodia, Laos, Thailand and Vietnam. But this body of literature focuses on internal migrants.

Research to address the sexual and reproductive health needs of women migrant workers in the context of cross-border migration in Asia, is very limited. Yet, cross border migration presents more complicated challenges compared to internal migration, as women migrant workers grapple with differences in culture, encounter language barriers, are often unaware of their rights in their host country, and whose health and well-being are ignored by host and home countries in equal measure. There is a scarcity of research which addresses how challenges and barriers to meeting their sexual and reproductive health needs across different institutional and cultural contexts, can be overcome.

Given the lack of literature on women's cross-border migration and sexual and reproductive health, we have had to draw on literature on women's internal migration and sexual and reproductive health, to fill gaps in knowledge. We have only been able to do this where similar challenges are experienced by internal and cross-border migrants. These include, for example, causes of poor sexual and reproductive health (typically lack of awareness), types of sexual and reproductive health issues experienced, and discrimination when accessing health care (due to migrant status). These issues are universal, and do not depend on geographical locations. We have not been able to address issues which are specific to cross-border migrants e.g. grappling with differences in culture, encountering language barriers when seeking health care, being unaware of legal entitlements in their host country, or adequacy of strategies adopted by home and host governments to promote sexual and reproductive health care.

We highlight the following issues discussed in the literature:

1. The nature of sexual and reproductive health needs of women migrant workers: Here, although sexual and reproductive health encompasses a wide range of health conditions, the literature (whether on internal or cross-border migration) almost always focuses on HIV/AIDs, other sexually transmitted diseases, unwanted pregnancies and abortions. We found only a small handful of research papers on e.g. reproductive tract infections. Sexual and reproductive health, however, encompasses a much wider range of conditions, which remains unexplored.

2. Barriers and challenges to meeting the sexual and reproductive health needs of women migrant workers in Asia, especially accessing health care services. Many research papers highlighted women migrant workers' lack of knowledge of as a barrier to good sexual and reproductive health. They also identified a range of industry, social, environmental and service barriers, which prevented access to health care.

3. We located a small cluster of research papers which evaluated the successes of workplace and community-based programs in China, Cambodia, Thailand and Vietnam to increase women migrant workers' understanding of sexual and reproductive health and facilitate their access to health care services. Some of these programs may be replicated in different settings and are therefore of value to activists and planners in cross-border migration contexts.

4. Finally, on implications of research on policy and practice, almost all research papers we reviewed made suggestions for improving women's understanding of sexual and reproductive health and their access to health care. Proposed strategies are numerous, ranging from educating women migrant workers about sexual and reproductive health, better design of workplace interventions, for government-stakeholder collaborations, or for governments to be more committed to act in upholding the sexual and reproductive health rights of women migrants. Whether or not these suggestions have been/can be implemented, however, are not discussed. Thus, we have not been able to determine their utility.

We conclude with identifying gaps in the literature, specifying limitations of the review and proposing recommendations for taking research forward. On the latter, we highlight a need for research to link feminist notions of empowerment to the sexual and reproductive health rights of women migrant workers. The literature reviewed tends to envisage change in policy and practice at government, or community, or workplace levels; i.e. a top-down view. Although many research papers highlighted the need for e.g. increased awareness and understanding of sexual and reproductive health issues on the part of women migrant workers, very few framed their discussions using an "empowerment" framework or focused on work at grass-roots level to enable women migrant workers themselves to exercise agency in bringing about change. Such research has always been encouraged by feminist advocates, yet remains strangely absent in this crucial area where millions of women continue to work with serious threats to their sexual and reproductive health.

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Introduction

Globalisation has opened up opportunities for women to seek employment to improve their and their families' lives, resulting in rapid female economic migration world-wide. There is a distinct gender dimension to migration today. Women's migration has wide-reaching implications for their health and access to health care services. Sexual and reproductive health rights are upheld in many international instruments and are firmly regarded as part of the basic human rights of peoples everywhere. Nonetheless, they are not issues which have attracted sufficient attention from governments, employers, health care providers, civil society or researchers. They are nonetheless, critical, given that women constitute almost 50 percent of the current global migrant population today. We focus, in this literature review, on women migrants and their sexual and reproductive health in the Asian region.

This review addresses the following question:

What does the literature identify are the barriers and challenges to meeting the sexual and reproductive health needs of women migrant workers in Asia, and to what extent can/have they be/been overcome?

Statistics

Migration is growing rapidly in Asia. The number of international migrants within ASEAN (Indonesia, Malaysia, the Philippines, Singapore and Thailand, Brunei, Laos, Cambodia, Myanmar and Vietnam) is estimated to be 9.9 million and of these, it is thought that 6.9 million have moved between countries within the region (UN Women, 2017: 17). Interestingly, about 96 per cent of the 6.9 million intra-ASEAN migrants in 2015 moved to just three countries: Malaysia, Singapore, and Thailand (p.40).

The formation of the ASEAN Economic Community (AEC) in December 2015, was expected to boost annual regional growth by 7.1 percent and create almost 14 million new jobs by 2025[1]. Tuccio and colleagues (2017) noted that migration within ASEAN is likely to continue to increase in the next few decades. Large income and demographic differentials between ASEAN economies are likely to support high levels of labour movement. The porous borders that separate ASEAN member states will also boost low-skilled, undocumented migration (p. 147). The authors also note that female migration is increasing. East Asian women have responded to changing demands in foreign labour markets. There is today a large immigration industry within ASEAN which enables both legal and undocumented female migrants to move to work. Thirdly, young women are more likely than men to follow their relatives or friends who are already working abroad (p.148).

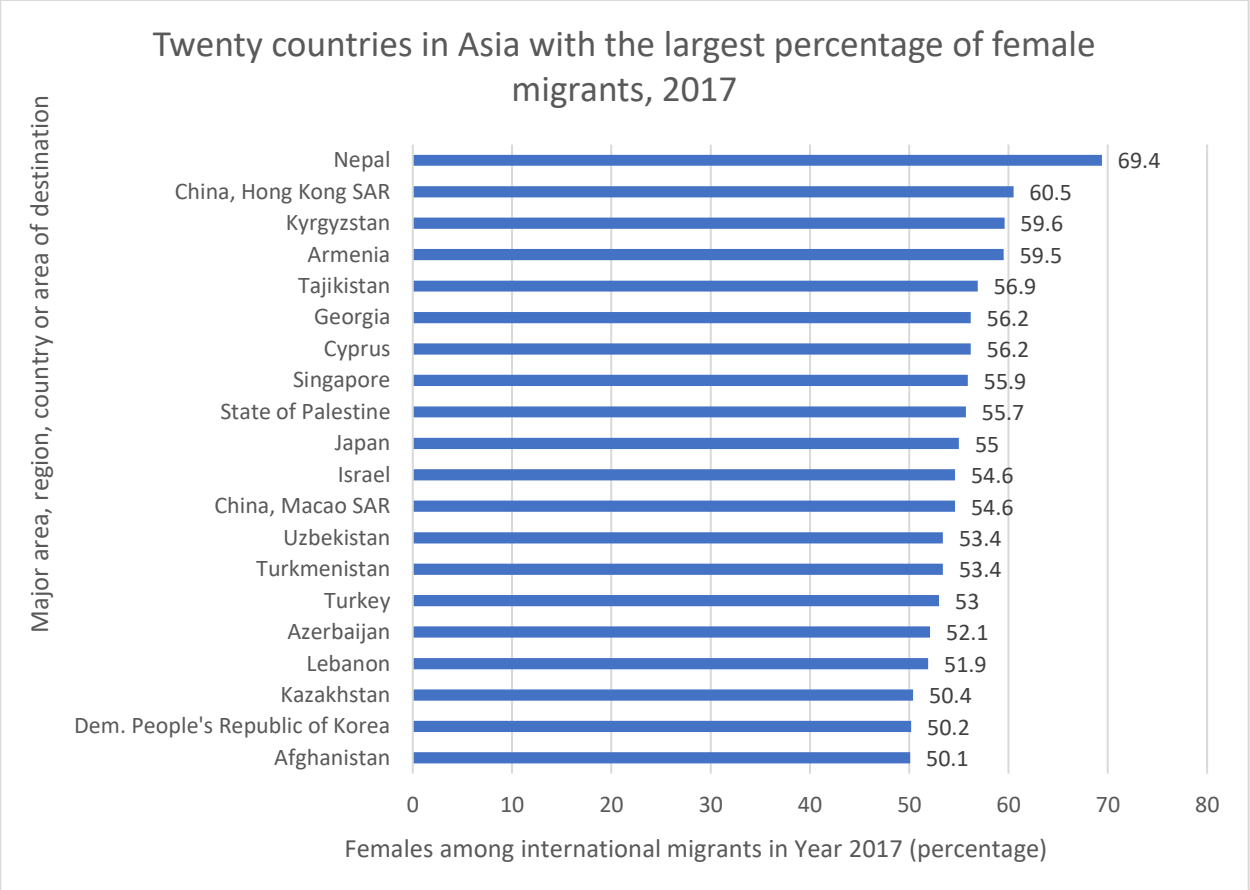
Women accounted for 48.7 percent of all migrants in the ASEAN region in 2015 (UN Women, 2017: 20). The Philippines, Indonesia, Myanmar, Vietnam, Cambodia and Lao People's Democratic Republic are dominant sending countries with ASEAN; whilst Malaysia, Singapore, Thailand and Brunei Darussalam are dominant destination countries. Women mainly work in the households, agriculture, construction and manufacturing sectors. In Singapore and Thailand, women constitute more than 50

[1] Uramoto, Y. (2014) "Can the AEC 2015 deliver for ASEAN's people" at http://www.ilo.org/asia/media-centre/articles/WCMS_300671/lang--en/index.htm

per cent of the total migrant population. Women migrant workers make up more than 10 per cent of the total workforce in Brunei Darussalam (UN Women, 2017: 20, 21).

In Asia, the number of male migrants grew by 73 per cent, from 26 million in 2000 to 46 million in 2017. The strong demand for male migrant workers in the oil-producing countries of Western Asia has partly contributed to this increase. The number of female migrants in Asia increased by 48 per cent, from 23 million in 2000 to 34 million in 2017. Women accounted for 46.6 percent of all migrants in Asia region in 2017 (UN, 2017). Graph below shows twenty countries in Asia with the largest percentage of female migrant in year 2017.

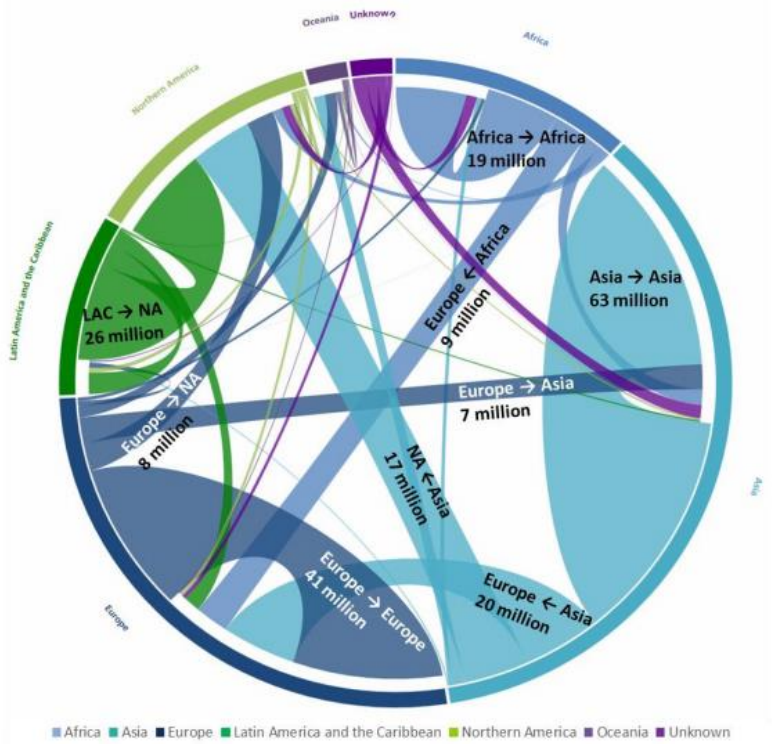
Figure 1: Twenty countries in Asia with the largest percentage of female migrants, 2017



(Source: UN, 2017)

Migration occurs primarily between countries that are located within the same world region. In 2017, the majority of the international migrants originating from Europe (67 per cent), Asia (60 per cent), Oceania (60 per cent) and Africa (53 per cent) reside in a country located in their region of birth (figure 5). In contrast, international migrants from Latin America and the Caribbean (84 per cent) and Northern America (72 per cent) reside primarily outside their region of birth.

Figure 2: Number of international migrants classified by region of origin and destination, 2017



(Source: UN, 2017) Notes: NA refers to Northern America, LAC refers to Latin America and the Caribbean

According to Sijapati (2015), intra-regional migration has been the top option for women in Asia. To them, major destinations for migration are the oil-rich Gulf countries and the fast-developing economies of East and Southeast Asia. The percentage of women migrants is significant in the top migration corridors (Sijapati, 2015).

Table 1: Percentage of Women Migrants in the Top Migration Corridors within Asia by Decade, 1960-2000

	1960 (%)	1970 (%)	1980 (%)	1990 (%)	2000 (%)
China – Hong Kong, China	48	45	48	49	51
India – United Arab Emirates	17	19	27	36	31
Afghanistan – Iran (Islam Republic of)	50	47	45	42	41
India- Saudi Arabia	23	21	19	17	20
Indonesia – Malaysia	41	41	38	36	45
Bangladesh – Saudi Arabia	25	22	20	19	21
Bangladesh – United Arab Emirates	10	12	17	24	20
Cambodia – Thailand	48	47	51	52	52
China – Republic of Korea	45	48	47	47	47
Malaysia – Singapore	48	52	53	55	57
Myanmar - Thailand	48	36	46	48	48

(Source: Sijapati, 2015)

What is Sexual and Reproductive Health?

The United Nations Population Fund defines good sexual and reproductive health as a state of complete physical, mental and social well-being in all matters relating to the reproductive system. It implies that people can have a satisfying and safe sex life (when, and with whom to engage in sexual activity), choose if, when and how often to have children.

Importantly, to maintain one's sexual and reproductive health, people must have access to accurate information and safe, effective and affordable contraception methods of their choice. They must be able to protect themselves from sexually transmitted infections. When they decide to have children, women must have access to services to help them have a fit pregnancy, safe delivery and healthy baby (http://www.unfpa.org/sexual-reproductive-health).

Relatedly, there are several pre-requisites to ensuring good sexual and reproductive health, including affordable family planning services; contraceptive information and services; antenatal care, safe motherhood service; assisted childbirth from a qualified medical person; prevention and treatment of sexually transmitted infections including HIV/AIDs, reproductive tract infections, and reproductive cancers; information, education, and counselling; safe and accessible post-abortion care and, where permitted by the law, access to safe abortion services.

Key International Instruments on Sexual and Reproductive Health Protection

The right to health was traditionally understood narrowly, referring mainly to health services and other actions such as provision of water and sanitation, whilst sexual and reproductive health related issues were overlooked. Since the 1990s, however, the strong articulation of a human rights approach to health has emphasised the need to advance gender equality and sexual and reproductive health and rights (Sen, 2014). Women's reproductive and sexual health rights have since been integrated in several treaties, conventions and other international instruments, and these rights are framed as human rights (for useful discussions, see Merali, 2000; Merali, 2001; Haider, 2008; Hadi, 2017).

Three initiatives were instrumental in instigating change; The 1993 World Conference on Human Rights, (Vienna Conference), the 1994 International Conference on Population and Development (ICPD) in Cairo and the 1995 Fourth World Conference on Women in Beijing. They emphasised women's rights to bodily integrity and autonomy, and choice, in relation to sexuality and reproduction. They recognised the many ways in which the sexual and reproductive health rights of women are violated; e.g. through denials to reproductive health care, gender-based violence (e.g. rape, domestic violence, sexual abuse), and their disadvantaged status (relative to men) which takes away their ability to take control of their lives. Significantly, these abuses were characterised as violations of human rights. There was a need to apply human rights principles to protect women from these kinds of violations, and state parties must take responsibility for ensuring women's health, in particular their sexual and reproductive health.

The use of a human rights approach to advance women's health rights (including sexual and reproductive health) is clarified in Paragraph 7.3. in the ICPD Programme of Action 1994:

"reproductive rights embrace certain human rights that are already recognised in national laws, international human rights documents and other consensus documents. These rights rest on the recognition of the basic rights of all couples and individuals to decide freely, and responsibly, the number, spacing, and timing of their children, a right to the information and means to do so, and the right to attain the highest attainable standard of sexual and reproductive health. It also includes their right to make decisions concerning reproduction free of discrimination, coercion and violence as expressed in human rights instruments."

Vienna, Cairo and Beijing thus represented a movement toward a more inclusive meaning of the right to health, to include sexual and reproductive health. For women, the right to health is no longer only about the right to health services, or providing nutrition, clean water and sanitation, but also the right to decision making, control, autonomy, choice, bodily integrity and freedom from violence and fear of violence (Sen, 2014). State commitments under international human rights instruments may not be legally binding, but it is clear that they have set international standards for government obligations relating to women's rights.[2]

Following Cairo and Beijing, the United Nations agreed on a declaration of eight Millennium Development Goals 2000, and agreed to fulfil these goals by 2015. Sexual and reproductive health rights were integral to the achievement of several MDG goals (MDG4 reduction of child mortality, MDG5 improve maternal health, MDG6 combat HIV/AIDs, malaria and other diseases).

In 2015, it adopted its 2030 Agenda for Sustainable Development, which included seventeen Sustainable Development Goals (SDGs) (http://www.un.org/sustainabledevelopment/). Sexual and reproductive health and rights are explicitly mentioned as part of Goal 3 (health) and Goal 5 (gender equality and empowerment). For the first time, these goals include indicators (including ones on sexual and reproductive health) to measure progress toward their achievement. Sexual and reproductive health is therefore, a core part of global development goals.

Sexual and reproductive health is mentioned in Targets 3.3, 3.7 and 5.2, 5.3 and 5.6

"By 2030, end the epidemics of AIDs, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases"

"By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes"

"Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation"

"Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation"

[2] Readers might like to consult the ICPD Beyond 2014 Global Report (http://www.unfpa.org/news/un-launches-icpd-beyond-2014-global-review-report), which reviews progress, gaps, challenges and emerging issues in relation to the ICPD Programme of Action. Its findings were that despite some progress, much remains to be done, including in relation to sexual and reproductive health.

"Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences"

Women Migrants and Sexual and Reproductive Health

Whilst women's sexual and reproductive health rights have gained both visibility and recognition in the gender and development discourse, these developments have not yet become prominent in discourses in migration. Initiatives and programmes to address the sexual and reproductive health needs of women migrant workers continue to be haphazard. Although there have been many initiatives within the Asian region to promote the health rights of migrants (for a discussion, see Nodzenski et al., 2016), few overtly address or promote their sexual and reproductive health rights.

The Programme of Action (PoA) of International Conference on Population and Development (ICPD) 1994 was explicit about safeguarding the reproductive health and rights of migrants. For example, Paragraph 7.11 provides:

"Migrants and displaced persons in many parts of the world have limited access to reproductive health care and may face specific serious threats to their reproductive health and rights. Services must be particularly sensitive to the needs of individual women and adolescents and responsive to their often-powerless situation."

The Committee on the Elimination of Discrimination against Women's (CEDAW) General Recommendation No. 26 during its 42nd session in 2008, also included specific mention of the health of women migrant workers. The Recommendation urged countries of origin to "deliver or facilitate free or affordable gender and rights-based pre-departure information and training programmes that raise prospective women migrant workers' awareness of potential exploitation", including "information on general and reproductive health, including HIV and AIDS prevention." (Article 24).

Progress in other initiatives are, however, less apparent.

The 1990 UN Convention on the Protection of the Rights of Migrant Workers and Members of their Families, which entered into force in 2003, is regarded as the most specific international instrument for the protection of the rights of migrant workers (http://www.un.org/documents/ga/res/45/a45r158.htm). Whilst it does not create new rights for migrants, it emphasises the need to guarantee equality of treatment, and the same working conditions for both migrants and nationals. Sexual and reproductive health rights **did not attract explicit consideration**, although the Convention guarantees that migrant workers shall enjoy equal treatment to nationals in respect of medical care and access to social and health services (e.g. Articles 28, 43).

The Joint United Nations Initiative on Migration, Health and HIV in Asia aims to achieve regional health security by bringing together a wide range of stakeholders (e.g. governments, civil society organisations, regional associations, development partners, UN agencies) to promote universal

access to HIV prevention, treatment, care and support for mobile and migrant populations in Asia (http://www.junima.org/). The initiative covers countries in the Asian region (Brunei Darussalam, Cambodia, Indonesia, Lao Republic, Malaysia, Myanmar, The Philippines, Singapore, Thailand, Vietnam, Southern Provinces of China). **HIV/AIDs,** in the context of migration, is the central focus, with limited coverage of other sexual and reproductive health conditions.

The Dhaka Declaration 2011 (http://www.iom.int/jahia/webdav/shared/shared/mainsite/microsites/rcps/colombo/Colombo-Process-Dhaka-Declaration.pdf) is signed by 11 countries. It acknowledges the challenges in protecting the rights of migrant workers and their families, and improving the welfare, dignity and well-being of these workers, especially those of women. It recognises that labour migration from Countries of Origin in Asia has been increasingly feminised in recent years, with employment opportunities and number of destinations for women migrant workers rapidly increasing. One of its recommendations is to promote migrant-inclusive health policies to ensure equitable access to health care as well as occupational safety and health for migrants (Recommendation 1). But, migrants' sexual and reproductive health rights are **not explicitly spelt out.**

The Consensus on the Protection and Promotion of the Rights of Migrant Workers (http://asean.org/storage/2017/11/ASEAN-Consensus-on-the-Protection-and-Promotion-of-the-Rights-of-Migrant-Workers1.pdf) was signed by the 10 ASEAN Member States in Manila on 14 November 2017 following the 2007 Declaration of the same name (http://asean.org/asean-leaders-commit-safeguard-rights-migrant-workers/). It seeks to ensure the fair and humane treatment of migrant workers, laying down general principles, stipulating the fundamental and specific rights of migrant workers, and places obligations of ASEAN Member States to protect them. These rights include: access to information about their employment, the right to fair wages; right to file a grievance to address breach of contract; and the right to join trade unions (see Chapters 3, 4). Although there is an obligation on receiving states to provide migrant workers with access to adequate medical and health care in accordance with its laws, policies and regulations (Article 41, Chapter 6), their **sexual and reproductive health rights are not explicitly addressed.**

Method

In preparing this literature review, we adopted a trans-disciplinary approach, blending social sciences, law, psychology, policy studies, sociology and science. We seek to understand the totality of women migrant worker's experience in relation to their sexual and reproductive health, rather than parts of it. In locating literature within the various disciplines, we have deliberately focused on publications in peer-reviewed journals, as they are, generally, publications which have undergone a peer-review process, and which meet minimum scholarly standards. Given the paucity of research in this area however, we also relied on non-peer reviewed literature if it was of relevance. We created a template which all researchers used when reviewing the literature, to ensure consistency in the review process (Appendix 1).

We used a keyword search to locate literature (Medline-PubMed, EBSCO host, Google Scholar, BioMed Central, CINAHL, PsychINFO, Web of Science). Key search terms included "sexual and reproductive health, sexual and reproductive health rights, women's health, migration, women foreign workers, women migrant workers". We read both abstracts and the content of the research papers we located to ascertain their suitability for review. We checked the references and

bibliographies in the papers we located to uncover further literature not revealed by our key word search. Articles which cited the papers we located were also checked. The initial search generated over 500 papers.

Specific criteria were then applied to extract the most relevant papers. To offer a developmental view, we focused on literature between 2007 and 2017, a 10-year period. Only papers published in English were reviewed. Since we sought to understand the problem in the Asian context, only literature which discussed sexual and reproductive health of women migrant workers within the Asian region were reviewed. The discussion must concern women migrating for work, rather than marriage or education. We focused on the sexual and reproductive health issues of women migrant workers migrating across national borders, although due to the lack of literature on cross-border migration, we have had to draw on literature discussing internal women migrant workers and their sexual and reproductive health. We felt this was of use where the challenges and issues experienced by cross-border migrants are also faced by internal migrants. These included, for example, poor knowledge sexual and reproductive health issues, types of sexual and reproductive health issues experienced by women migrant workers, and discrimination when accessing health care (due to migrant status). These issues are universal, and do not depend on geographical locations. Due to a lack of literature, we have not been able to address issues which are specific to cross-border migrants e.g. grappling with differences in culture, encountering language barriers when seeking health care, being unaware of legal entitlements in their host country, or adequacy of strategies adopted by home and host governments to promote sexual and reproductive health care.

An important criterion for papers to qualify for review is that the sexual and reproductive health of women migrant workers must be of central concern (at least 50% of the research paper). Exceptionally however, we have included papers where this has not been the case, but where they have highlighted particular ramifications for women migrant workers. Both qualitative and quantitative research papers were accepted. At least two researchers reviewed all papers to minimise errors. A total of 36 research papers was found to be relevant and are discussed in this literature review. Of these, a total of 15 concerned cross-border migration and 21 were papers on internal migration.

This review was undertaken between August 2017 and February 2018, a relatively short time frame. Nevertheless, given the rigorous process we have adopted to ensure as comprehensive a search as possible, we are confident that the main themes in the literature relating to sexual and reproductive health rights of women migrant workers in Asia have been adequately captured.

Findings by Themes

1. Range of Sexual and Reproductive Health Issues explored in the literature

Firstly, although sexual and reproductive health (SRH) encompasses a wide range of health conditions, the literature almost always focuses on HIV/AIDs and other sexually transmitted diseases (STDs), unwanted pregnancies and abortions. We located a small cluster of papers which discussed reproductive tract infections (RTIs). Overall, the literature discussed only a limited range of sexual and reproductive health issues faced by women migrant workers.

Of the 36 number of research papers reviewed, the categories of sexual and reproductive health issues discussed were:

Table 2: Categories of SRH issues discussed in research papers reviewed.

Categories of SRH Issues	Number of Research Papers
HIV / AIDS	12
STDs	5
RTIs	2
Contraception (Unmet Needs & Inconsistent Used)	10
Unwanted Pregnancies	9
Abortion (Induced & Unsafe)	11
Knowledge, Attitude & Practice of SRH	9
Family Planning Services	1

2. Barriers and challenges to good sexual and reproductive and/or access to health care

Virtually all the research papers we reviewed identified lack of awareness and knowledge about sexual and reproductive health issues on the part of migrant women workers as barriers to good sexual and reproductive health and access to healthcare. This factor was often linked or attributed to, migrant's social vulnerabilities, personal factors, ways in which health care was structured, laws which excluded migrants from health care benefits, nature of industry practices, and institutional, social and cultural norms. Together, they increased the vulnerabilities of women to poor sexual and reproductive health unwanted pregnancies and sexually transmitted diseases.

In the following paragraphs, we discuss these barriers and challenges. We note however, that they are not mutually exclusive. Many papers revealed more than one barrier or challenge, highlighting their inter-relationship.

When women migrate for work, they also move away from familiar structures and surroundings and the norms which have shaped their lives. Unfortunately, being in a new environment can impact negatively on their sexual and reproductive health. A small cluster of literature on cross-national migration revealed how being in unfamiliar surroundings is liable to led to risky sexual behaviours.

2(a) Social vulnerabilities following migration to a new environment

Tangmunkongvorakul et al. (2017) described the sexual behaviours, life styles, relationships and experiences with sexual and reproductive health services, of young migrant workers in Thailand. Many moved across the border from Myanmar to Chiang Mai, in search of work. The authors provided a detailed account of how the new environment increased risky behaviour.

In their research (sample of 84 participants; 43 male and 41 female migrant workers), they found that being away from parents offered migrants an opportunity to express their sexuality and to enter into relationships more openly, without having to deal with parental disapproval (p.4), or offending traditional values which emphasised chastity and morality. Access to social media and modern communication technologies were an easy way to communicate with one another and to initiate

new romantic relationships (p.5). Limited knowledge about, and experience with, contraceptives influenced lifestyles and sexual behaviours. Many did not know how to use condoms, or were reluctant to use one, or preferred their girlfriends to take contraceptive pills. Female migrant workers had less knowledge of contraception than their male counterparts (pp. 6,7). Finally, many migrant workers did not know (due to unfamiliarity with Thai law) they were eligible to access youth friendly services under the health insurance system (p.7).

Singh & Siddhanta (2017) considered the vulnerabilities to HIV of Nepalese and Bangladesh migrants upon arrival in India. The unfamiliar environment increased the risk of contracting HIV. The authors pointed out that upon arrival in India, these migrants were deprived of many basic services – medical, housing, banks (p.3). Many were uneducated and unskilled. Male migrants, living with friends and subject to peer pressure, often indulged in risky activities. Alcoholism, a more liberal environment, indulging in casual sex, lack of knowledge and awareness, and poor attitudes towards safe sex increased the risks of contracting HIV (p.4). Because migrants felt discriminated against, they rarely sought treatment or testing even when their lifestyle exposed them to HIV (p.4). Bangladeshi migrants were often undocumented workers, who once identified, could be deported. This worsened their vulnerabilities as they constantly concealed their identities (p.5). Many women migrants engaged in sex work. Their lack of awareness about HIV/AIDs typically resulted in the inconsistent use of condoms. Others were subject to sexual harassment, and forced to have sexual relations by their male colleagues. There was also a high prevalence of domestic violence reported in these communities, which were often alcohol-related (p.4). Here, sexual violence and unsafe sex exposed women to possibilities of contracting HIV.

Islam et al (2010) explained that a combination of factors made Bangladeshi women migrants vulnerable to HIV. They sought to ascertain the extent of knowledge about HIV/AIDs among these women. Responses to questionnaires from 123 participants at the airport who were ready to travel for work abroad, revealed that their HIV knowledge was very poor. 13 percent had not heard of HIV (p. 942). Less than half (46.3%) identified unprotected sex as a cause of HIV infection and less than one third (28.3%) identified the condom as a preventative method (p.943).

The authors surmised that literacy levels were low and consequent access to information on HIV/AIDs was very limited. Many women lived in very difficult circumstances and were targets of sexual exploitation and violence, both in their home and destination countries. They were deceived by traffickers into sex work. Gender relations and cultural norms influenced individual sexual attitudes and behaviours, placing women at greater risk of HIV infection than men. For others, being free from familiar constraints encouraged them to engage in risky behaviours. The lack of social norms which had hitherto shaped their lives, lack of places of recreation, peer pressure in the new environment, normal sexual needs and poor sexual health and knowledge all increased their vulnerability to HIV (p. 944).

As with cross-border migration, migrating to new environments also increased the vulnerabilities of internal migrants to sexually transmitted diseases, unwanted pregnancies and unsafe abortions.

Webber et al (2010) unravelled the context of HIV prevention for rural-to-urban migrant Cambodian female garment factory workers. Cambodia has one of the highest HIV rates in Asia, with HIV positive women increasing in number (p.159).

Their sample consisted of 20 migrant garment workers, 8 key informants (three in government positions, five local NGOs), who were interviewed. Additionally, two focus groups were held with 13 health care providers (p.163).

Poverty was the main incentive for migration. They needed to provide for their families. But women also took on sex work to supplement their incomes. Additionally, when these women left familiar family and community networks, they also lost their support networks. They relayed their loneliness and fear. For some women, new-found friends encouraged them to pursue sexual relationships with local men, exposing themselves to sexual risks. In sum, their economic and social vulnerabilities increased their risk of contracting HIV (pp. 166, 167).

2(b) Personal factors

In many cases, migrant workers' personal and socio-economic characteristics such as educational levels, knowledge of sexual and reproductive health issues, religion, age, marital status, individual attitudes toward sexuality, etc. influenced their sexual behaviours and lifestyles.

Ullah (2010) investigated incidences of premarital pregnancies of women working as domestic workers in Hong Kong. Many originated from The Philippines, Indonesia and Thailand. Of the 336 female domestic workers in his study, 97% had premarital sex and of these, 36% became pregnant (118 women). But 61% of these pregnancies (72 women) were unwanted (p.72). Premarital pregnancies had a profound effect on their lives, whether economic (loss of jobs, cost of undergoing abortions), health (women who had undergone abortions suffered depression, loss of fertility, contracted sexually transmitted diseases), social (breaking up with their partners, rejected by boyfriends, estranged from families). Premarital pregnancies also reduced marriage prospects, and diminished the reputation of the domestic workers. Deportation before expiry of contracts was very likely (p.82).

The author found, inter alia, that education levels was closely related to incidences of premarital pregnancies. Women with low levels of education were deeply influenced by traditional ideologies and were less inclined to adopt new living styles. On the other hand, education improved women's knowledge about contraception, which reduced incidences of premarital pregnancies (p.68). Premarital pregnancies were also more likely to occur among younger women (under 30) (p.69). Religion was a deterrent to premarital sex; women migrants who were deeply religious tended not to engage in premarital sex (p.71). A quarter of unwanted pregnancies occurred accidentally, due to unreliable contraceptive methods, or partners were not willing to use condoms (p.73). But, many pregnancies also occurred because of the carelessness and attitudes of these women; many forgot or were reluctant to take the pill, they wrongly calculated the "safe period" in the menstrual cycle, using contraception was regarded as a burden, women thought they would not become pregnant even without contraception, women believed that contraception reduced sexual pleasure (p.73).

Musumari & Chamchan (2016) revealed low levels of HIV testing among migrant workers from Myanmar, the largest group of migrants in Thailand. The authors noted that little was known about HIV testing behaviour among migrant workers in Thailand (p.2).

Their study of 2,169 migrant workers from Myanmar (58.8% males, 41.2% females) revealed that both personal and structural factors influenced the take-up of HIV testing (p.5).

In relation to personal factors, educational levels influenced health seeking behaviours. Individuals with at least a secondary education level were more likely to have been tested for HIV (p.10).

Gender was another factor. Women were twice more likely to have been tested for HIV compared with men. This could be because women had more contact with health care systems; indeed,

pregnancy was cited as a reason for testing, in contrast to male migrant workers who mostly tested for HIV as a condition for donating blood, as a part of their work application process, or even out of curiosity (p.12).

Participants who knew someone who had died of AIDs were more likely to be tested (p.13). Evidently, those who worked in the fishery sector had a lower likelihood of being tested for HIV. Indeed, migrant fishermen have been identified as a group at high risk of HIV infection among migrant workers in Thailand (p.13).

Migrant workers living off-work site were more likely to report having been tested for HIV compared to those who lived in the work site. This could mean they were missing out on health programs regularly provided to the community (p.13).

Finally, lack of knowledge about HIV testing sites was a barrier to taking up HIV testing (p.15).

In relation to structural factors, language barriers or the unavailability of counselling in migrant workers' native language were likely factors which reduced the likelihood of migrants taking up HIV testing (p.14).

Decat et al (2011) noted the considerable sexual and reproductive health challenges reported among rural to urban migrants in China and explored the unmet need for contraception among (internal) female migrants, in Guangzhou and Qingdao, China. Their findings suggested that from their sample of 2513 sexually active female rural to urban migrants aged between 18-29, 36.8% of respondents in Qingdao and 51.2% of respondents in Guangzhou reported an unmet need for contraception. Unmarried, childless migrants, migrants not covered by health insurance, migrants who received poor schooling, and migrants with low awareness of sexual and reproductive health were particularly vulnerable (p.30). High rates of unprotected sexual activity resulted in unplanned pregnancies, abortions and psychological distress among these women.

Manoyos et al (2016) noted that many migrant workers from neighbouring countries moved to Thailand to work. Many engaged in risky sexual behaviours which put them at risk of HIV and other sexually transmitted diseases. Of their sample of 442 cross-border migrants, 220 were males and 222 were females, aged 15-24 and lived in urban Chiang Mai, Thailand. Over half (57%) reported having had sexual intercourse (n=252), with 143 males and 109 females (p.351). 63.5% of the 252 migrants had never used, or had a partner use, condoms. The majority of those reporting condom use (68.5%) used them inconsistently, with only 31.5% using condoms every time (p.351).

Although contraceptive use was irregular, reversing this was a difficult challenge, due to the following reasons: (i) limited ability to understand contraceptive materials written in the Thai language; (ii) a third of the respondents were not educated; thus even if materials were written in their native language, this did not mean they would be able to understand the information; (iii) lack of health insurance and consequent preference for self-treatment; (iv) migrants without work permits were reluctant to engage with public health educators who were associated with the government; (v) a perception that condom use meant sexual promiscuousness, or would bring reduced sexual pleasure, and a fear that asking partners to use condoms signalled distrust (pp.351-352).

2(c) Health care service barriers

Some research revealed that women migrant workers encountered many barriers and challenges when accessing health care, discouraging them from seeking counselling, contraception and treatment. Here, the research by Webber et al (2012) is instructive. The barriers preventing beer promoters' access to health care in their studies may be true for women migrant workers in other industries also.

The authors surveyed rural-urban (internal) migrant beer promoters in Cambodia, Laos, Thailand, and Vietnam to determine their experiences in accessing reproductive health care services in the cities of Phnom Penh, Vientiane, Bangkok, and Hanoi (focus groups of between 36-47 beer promoters in each country, and focus groups or interviews with between 5-20 key informants [health care providers, senior NGO staff and policy makers in the government] in each country). Migrant women worked as beer promoters in restaurants, karaoke parlours, and beer shops in large cities (p.2). These women contended with sexual harassment and many were asked by their employers to engage in sexual relations with their customers (p.2). These women were at risk of unwanted pregnancies and sexually transmitted diseases. Many underwent abortions. Access to local reproductive health institutions were critical, yet many faced barriers in doing so.

The authors found several factors preventing these women from accessing health care (p.7), some of which were service-related. For example, the costs of health care services (pp.7-10), the location of clinics (p.11), waiting times, cleanliness and assurance of confidentiality were also identified as important factors which influenced beer promoters' decisions in seeking reproductive health care services (p.11), as were staff attitudes (p.12), clinic hours and availability of medications (p.13).[3]

2(d) Discriminatory laws

At times, laws in host countries excluded women migrant workers from accessing health care. Lasimbang et al (2016) noted that despite many migrant-related policies and laws in Sabah, Malaysia, they did not protect their sexual and reproductive health rights. Many Indonesian and Filipino migrants worked and lived in Sabah (p.2). Ironically, laws and policies prioritised controlling the social impact of migration, rather than protect their health and rights (p.8). Female and undocumented migrants were especially vulnerable. Many migrant women were forced into the commercial sex trade, exposing them to risks of unwanted pregnancies, unsafe abortions and sexually transmitted diseases (p.6).

The authors pointed out the discriminatory nature of the law. Maternity protection provisions did not apply to migrant domestic workers. Domestic work was not regarded as work, and therefore domestic workers did not enjoy the same rights and entitlements as other workers (p.7). Additionally, cost prevented access to health care, given women migrants' low wages. Ironically, Malaysian law required migrants to pay almost double the amount of health care compared to local citizens (p.8).

[3] For a related paper, see Webber et al, 2015.

The authors stressed that the position of undocumented migrants was much more vulnerable and that their plight was worse. This group fell completely outside the law and are criminalised due to their illegal status (p.8).

2(e) Employer ambivalence/resistance and occupational barriers/hazards

In many instances, a lack of interest in the sexual and reproductive health of women workers by their employers and lack of proper safeguards against sexual hazards in entertainment and sex industries increased the vulnerabilities of women migrant workers to poor sexual and reproductive health, sexually transmitted diseases, and unwanted pregnancies.

Rural to urban migration in Vietnam involved a high proportion of female migrants because of job opportunities, particularly in industrial zones. Kim et al. (2012) noted that reproductive tract infections were a common health problem among female migrant workers in the Sai Dong industrial zone. Of their sample of 74 female migrants (from 300 in total) who experienced reproductive tract infection symptoms, only a fifth sought treatment (21.6%) (p.6). Some of the barriers singled out for discussion included limited interest on the part of employers in the reproductive health of female migrants (p.6), and ineffective collaboration between the local health system and employers (pp.7, 10). The authors noted that although many employers provided annual medical examinations, these were often only a formality, and particularly in the case of unmarried female migrants, reproductive tract and sexually transmitted diseases were commonly ignored. The problem was compounded by ineffective collaboration between the local health system and manufactories. Despite regular meetings between the district health centre and the manufacturers, efforts to address the health problems of female migrants did not attract interest of manufactories (p.11).

Webber et al (2010), referred to earlier, identified similar barriers which prevented access to health care and health education programmes by Cambodian female garment factory workers. The authors termed these barriers “occupational vulnerabilities”. They argued that migrants’ access to health care services and health education programs were limited because they were not allowed time away from the production line (p.167). The factory’s desire for production and profit affected policies such as time off for healthcare appointments, over-time, sick leave and willingness to work with with government and NGOs to allow health education classes during working hours (p.167).

Although the factories offered health care services for its workers, these were basic and only treated minor health problems such as headaches. Moreover, the quality of service was inconsistent and migrant workers did not approach the factory clinic for reproductive health problems. In any case, their access to these clinics was tightly controlled by factory management (p.165).

Yi et al (2015) noted that in Cambodia, many young women from poor rural families migrated to urban areas to work in garment factories (p.1). Many of them worked as entertainment workers to supplement their income, in entertainment venues such as karaoke bars, massage parlours, restaurants or beer gardens (p.2). They were at high risk of poor sexual and reproductive health because of their involvement in direct or indirect sex work, a feature of the industry in which they worked, and also because they had limited access to sexual and reproductive healthcare services (p.2). Unsurprisingly, women migrants experienced high rates of unwanted pregnancies which ended in induced abortions.

The authors found (sample of 556 female entertainment workers aged 18-47 years), that 25% of respondents reported having been pregnant at least once, and that 21.4% reported having at least one induced abortion during work as female entertainment workers (p.1). Those with a history of induced abortions (i) remained significantly more likely to be currently working in a karaoke bar, (ii) have worked longer as an entertainment worker, (iii) have had a greater number of sexual partners in the past 12 months, (iv) were currently using a contraceptive method, (v) were able to find condoms when they needed them.[4] Surprisingly, the authors also found that (vi) induced abortions were not significantly associated with either the number of commercial partners or inconsistent condom use in commercial sexual relationships, but with non-commercial partners (pp.5,6). This too, was a major risk factor associated with unwanted pregnancies and should be taken into consideration when planning interventions to improve sexual and reproductive health among female entertainment workers.

Similar themes appeared in Dong et al (2015) who looked at the sexual and reproductive health of female migrants working in entertainment venues in urban China. Many female migrants experienced difficulties in finding skilled or formal employment, and thus resorted to jobs in entertainment venues, such as bars, nightclubs, and karaoke parlours (p.2). There were specific sexual risks associated with working in the entertainment sector - the authors referred to studies which showed that up to 80 percent of migrant women working in entertainment venues engaged in commercial sexual activity (p.2).

The nature of these occupations, together with poor understanding of sexual and reproductive health, led to migrants engaging in unsafe sexual behaviours, undergoing multiple abortions and contracting sexually transmitted diseases. In their sample of 358 young migrant women working in entertainment venues, they found a quarter (25.4%) had had multiple abortions with 18.3% having had an abortion outside of a regulated health clinic. A third (33%) of the sample had contracted a sexually transmitted disease in the past year and a fourth of these women (23.7%) did not receive treatment in a public facility. One fourth of the sample (23.5%) experienced both an abortion and sexually transmitted disease in the past year (pp.1, 5). Women in this final category were more likely to report having had unprotected sex, genitourinary tract infection symptoms, anxiety, drug use and ideas of suicide (p.6). Women who had experienced multiple abortions had very low incomes, were more likely to have sex with both clients and husbands, and tended to use alcohol as a precursor to sex, compared to those who had no history of multiple abortions (p.6). The authors encouraged exploring the feasibility and acceptability of providing on-site sexual and reproductive health promotion programs (e.g. testing, education, outreach) at entertainment venues (p.7).

We found one research paper which focused on migrant sex workers. Gazi et al (2009) looked at sex workers in Teknaf, Bangladesh, who migrated from Myanmar in search of work, comparing their experience with non-migrant sex workers. Many migrant women were deceived into the sex trade, becoming vulnerable to HIV infections (p.55). Interviews with sex workers (sample of 13 migrant sex workers and 17 non-migrant sex workers; pg. 59) revealed that knowledge about HIV transmission was poor (p.63). Migrant sex workers were more vulnerable to sexual exploitation and to having unprotected sex because they had less negotiation power with clients (p.62). Low condom use put them and their clients at risk of HIV. They were not aware of the ways in which HIV can be transmitted; nor did they know how to protect themselves against HIV (p.65). It was common for migrant sex workers to have a history of substance abuse. Migrant sex workers were also a mobile

[4] This was strange, and may be because female entertainment workers who did not have a history of induced abortions were either less sexually active, or they were not involved in as much sex work compared to those who have had induced abortions (p. 5)

population, visiting back and forth between Teknaf and Myanmar and having both paying and non-paying customers in both countries (p.65).

The authors argued that non-migrant sex workers were inadequately protected, contending with police harassment and raids. But the plight of migrant sex workers was worse. Without legal documents, they faced social consequences and sexual exploitation. It may be that decriminalisation of sex work in hotels and streets may reduce the vulnerability of sex workers by reducing isolation and improving their capacity to negotiate safer practices (p.66). There was also a need to reduce sexual risks and promote condom use (p.66). Meanwhile, HIV/AIDs prevention programmes can be effective but would require concerted efforts (p.66). Ironically, a potential group for condom promotion were the pimps themselves, who could promote and distribute condoms (p.66).

2(f) Institutional, social, and cultural norms

A small cluster of research papers explored structural factors which caused women to be vulnerable to sexual and reproductive health illnesses or diseases. For example, in relation to HIV, Webber et al (2007) explained that there was a myriad of reasons why women were vulnerable. Women were biologically, more vulnerable to contracting HIV (p.713). However, gender constructs (which differentiated the power, roles, responsibilities and obligations of women from men) also impacted on their ability to take precautions against HIV (p. 713). How do these contextual factors affect women's HIV prevention behaviour?

The authors argue that gender has a major impact on HIV prevention for migrants. Gender power dynamics can increase migrant women's vulnerability to HIV. For example, migrant men acquired HIV through extra marital relations and then passed it on to their wives when they returned. In societies where "machismo" featured strongly, men could have marital affairs, yet women may feel unable to enforce condom use, as this might imply mistrust in their relationships with their husbands. These left women vulnerable to HIV (pp.719, ,720).

Gender power dynamics also featured in the employment of women migrants. Male migration could create opportunities for women, including sex work. Sex work may be primary or secondary employment to supplement these women's incomes, again exposing them to risk of HIV (p.720). Finally, human rights abuse of women migrants, such as sexual exploitation and sexual violence, further limited their ability to protect themselves (pp.720, 721). The authors urged researchers, health care providers and policy makers to recognise the complexity of the contextual factors which contributed to migrant women's vulnerability to HIV. Interventions based solely on behaviour change (e.g. promote condom use) were too simplistic and not sufficient to prevent HIV among these women.

Troung, T. et al (2014) used the experiences of Filipina domestic workers in Hong Kong, Singapore, and Qatar, to explain their poor sexual and reproductive health. They argued that domestic workers' lack of access to health care did not take place in a vacuum; there were structural vulnerabilities which prevented them from doing so. Indeed, access to healthcare was determined by the types and degree of these structural vulnerabilities. Yet, these vulnerabilities were not well understood by women's advocates.

Using anecdotes across the three countries, the authors showed the many structural vulnerabilities which these women encountered when trying to access health care. They included: whether

national laws, policies and practices excluded these workers from protections (p.232); whether employers and migrants' associations were sympathetic to the sexual and reproductive health needs of women migrants (p.233, 234, 235); and level of women's personal awareness of sexual and reproductive health issues (p.235, 237, 238). Additionally, it was important to look at the outcomes of collaborations between government officials and civil society organisations who work with migrant domestic workers (pp.230, 231). They all intersect to determine ease of access to health systems (p.230). Only by taking account of the particular combinations of forms of institutional discrimination in different cultural and institutional settings, can advocacy enhance the sexual and reproductive health of women migrants.

Hegde et al (2012) noted the high maternal mortality risks due to unsafe abortion methods practiced by unmarried Cambodian women across the Thai-Cambodia border (p.989). Despite life threatening complications arising from unsafe abortions, these women continued to resort to abortion as a preferred birth control method, even seeking repeat "unsafe" abortions. The authors explored the attitudes and practices of these women toward unsafe abortions in the context of unsafe and unprotected sex (questionnaires with 15 migrant women; interviews with 10 unmarried migrant women and 15 key informants) (pp.991, 992).

They found that these women's sexual naivety, social and cultural norms and expectations and limited sexual and reproductive health knowledge and life skills, all subjected these women to risks of unplanned pregnancies and unsafe abortions (p.998). Ironically, because sexual discourses dictated that unmarried women rejected contraceptive use to avoid infertility following marriage, they chose unsafe abortion as a preferred birth control method instead of preventing conception from the outset (pp. 994, 999). The women resorted to traditional methods, illegal and counterfeit abortion drugs from unregistered sellers, herbalists, and traditional healers to induce abortions. Health services focused on reproductive health programs for married women and ignored comprehensive fertility regulation programs that included unmarried migrant women of reproductive age (p.997).

The authors highlighted considerable challenges to address unsafe abortions, due to the country's social, political, and cultural norms and how premarital sexual activity is regarded. They argued that it is only by empowering unmarried women to take responsibility for their own sexual and reproductive health that the burden of unsafe abortions can be reduced (p. 999). The nature of empowerment of these women, or how it could be achieved, however, were not further discussed.

At times, women migrant workers themselves inadvertently perpetuated sexual and reproductive health challenges. Unnithan & Ally (2015) documented the experiences of women migrants from Sri Lanka to Saudi Arabia, Kuwait and the UAE. Women domestic workers comprised over 40 percent of Sri Lankan departures annually, and contributed significantly to national development through remittance earnings. Labour laws and social security in the Gulf states did not extend to them. These women were not entitled to public health and social protections and depended on their employers' permission for them to seek health care. They were routinely subjected to mandatory testing for HIV/AIDs, sexually transmitted diseases and pregnancy and were deported if they became pregnant (p.2).

Whilst these no doubt increased women to sexual and reproductive health risks, the authors also found that these women themselves neglected or concealed sexual and reproductive health issues because they wanted to work, and they felt compelled to present themselves as healthy, successful and 'good' women (p.3). Additionally, their negative encounters with state service provision instilled

in them a sense of being 'undeserving' of social care (p.3). As a consequence, their sexual and reproductive health well-being remained unaddressed.

Finally, Jordal et al (2014) explained the nature of gender relations which determined how women lived in Sri Lanka. Theirs was a research paper on rural-urban migrants, but likely also highlights the role cultural and gender norms play in putting both cross-border women migrant workers at risk of poor sexual practices.

In Sri Lanka, as in many other developing countries, sexuality was seldom openly spoken of and premarital sex was frowned upon socially. Virginity was critical to the reputations of unmarried women and their families. Unmarried women were expected to live under the constant watch of their families until marriage. Qualities such as shyness, naivety, docility, helplessness, and chastity, were highly valued in women and particularly important for their respectability (p.660).

However, it has also been argued these norms and values were not compatible with unmarried women's employment in the country's free trade zones. Women working in these zones deviated from hegemonic gender norms and gradually changed their ways of thinking and speaking about these norms. Indeed, a small, but nonetheless significant, number of women in free trade zones admit to engaging in premarital sexual relations (p.661). How then, do we ensure these women's control over their sexual and reproductive health?

The authors interviewed 16 unmarried migrant women (worked in free trade zones between 6 months to 9 years as machine operators; are between 19-35 years of age; the majority unmarried; schooling ranged between 10-13 years) to explore their perceptions and interpretations of relationships and sexuality (p.662).

The authors found that the ways in which unmarried migrant women perceived relationships and sexuality were highly influenced by hegemonic notions of respectability and virginity. Migration opened opportunities for an improved life, but these women needed to safeguard their respectability. They handled relationships in ways which did not taint their and their families' reputations, or their ability to marry. Female sexuality was regarded solely a matter within marriage. If it was discovered that they had knowledge of sexuality and contraception, or were non-virgins, their reputations would be threatened (pp.669, 672).

But, the findings also implied that, in their efforts to demonstrate respectability, these women placed themselves at risk by denying they had a need for sexual and reproductive health information and services, and contraceptives (p.673). Indeed, the high numbers of induced illegal abortions among migrant workers, carried out in secrecy and under suboptimal conditions, as highlighted in the literature, were an ironic outcome of their desire to demonstrate hegemonic notions of respectability (p.671).

In the light of these barriers and challenges to meeting the sexual and reproductive health needs of women migrant workers in Asian countries, what actions have been taken to address these difficulties?

3. Interventions

We identified a cluster of research papers which discussed interventions to increase migrants' understanding of sexual and reproductive health, encourage safer sexual behaviours and improve

access to health care. These papers are particularly valuable as they describe in detail, the kinds of actions which can be put in place to advance women migrant workers' sexual and reproductive health.

We note that most of these papers focused on interventions to help internal migrants. Nonetheless, it is useful to consider the strategies which have put in place, as they can potentially be replicated in the context of cross-border migrants.

The papers emphasised the importance of education programmes involving other stakeholders, of implementing holistic and multi-faceted programmes and of providing support to migrants over the long term. Others described how the use of technology had successfully increased women migrant workers' knowledge of sexual and reproductive health issues and promoted safer sexual behaviours.

We take the opportunity to describe the interventions in detail, and therefore this section may appear descriptive. Nevertheless, we feel it is important to be detailed, because these interventions are a rich resource which can be adapted and tailored for different contexts.

3(a) Integrating Education and Improving Knowledge

Zhu et al (2014) noted the rising prevalence of sexually transmitted diseases such as HIV/AIDs, unwanted pregnancies and other reproductive health problems among migrants in China. They developed an educational programme to improve reproductive health knowledge, attitude and behaviour among unmarried female migrant workers (p.711). Two commune factories in Shenzhen participated. (Sample size: base line survey recruited 1060 unmarried female migrants in "routine" factory v 2980 in the intervention factory; 6- month survey recruited 2139 unmarried female migrants in "routine" factory v 1425 in the intervention factory). One received routine local government health services, whilst the other received an educational intervention in addition to the routine services. The intervention cluster included distribution of free educational study materials, free monthly lectures about reproductive health, counselling classes and access to contraceptives. Gynaecological care was provided when needed, without charge, by the community health care staff (p.711, 713).

Table 3: Components of health care service: study intervention vs. usual care (routine services)

Components	Intervention	Usual Care
Health Education	Information promoting physical activity Assistance to manage better and/or cope with certain health conditions, such as influenza, lung tuberculosis or hepatitis Knowledge about reproductive health (healthy sexual activities; healthy and appropriate use of contraception; STDs and HIV/AIDs knowledge, effects, prevention, symptoms; appropriate ways to obtain health care for	Information promoting physical activity Assistance to manage better and/or cope with certain health conditions, such as influenza, lung tuberculosis or hepatitis

	STD/HIV/AIDs; and menstruation healthcare	
Community preventive	Promoting mental and physical health, such as mental health, reasonable diet and exercise Disease and injury prevention, such as influenza or workplace injury prevention Prevention of STD and other reproductive system problems, such as HIV/AIDs, other STDs and unwanted pregnancy	Promoting mental and physical health, such as mental health, reasonable diet and exercise Disease and injury prevention, such as influenza or workplace injury prevention
Community health services	Postpartum follow-up	Postpartum follow-up

(reproduced from the authors' research paper, p.712)

After six months, the intervention cluster showed higher levels of knowledge regarding HIV/AIDs, higher levels of awareness of places offering free contraceptives and a significantly lower proportion of female migrant workers accepting and practising premarital sex or suffering from gynaecological disorders (pp. 714, 716).

Such community or workplace-based educational intervention programmes can improve knowledge, attitudes and behaviours around sexual and reproductive health, leading to healthier sexual behaviours among unmarried migrant female workers. One significant feature of the intervention in the case study was the involvement of other stakeholders; notably community health care providers, in implementing and supporting the programme.

Meanwhile, Mendelsohn et al (2015) noted that migrants, a key workforce in China, were at high risk of acquiring HIV and other sexually transmitted diseases, yet there was a lack of easily accessible sexual health services available for them. The authors designed a short-term, low-cost sexual health intervention to improve knowledge about HIV and other sexually transmitted infections among migrant construction workers in Shanghai, China. The intervention also sought to reduce stigma, risky sexual behaviours, and sexual transmission of HIV and other sexually transmitted diseases (p.1).

A three-pronged intervention was developed; a low-intensity intervention which consisted of distributing educational pamphlets, a medium-intensity intervention which, added pamphlets, posters, and videos, and a high-intensity intervention which further added group and individual counselling sessions (pp. 2, 5). The low-intensity intervention served as the control arm. 1871 migrant construction workers, across 18 construction sites, participated. Each site was allocated to one intervention condition. Follow-up interviews were conducted at 3- and 6-months to assess their impact on sexual risk behaviours, HIV and STI risk, knowledge, and stigma (p.3).

Table 4: Components of Low Intensity, Intermediate Intensity, and High Intensity Intervention.

	Low Intensity Intervention	Intermediate Intensity Intervention	High Intensity Intervention
Educational Component	Pamphlet	Pamphlet; posters; videos	Pamphlet; posters; videos
Behavioural Component	None	None	Group counselling and discussion; one on-one counselling
Allocation	Six randomly selected construction sites	Six randomly selected construction sites	Six randomly selected construction sites
Access	All workers at the site	All workers at the site	All workers at participating sites, regardless of participation in the study, had access to the educational component but only those who agreed to participate in the study were offered the counselling intervention. All participants who agreed to participate in the high-intensity intervention were allocated to group discussion. Additional one-on-one sessions were given upon request

(reproduced from the authors' research paper, p.4)

The authors found that even at the 3-month follow-up visit, 79 percent of participants across all intervention arms reported engaging with at least 75 percent of the intervention materials (p. 7). Overall, 2284 pamphlets were distributed, 720 posters displayed, 672 hours of video shown, 376 participants accessed group counselling, and 61 participants attended individual counselling sessions (p. 7). These interventions prioritised ease of delivery to a highly mobile workforce and were feasible and easily accessed by participants.

Three points about the interventions are worth highlighting. First, the interventions were designed for short-term and regular delivery to migrant workers, most of who moved on to other work quickly. As resources (manpower and materials) were already in place, the interventions could be implemented and completed quickly. This also had cost implications. To reach mobile migrant populations, these are important considerations (short-term interventions, ability to use existing resources). Secondly, the authors attributed the strengths of the intervention to the involvement of government, local health workers and construction site managers. Their participation legitimised the intervention in the eyes of stakeholders and it became possible to integrate it in the daily routines (p.10). We note that other papers in this review also attributed the success of efforts to improve migrants' sexual and reproductive health to cooperation among multi-stakeholders. Finally, the

authors found that female migrant construction workers were significantly less likely to participate than their male counterparts (1757 male migrant workers v 114 female migrant workers) (p. 9). It may be that there were very small numbers of women at participating construction sites, who did not want to be in the communal areas where activities took place. A more directed approach to sexual health education for these women may be necessary (p.10).

3(b) Holistic and multi-faceted interventions

Gao et al (2015) drew attention to the vulnerability of female migrants to sexual and reproductive health diseases in Guangzhou, China, where 33.4% of HIV-infected patients were migrants and where 30.8% of migrant female workers contracted a gynaecological disease. Their knowledge about sexual and reproductive health was extremely limited. They seldom sought treatment from hospitals, nor were they covered by medical insurance. Employers seldom paid attention to their sexual and reproductive health. Work units did not have labour unions or family planning associations to accommodate these needs. These migrants could not access health care easily. There were high levels of reproductive tract infections and sexually transmitted diseases, unintended pregnancies and induced abortions among this migrant population (p.14).

The researchers developed a worksite-based intervention programme to improve sexual and reproductive health knowledge, attitude and practice among women migrant workers. Eight factories in Guangzhou were randomly allocated to either a “standard package of interventions” group (SPI) or an “intensive package of interventions” group (IPI). 1346 female migrant workers participated (p.14).

For clarity, we reproduce below the contents of these interventions (pp.14, 15).

SPIs included the following:

(1) distributing easy-to-understand brochures concerning sexual and reproductive health monthly;

(2) putting up sexual and reproductive health posters including reproductive tract infection prevention and cure, contraceptive methods, AIDs prevention and healthy sexual behaviour, on the bulletin board and in factory canteens every 2 months;

(3) providing free condoms to the female workers monthly;

Additionally, IPIs included the following:

(4) playing sexual and reproductive health education videos in canteens and establishing a “cultural activities” room every month;

(5) distributing VIP cards to the participants for a free gynaecological examination every month;

(6) installing hotlines for providing free sexual and reproductive health counselling in seven hospitals in the locality;

(7) conducting sexual and reproductive health lectures in the cultural activities room and meeting room, incorporating open discussion and teaching

(8) developing peer education programs with administrators who had a high education level as trainers; and

(9) showing sexual and reproductive health -related knowledge on display boards inside the dormitories and canteens (pp.14, 15)

Managers and doctors in the factories were responsible for carrying out items (1)- (5), doctors in the seven hospitals conducted (6); (7)- (8) were conducted by doctors from a maternal and child care service centre in the locality, whilst the authors were responsible for (9) (p.15).

Findings indicated that comprehensive interventions produced better outcomes, at the end of 6 months. Both interventions sought to, and succeeded in, promoting better knowledge, attitudes and behaviours toward sexual and reproductive health among female migrant workers. But, the IPIs had a stronger effect. The IPI groups had significantly higher knowledge scores, and the contraception status of migrants in this group improved compared with those in the SPI groups (p.17). Incidentally, increases in knowledge and attitude scores were also greater among unmarried females than their married counterparts, suggesting that these types of interventions were particularly effective for younger and unmarried female migrants (pp. 17, 18). In all, as their knowledge and attitudes improved, female migrant workers increased their use of contraceptives and engaged in less risky behaviours (p.18).

The findings suggested that extensive intervention packages, which incorporates education, gynaecological services, hot-line consultation and sexual and reproductive health lectures could be a model for future interventions which are more effective than traditional intervention strategies. Again, this case study also demonstrated the potential for factory managers and health care providers to work together to implement these interventions.

Decat et al (2012) implemented a sexual health promotion programme at ten manufacturing worksites in Qingdao China, to assess its impact on contraceptive use among female rural to urban migrant workers. The worksites were randomly allocated either a standard package of interventions (SPI), and an intensive package of interventions (IPI). From the IPI group, 684 base line and 603 end line migrants were included. Meanwhile, from the SPI group, 721 base line and 615 end line migrants were considered (p. 367).

We describe the interventions in detail:

The SPI package included the following:

- Monthly distribution of brochures to migrants
- Monthly free condom distribution
- Informative posters in public places in the worksites

The IPI package included, in addition:

- Installation of hotline which offered sexual and reproductive health counselling
- All workers received VIP cards which entitled them to pay less for sexual and reproductive health services
- Health providers from a local family planning service visited the worksites fortnightly, giving a 30-minute lecture on a sexual and reproductive health theme, showing informative videos, offering migrant workers face to face consultation, organising informative and instructive session for selected peer educators (pp. 365, 366).

With the exception of lectures, activities took place outside of work hours and participation was voluntary. At each worksite, trained peer educators were encouraged to discuss sexual and reproductive health issues with their colleagues on an informal basis (p.366).

Both IPI and SPI interventions had a positive impact on migrant women.

Both increased contraceptive use among childless migrants. Participants from both interventions also reported being more comfortable when communicating about sexual and reproductive health with friends at the end of the study. Participating in the IPI seemed to have added value: on contraceptive use among childless migrants in their mid-twenties (older than 22 years); on the ease with which childless migrants communicated about sexual and reproductive health with a doctor, and on utilisation of sexual and reproductive health services by migrant mothers (compared to their peers from the SPI) (pp. 367-369).

Findings showed that that implementing sexual health promotion programmes of this nature at worksites had a positive impact on migrant women. Although the research focused on promoting consistent use of modern family planning methods among migrant workers, the authors argued there was potential in these kinds of intervention strategies for other sexual and reproductive health outcomes.

3(c) Continuing and long-term support

Huang et al (2014) noted that in 2011, Shanghai housed 9.3 million migrants who accounted for nearly 40% of its population. 80% came from rural areas. Due to an unmet need of contraception, these women experienced high levels of unintended pregnancies. They did not seek medical care and were at a higher risk of ill-health and even deaths (p.522).

An intervention offering free contraceptive counselling and a choice of contraceptive methods after discharge from hospital following childbirth, and additional support and services during the first year, was designed. Did it affect the incidence of unintended pregnancies among these migrants? (p.522)

840 migrant women in Shanghai were recruited for the study. Subsequent to hospital discharge, counselling support were offered at 6 weeks and at 3, 6, 9 and 12 months postpartum via scheduled telephone calls and/or clinic visits. 601 women completed one full year of follow up (p.523).

By 3 months, 71.1% of women were using contraceptives. By 12 months, this increased to 97.1%, and more than half had resorted to long term contraception (pp. 524). The incidence rate of unintended pregnancies during the first- year post-delivery, had reduced from 12.8 per 100 women, to 2.2 per 100 women. There were clearly fewer unintended pregnancies (p.524).

The utility of interventions which promoted awareness of free family planning services post childbirth, and ensuring access to these services was clear. The intervention reduced the high level of unintended pregnancies in their sample. The support during the first-year post-delivery encouraged women to continue to use contraceptives and reduced the incidence of postpartum unintended pregnancies (p.525).

We note however, that in many countries, women migrant workers are prohibited from getting pregnant. Consequently, offering counselling and contraceptives during the birth period and immediately after, shown in this case study, may not be relevant. However, the bigger picture is that services which promoted better sexual and reproductive health, if offered strategically and over the long-term, can help women migrants meet their sexual and reproductive health needs. These services can therefore be integrated into clinics and health centres, and offered to women migrants of child-bearing age, in non-maternity contexts.

3(d) Making use of technology which migrants are familiar with

Vu et al (2016) noted increased internal migration trends, particularly among young women, who sought employment opportunities in cities in Vietnam. They were excluded by institutional barriers from formal medical systems, exposing them to greater risks of illness. Socio-cultural factors too, acted as barriers, influencing their behaviour and access to health services (p.1). The majority were young and sexually active, but had low awareness of sexually transmitted diseases and were less likely to adopt safe sexual practices (p.2).

The authors developed a mobile health (mHealth) intervention model which was implemented over 12 months in a factory (with a high number of young female migrant workers) in the Long Bien industrial zone of Hanoi, Vietnam. The intervention provided sexual and reproductive health services for female migrants through text messaging, information booklets accompanied maps, and free hotline counselling. At baseline survey, 411 women participated, at post-intervention survey, 482 women participated, with the majority of women being under 25 years of age (p.2).

There was a high uptake of the intervention services. They increased these women's knowledge of sexual and reproductive health (contraceptive use, being able to identify which behaviours are risky), and encouraged safer practices to safeguard this health (contraceptive use, more frequent gynaecological check-ups).

The authors explained key features of the successful interventions. We describe these factors in detail, given their adaptability in interventions in other contexts.

Explanatory factors for success of the hotline service: (a) calls to the hotline were made after regular office hours and did not interfere with work. Otherwise, women would have to resort to private clinics, which would have had cost-implications (b) since the hotline service was anonymous, women could discuss taboo/sex-related subjects without fear (c) service was private and confidential, allowing women to be frank with their questions (d) service was easy to access, outside of work hours (pp. 3, 4).

Explanatory factors for success of the SMS service: (a) covered a wide range of sexual and reproductive health topics, (b) SMS sent with regular frequency (c) content of the SMS was easy to understand (p.4)

Explanatory factors for success of the map of local health services providers: (a) the map provided information about several health care providers in the vicinity (e.g. services offered, address, hours of operation, staff credentials, average cost and promotions etc. (b) provision of detailed information about reproductive health topics which were of significance to the women (p.5)

The benefits were felt not only by migrant women; the project also created valuable partnerships among the implementers of the project, local authorities, factory owner, health service providers and users. Factory owners and employers supported the intervention because its activities kept workers healthy and productive. For health care providers in the local area, the project was a channel to promote their services more widely. For the local authorities, it added valuable services to its efforts to support the migrant population, given that migrants are a valuable resource for economic development (pp.7, 8).

Similar research exists in other contexts which explored the extent to which text messages were a feasible means of improving women migrant workers' sexual and reproductive health. In the Cambodian context, Brody et al. (2016) noted that a significant challenge was reducing new HIV infections among female entertainment workers. These women worked in restaurants, karaoke bars, beer gardens, cafes, pubs, and massage parlours.

The authors conducted a cross-sectional phone survey, to increase sexual and reproductive health knowledge and enable them to access health care services. The 96 female entertainment workers in their study were between 18-35 years old and owned a mobile phone (p.4). mHealth interventions (mobile health) yielded positive results. The female entertainment workers reported feeling comfortable receiving private health messages, although approximately half reported sharing their phone with others (p.6). Younger workers were less likely to share their phones. Smartphone use was high at 47%, with younger workers more likely to own a smartphone (p.6).

In view of the fact that half of the workers in the study were not smartphone owners, especially among older women, it may be that app-based interventions would not reach sufficient numbers of women. However, critical information about sexual and reproductive health, or access to health care services, or to advise and encourage health seeking behaviours, can all be disseminated effectively using simple text messages. As a caveat, the authors cautioned that low literacy levels may compromise the efficiency of mHealth interventions (p.6). (see also, Brody et al., 2017).

3(e) Integrating migrants into their communities

Ford & Chamratrithirong (2014) argued that social integration of migrants into the Thai community strengthened HIV prevention efforts (such as AIDs knowledge and condom use). They cited evidence that social integration and participation of migrants in their receiving communities benefited their health (p.390). Migrants could develop ties with their new communities and create networks. Contacts within their own community may help their mental health, and reduce instances of economic exploitation, whilst those within the host community could promote access to further economic opportunities, health information and services (p.391).

Data for the study were drawn from a survey of 3405 male and female migrant workers from Myanmar, Cambodia and Laos working in Thailand in 2010 (p. 390, 391). Social integration was measured using duration of residence in the community, ability to speak the Thai language, acquisition of a Thai nickname, and participation in social events with both Thai and migrant community (p.392). The results indicated that social integration of migrants was positively related to levels of AIDs knowledge and consistent condom use (p.395). Relatedly, participation in AIDs prevention programmes, self-efficacy, levels of education and relationship factors, too, improved AIDs knowledge and condom use. Female migrants were however, less socially integrated compared to male migrants. They were less likely to speak Thai or have a Thai nickname, indicating a lower

level of interaction in the community. It may be the case that further outreach to these women were needed to promote health seeking behaviours (p.395).

Several obstacles to social integration of migrants were, however, outlined, including difficulties of migrants securing permanent residence status, stigma against undocumented workers, a sense of discrimination against migrant workers and existing xenophobia in Thai society (p.396).

Other researchers, however, cautioned multi-challenges when implementing interventions on the ground. Qian et al (2007) noted that China's migrant population comprised of young women who were highly mobile, hard to reach, and isolated from comprehensive family planning services. These women were at risk because they lacked knowledge of contraception methods and perceived induced abortions to be a contraceptive (p.2).

The authors piloted a workplace-based intervention to promote contraceptive use by unmarried female migrants working in privately owned factories in Shanghai (sample of 598 women). The intervention had five components**;** (a) training factory doctors in delivering family planning service (b) inviting experts to give lectures (c) disseminating educational materials, (d) holding a knowledge quiz with prize, (e) providing free contraceptives and counselling service (p.3).

But the intervention brought only limited success as implementing a complex intervention for a hard to reach population was not easy. Uptake was poor (p.7). Many practical problems were encountered. Migrants moved jobs frequently; many migrants were made redundant because of changing economic circumstances; they could not participate because their managers needed them and refused them permission to attend; migrants could not use the service in the factory clinic because the doctor was made redundant; migrants did not attend the lectures since it was voluntary (p.5).

On acceptability of the intervention, young women preferred family planning services that protected their privacy. They preferred to use health care services outside of the factory (drug stores) rather than the in-house doctor, who was familiar to them (p.7). Women also mentioned that the factory shift work system prevented them from using services provided in the intervention; notably attending lectures. Others mentioned they were too busy to attend or that they were off-shift when the lecture was given. Many women also felt they did not need the services provided in the intervention (access to contraceptives or counselling), that they did not trust the service, or that the facility was located too far away (p.8).

Overall, providing contraceptive services to unmarried female migrants proved very challenging. The authors urged future research to focus on the specific needs and service preferences of this population to determine the most effective way of promoting contraceptive use among them (p.10).

4. Changing Policy and Practice

Almost all the research papers we reviewed made suggestions for (i) improving women's understanding of sexual and reproductive health and (ii) facilitating their access to health care. That employers and factories should be involved in achieving change were emphasised in some papers. Interventions needed to be tailored to take into account industry or workplace settings. Meanwhile, other papers placed the responsibility to improve women migrant workers' sexual and reproductive health on governments. Finally, to accommodate the diversity among international migrants, some research papers promoted the need to be culturally sensitive when designing interventions.

Although only proposals, they may be of value in informing the policies and practices of government, employers, health care providers and non-governmental organisations dealing with the sexual and reproductive health of migrants. Indeed, some of these proposals affirmed and legitimised the successful interventions which have been put in place to improve women migrant workers' sexual and reproductive health, discussed in Section 3.

4(a) Targeting vulnerable migrants

Some papers we reviewed emphasised the need to improve health care services to reach vulnerable migrants, especially young, unmarried female migrants.

In the context of China, rural-urban female migrants experienced high rates of unplanned pregnancies and abortions, because of an unmet need for contraception. Many research papers confirmed this, for example, Liu et al, (2011); Lu et al, (2012) and Wang et al, (2013). According to Decat et al. (2011), over one-third of sexually active rural-to-urban women migrants (not planning pregnancies) in their study had an unmet need for contraception, especially unmarried, childless migrants who were not covered by health insurance, who had low levels of education and who were not knowledgeable about sexual and reproductive health issues. The authors proposed the following: i) communicate and distribute knowledge about sexuality and sexual and reproductive health openly, ii) expand the availability of free/low-priced condoms in workplaces and public locations, and, iii) extend health insurance coverage for migrant workers (p.33).

Earlier, Tangmunkongvorakul et al (2017) described young migrant's vulnerabilities to sexual and reproductive health challenges when adapting to a new environment. The absence of home constraints, low levels of awareness of sexual and reproductive health, social media and modern communication technologies and lack of access to health services, led to high risk sexual behaviours. Migrants were also not aware of their eligibility to access health services under the migrant worker health insurance system.

One of the recommendations put forward by the authors to improve sexual and reproductive health among young migrants was to enable them access to a youth friendly clinic (ideally in their native language) to help them personalise HIV risks and risks of other sexually transmitted diseases and unintended pregnancies. This facility would increase their awareness and knowledge of sexual and reproductive health (p. 9).

Meanwhile, Dahal et al (2013) researched the sexual behaviour of Nepali male migrant workers abroad and their perceived vulnerabilities to HIV/AIDs. Migrants who had worked for at least 6 months abroad and who had returned between 3 months to 2 years were interviewed to gauge their sexual behaviour whilst abroad and their perceived risks of HIV/AIDs (p.219).

Their findings revealed, inter alia, that migrants who worked in Gulf countries were more vulnerable to HIV/AIDs compared to those in Non-Gulf Countries. This may be because within the former, migrants encountered difficulty in accessing condoms, since condom use likely contravened religious beliefs. More generally, the more educated the migrants, the higher the appreciation of risks associated with HIV/AIDs. Despite the knowledge that AIDs was a fatal disease (87.3%), almost half the respondents (42.7%) did not take adequate steps to protect themselves. Younger migrants were less averse to taking risks, as with those in mixed setting accommodations (p.221). Only 61.1% of those who had sex always used condoms (p.220).

In all, risky sexual habits were prevalent among male Nepalis who worked abroad. Importantly, for the majority, female colleagues were unpaid sexual partners. This suggested that female migrants were equally involved in taking sexual risks. The authors called for HIV prevention programmes to target migrants, to incorporate counselling, promote condom use, facilitate access to condoms and regular testing to address high risks of sexually transmitted diseases among potential and returnee migrants (p.223).

4(b) Tailoring interventions according to industry or workplace settings

Some papers argued that interventions should take into account the characteristics of women migrants' workplace settings, or more widely, the industries in which they worked. In other words, interventions need to be workplace or industry sensitive, in order to meet women migrant workers' sexual and reproductive health needs.

Huang et al (2016) argued that in China, young female migrants faced potentially high risk of HIV/AIDS and poor reproductive health (p.602).

The authors investigated how HIV-related risk behaviours among female migrants varied according to workplace settings. In their study, respondents working in the entertainment industry were much more likely to report sexual behaviour, unprotected sex, multiple abortions and sexually transmitted diseases than respondents who were employed in factories and restaurants. In turn, migrants in the latter category showed lower levels of HIV/AIDS and condom use knowledge, self-efficacy in using condoms and history of HIV/AIDS counselling and testing, as compared to respondents working in the entertainment sector (p.595).

The authors called for sexual and reproductive health interventions to prioritise young female migrants, and for these interventions to be tailored according to different workplace settings. HIV prevention strategies for those working in the entertainment sector should emphasise reducing unprotected sex, increasing testing for HIV/sexually transmitted diseases and reducing unintended pregnancies. Meanwhile those for female migrant workers in factory and restaurant settings should emphasise enhancing HIV/AIDs related knowledge, condom use knowledge and condom use self-sufficiency. Importantly, the authors pointed out the importance of engaging the trust and collaborations of managers/owners of workplace settings to obtain access and implement change (pp. 603, 604).

Recall earlier the study which Webber et al (2012) conducted to assess women migrant beer promoters' access to sexual and reproductive health services in Cambodia, Laos, Thailand and Vietnam. They identified a host of factors (cost, location, environmental, service and personal) preventing these women from doing so. They proposed several recommendations to overcome the difficulties women migrant beer promoters experienced in their work as beer promoters, which call for health care providers to take into account industry-specific challenges. Proposals included: i) evening and weekend clinics to enable these workers to access health care, ii) provision of health insurance through employer or government, iii) provision of free or low cost clinic, iv) recruitment of more medical staff to reduce waiting times, v) arrangement of mobile clinics to visit workplaces or provision of free transportation for beer promoters to clinics, vi) provision of improved training to reduce prejudice on the part of health care providers against beer promoters, and, vii) introduction of public education about the pivotal roles of reproductive health care (p.1).

In their paper on women migrant workers in Cambodia's garment factories, Webber et al (2010) proposed several interventions to reduce the risk of HIV infection among these factory workers. Specifically, in relation to workplace settings, the authors proposed ensuring social supports for migrant workers. Factories can set up peer orientation committees for new employees to reduce sense of loneliness and isolation to serve as a source of sexual and reproductive health knowledge. Factories could also work with other stakeholders to make available affordable and accessible health care services to employees (pp. 167, 168).

4(c) State interventions, in conjunction with other stakeholders

Unnithan & Ally (2015) described earlier, the experiences of Sri Lankan women domestic workers in the Gulf States. The conditions under which these women worked restricted their access to health care. On the contrary, they were vulnerable to sexual exploitation and abuse. The authors proposed that home and host governments had a role to play in reducing the vulnerabilities of these women. Sending and receiving countries needed to counteract images of these women as 'lone, sexually-available women', and reduce the stigma associated with their need to access sexual and reproductive health care. There must be a more holistic view of migrant women's health beyond HIV, sexually transmitted diseases or pregnancy testing to tackle a broader range of health concerns. Finally, recruitment agencies need to synchronise with government representatives, health and social care professionals, to set a standard employment contract for migrant domestic workers, which include provisions for health insurance and confidential access to sexual and reproductive health care (p.4).

Lasimbang (2016) detailed earlier, the discriminations faced by migrant workers in Sabah, Malaysia, and how the system impacted negatively on women migrants' access to sexual and reproductive health services. Several recommendations were made to protect these rights of migrants, with many of the responsibilities placed on the state. They included revising laws and policies to enable migrants and domestic workers to claim their sexual and reproductive health and rights, developing solutions to address the issue of stateless children, increasing access to health care among migrants (lower cost, better quality) and showing commitment to take action in protecting the sexual and reproductive health of migrants (p.121).

Islam et al (2010) placed the onus not only on governments, but also other concerned agencies, to take steps to make women migrants aware of HIV/AIDs infection and to protect themselves. For women migrants going abroad to work, the authors proposed the implementation of pre-departure orientation and training programmes. Effective HIV related modules must be incorporated within this training. Embassy staff, labour attaches, and welfare staff could all adopt a sensitive toward women migrant workers, especially those who tested positive for HIV (p.945).

Last but not least, the Migrant Workers Right to Redress Coalition in Malaysia, who had long campaigned for improvement of the rights of migrant workers, submitted its report: "Towards A Comprehensive National Policy on Labour Migration for Malaysia" to the government in July 2017, emphasising a need to develop a comprehensive national policy on labour migration. The report considered several areas of concern; recruitment, employment in Malaysia, undocumented workers, arrest and detention, women migrant workers, health and social security, and housing (p.3).

In relation to women migrants (Section 5), the Report emphasised that they faced particular challenges. The isolation faced by domestic workers, for example, made it very difficult for them to

obtain help. They were particularly susceptible to sexual violence. Clauses in employment contracts typically attempted to control the extent to which women migrants can form relationships. There was a lack of understanding of their reproductive rights. Further, women were vulnerable to trafficking to work in the sex industry (p. 14). The Report stressed the importance of understanding and protecting the reproductive and family rights of migrant women. There needed to be a different approach to pregnancy, ironically, listed as an illness. Contracts which made pregnancy a dismissible offence should be stopped. Women migrants who choose to undergo abortion should not be penalised. Abortion was allowed for Malaysian women in certain circumstances and the same should be offered to women migrants. Finally, contracts or actions must not prohibit women migrant workers from getting married; these clauses violated basic human rights (p.15).

4(d) Interventions must be culturally sensitive

Two research papers emphasised the need for culturally sensitive interventions to help women migrant workers meet their sexual and reproductive health needs. Here, health workers and educators from the same backgrounds were best placed to help these women.

Belton (2007) in her research documenting the problem of unplanned pregnancies and unsafe abortions for Burmese migrant women living in Tak, a border province in Thailand, revealed the health risks incurred by these women.

Unintended pregnancies were common, with one-third of self-induced abortions (p.419). Poverty, unsupportive employers and husbands, domestic violence constituted some of the reasons for terminating pregnancies. Meanwhile, the general insecurity in the area, and restrictions on mobility, exacerbated the problem (p.430).

The poor quality of health services available to these women threatened their reproductive health. Language and culture differences between local health providers and Burmese migrant discouraged building understanding and trust. Consequently, many women resorted to traditional techniques to end pregnancies, often with the help of lay midwives (p.429 & 430).

The author proposed creative ways of delivering health care. Burmese migrant women would accept modern family planning methods if the they were offered in culturally appropriate ways. In this regard, utilisation of bi-cultural workers in the public health service would help Thai staff relate to these women. The author provided the example of the Mae Tao Clinic in her study, run by Burmese refugees, which offered quality post-abortion care for refugee and migrant workers. It was a model of a culturally sensitive health service for Burmese people seeking health care, where health workers could speak their language, and shared similar life histories (p.422, 430, 431).

Similarly, Manoyos et al (2016) earlier drew attention to the vulnerabilities of young, cross-border migrants in Thailand, originating from Burma, Laos and Cambodia. The authors proposed several ways to reduce the risk of HIV and other sexually transmitted diseases among these migrants, one of which was to use educators who spoke native languages to promote safer sexual behaviours. It was also important to learn the cultural norms of migrants' countries of origin and to design interventions which were consistent with norms and beliefs around sexual behaviours. We note here too, the importance of helping women migrants in ways which are consistent with their respective cultural norms and values, was emphasised.

Table 5: Reviewed Studies.

Study	Region of Study	Sample Size and Subject of Investigation	Study Method	Findings	Recommendation / Good Practices
Belton (2007)	Thailand	a) 43 Burmese WMWs; b) 10 husbands of WMWs; d) 20 urban and rural-based lay midwives;	Face to face interview Review of medical notes	- Poverty, unsupportive employers and husbands, domestic violence constituted some of the reasons for WMWs terminating their pregnancies. - Poor quality of health services; language and culture differences between local health providers and WMWs discouraged their access to reproductive health. - Many WMWs resorted to traditional techniques to end pregnancies, often with the help of lay midwives	- Offer modern family planning methods in culturally appropriate ways. - Utilisation of bi-cultural workers in the public health service.
Brody et al. (2016)	Cambodia	96 female entertainment workers who are between 18-35 years old and owned a mobile phone	Cross-sectional phone survey	- Respondents reported feeling comfortable receiving private health messages, although approximately half reported sharing their phone with others. - Critical information about sexual and reproductive health, or access to health care services, or to advise and encourage health seeking behaviours, can all be disseminated effectively using simple text messages - However, app-based interventions might not reach sufficient numbers of women as half of the workers in the study were not smartphone owners.	
Dahal et al. (2013)	Nepal	110 Nepali male migrant workers who had worked for at least 6 months abroad and who had returned between 3 months to 2 years	Interviewed using semi-structured questionnaire	- Male migrants who worked in Gulf countries were more vulnerable to HIV/AIDs compared to those in Non-Gulf Countries because within the former, it is difficult to access condoms; since condom use likely contravened religious beliefs. - Despite the knowledge that AIDs was a fatal disease, almost half the respondents did not take adequate steps to protect themselves. - Younger male migrants were less averse to taking risks, as with those in mixed setting accommodations.	- HIV prevention programmes to target migrants, to incorporate counselling, promote condom use, facilitate access to condoms and regular testing to address high risks of sexually transmitted diseases among potential and returnee migrants.

				- Female colleagues were unpaid sexual partners. They were equally involved in taking sexual risks.	
Decat et al. (2011)	China	2513 sexually active female rural to urban migrants aged between 18-29	Cross-sectional survey	- Unmarried, childless migrants, migrants not covered by health insurance, migrants who received poor schooling, and migrants with low awareness of sexual and reproductive health were particularly vulnerable of having an unmet need for contraception. - High rates of unprotected sexual activity resulted in unplanned pregnancies, abortions and psychological distress among these women.	
Decat et al. (2012)	China	IPI group: 684 base line and 603 end line migrants SPI group: 721 base line and 615 end line migrants	Comparative study Cross-sectional survey Worksite-based intervention Pre- & Post-time assessment	- Both IPI and SPI interventions increased contraceptive use among childless migrants. - Participants from both interventions being more comfortable when communicating about sexual and reproductive health with friends at the end of the study. - Compared to SPI, participating in the IPI seemed to have added value: 1) on contraceptive use among childless migrants in their mid-twenties -(older than 22 years); 2) on the ease with which childless migrants communicated about sexual and reproductive health with a doctor, and 3) on utilisation of sexual and reproductive health services by migrant mothers	
Dong et al. (2015)	China	358 young migrant women working in entertainment venues, 18 to 29 years old.	Cross-sectional survey	- Women who experienced both an abortion and sexually transmitted disease in the past year were more likely to report having had unprotected sex, genitourinary tract infection symptoms, anxiety, drug use and ideas of suicide. - Women who had experienced multiple abortions had very low incomes, were more likely to have sex with both clients	- The authors suggested exploring the feasibility and acceptability of providing on-site sexual and reproductive health promotion programs (e.g. testing, education, outreach) at entertainment venues

				and husbands, and tended to use alcohol as a precursor to sex, compared to those who had no history of multiple abortions	
Ford & Chamratrithirong (2014)	Thailand	3405 male and female migrant workers from Myanmar, Cambodia and Laos working in Thailand in 2010, 15 – 59 years of age.	Personal interviews with questionnaire	- Social integration of migrants was positively related to levels of AIDs knowledge and consistent condom use. - Participation in AIDs prevention programmes, self-efficacy, levels of education and relationship factors, too, improved AIDs knowledge and condom use. - Female migrants were less socially integrated compared to male migrants; further outreach to these women were needed to promote health seeking behaviours. - Several obstacles to social integration of migrants: 1) Difficulties of migrants securing permanent residence status, 2) Stigma against undocumented workers, 3) A sense of discrimination against migrant workers and, 4) Xenophobia in Thai society	
Gao et al. (2015)	China	IPI and SPI group: 1346 female migrant workers	Comparative study Cross-sectional survey Worksite-based intervention Pre- & Post-time assessment	- Both interventions promote better knowledge, attitudes and behaviours toward sexual and reproductive health among female migrant workers. - However, the IPIs had significantly higher knowledge scores, and the contraception status of migrants in this group improved compared with those in the SPI groups. - Increases in knowledge and attitude scores were also greater among unmarried females than their married counterparts, suggesting that these types of interventions were particularly effective for younger and unmarried female migrants	- Extensive intervention packages, which incorporates education, gynaecological services, hot-line consultation and sexual and reproductive health lectures could be a model for future interventions which are more effective than traditional intervention strategies.

Gazi et al. (2009)	Bangladesh	a) 13 migrant sex workers and, b) 17 non-migrant sex workers	In-depth interview	- Findings revealed that respondents' knowledge about HIV transmission was poor. They were not aware of the ways in which HIV can be transmitted; nor did they know how to protect themselves against HIV. - Migrant sex workers were more vulnerable to sexual exploitation and to having unprotected sex because they had less negotiation power with clients. Low condom use put them and their clients at risk of HIV. - Non-migrant sex workers were inadequately protected, contending with police harassment and raids. However, migrant sex workers without legal documents faced far worse social consequences and sexual exploitation.	- HIV/AIDs prevention programmes can be effective but would require concerted efforts. - Potential group for condom promotion were the pimps themselves, who could promote and distribute condoms.
Hegde et al. (2012)	Thai-Cambodia Border	a) 15 migrant women, b) 10 unmarried migrant women and, c) 15 key informants	Structured and semi-structured questionnaires In-depth interviews Document analysis	- Women's sexual naivety, social and cultural norms and expectations, and limited sexual and reproductive health knowledge and life skills, all contribute to unplanned pregnancies and unsafe abortions. - Unmarried women rejected contraceptive use to avoid infertility following marriage, they chose unsafe abortion as a preferred birth control method instead of preventing conception - Migrant women resorted to traditional methods, illegal and counterfeit abortion drugs from unregistered sellers, herbalists, and traditional healers to induce abortions. - Health services focused on reproductive health programs for married women and ignored comprehensive fertility regulation programs that included unmarried migrant women of reproductive age.	- Only by empowering unmarried women to take responsibility for their own sexual and reproductive health that the burden of unsafe abortions can be reduced
Huang et al. (2014)	China	840 migrant women	Intervention study Cross-sectional survey	- By 3 months, 71.1% of women were using contraceptives. By 12 months, this increased to 97.1%, and more than half had resorted to long term contraception.	

				- The intervention reduced the high level of unintended pregnancies in their sample. - The support during the first-year post-delivery encouraged women to continue to use contraceptives and reduced the incidence of postpartum unintended pregnancies.	
Huang et al. (2016)	China	a) 175 young female migrant factory workers, b) 138 young female migrant restaurant workers and, c) 144 young female migrant entertainment workers	Cross-sectional survey	- Respondents working in the entertainment industry were much more likely to report sexual behaviour, unprotected sex, multiple abortions and sexually transmitted diseases than respondents who were employed in factories and restaurants. - Respondents working in the factories and restaurants showed lower levels of HIV/AIDS and condom use knowledge, self-efficacy in using condoms and history of HIV/AIDS counselling and testing, as compared to respondents working in the entertainment sector.	- HIV prevention strategies for female migrant workers working in the entertainment sector should emphasise reducing unprotected sex, increasing testing for HIV/sexually transmitted diseases and reducing unintended pregnancies. - HIV prevention strategies for female migrant workers in factory and restaurant settings should emphasise enhancing HIV/AIDs related knowledge, condom use knowledge and condom use self-sufficiency. - Engaging the trust and collaborations of managers/owners of workplace settings to obtain access and implement change
Islam et al. (2010)	Bangladesh	123 female migrant workers	Cross-sectional survey		- The implementation of pre-departure orientation and training programmes. - Effective HIV related modules must be incorporated within this training. - Embassy staff, labour attaches, and welfare staff could all adopt a sensitive toward women migrant workers, especially those who tested positive for HIV
Jordal et al. (2013)	Sri Lanka	16 unmarried migrant women (worked in free trade zones between 6	Semi structured interviews	- Migration opened opportunities for an improved life, but these women needed to safeguard their respectability. They	

		months to 9 years as machine operators; are between 19-35 years of age)		handled relationships in ways which did not taint their and their families' reputations, or their ability to marry. - If it was discovered that they had knowledge of sexuality and contraception, or were non-virgins, their reputations would be threatened. - In their efforts to demonstrate respectability, these women placed themselves at risk by denying they had a need for sexual and reproductive health information and services, and contraceptives.	
Kim et al. (2012)	Vietnam	a) 300 female migrants b) 2 x 8 female migrants c) 20 key informants	Cross-sectional survey Focus group discussion In-depth interviews	- Although many employers provided annual medical examinations, these were often only a formality, and particularly in the case of unmarried female migrants, reproductive tract and sexually transmitted diseases were commonly ignored. - Despite regular meetings between the district health centre and the manufacturers, efforts to address the health problems of female migrants did not attract interest of manufactories	
Lasimbang et al. (2016	Malaysia		Narrative review General assessment of published books, journal articles, national reports and official web pages	- Malaysia laws and policies prioritised controlling the social impact of migration, rather than protect women migrant workers' health and rights. - Many migrant women were forced into the commercial sex trade, exposing them to risks of unwanted pregnancies, unsafe abortions and sexually transmitted diseases. - Maternity protection provisions did not apply to migrant domestic workers. Domestic work was not regarded as work, and therefore domestic workers did not enjoy the same rights and entitlements as other workers. - Cost prevented access to health care. Malaysian law required women migrant workers to pay almost double the amount of health care compared to local citizens.	- Revising laws and policies to enable migrants and domestic workers to claim their sexual and reproductive health and rights, - Developing solutions to address the issue of stateless children, - Increasing access to health care among migrants (lower cost, better quality) and, - Showing commitment to take action in protecting the sexual and reproductive health of migrants

Manoyos et al. (2016)	Thailand	220 males and 222 female cross-border migrants, aged 15-24	Structured interview questionnaire	- Reversing irregular contraceptive use was difficult because: 1) Limited ability to understand contraceptive materials written in the Thai language; 2) A third of the respondents were not educated; 3) Lack of health insurance and consequent preference for self-treatment; 4) Migrants without work permits were reluctant to engage with public health educators who were associated with the government; 5) A perception that condom use meant sexual promiscuousness, or would bring reduced sexual pleasure, and a fear that asking partners to use condoms signalled distrust.	Employ educators who spoke native languages to promote safer sexual behaviours. It was also important to learn the cultural norms of migrants' countries of origin and to design interventions which were consistent with norms and beliefs around sexual behaviours.
Mendelsohn et al. (2015)	China	1871 migrant construction workers (1757 males and 114 females)	A three-pronged intervention study Follow-up interviews for pre- & post-time assessment	- These interventions prioritised ease of delivery to a highly mobile workforce and were feasible and easily accessed by participants.	- To reach mobile migrant populations, short-term interventions and ability to use existing are important considerations. - Government, local health workers and construction site managers' participation of the intervention legitimised the intervention in the eyes of stakeholders and it became possible to integrate it in the daily routines. - Female migrant construction workers were significantly less likely to participate than their male counterparts. A more directed approach to sexual health education for these women may be necessary.
Musumari & Chamchan (2016)	Thailand	2,169 migrant workers from Myanmar, aged 18–49 years	Structured questionnaire	- Individuals with at least a secondary education level were more likely to have been tested for HIV.	

				- Women were twice more likely to have been tested for HIV compared with men. This could be because women had more contact with health care systems. - Lack of knowledge about HIV testing sites was a barrier to taking up HIV testing. - Language barriers or the unavailability of counselling in migrant workers' native language reduced the likelihood of migrants taking up HIV testing.	
Qian et al. (2007)	China	598 unmarried female migrants	Workplace-based intervention Survey for pre- & post-time assessment Semi-structured interviews Focus group discussions	- Intervention brought only limited success because: 1) Migrants moved jobs frequently; 2) Many migrants were made redundant because of changing economic circumstances; 3) Migrants could not participate because their managers needed them and refused them permission to attend; 4) Migrants could not use the service in the factory clinic because the doctor was made redundant; 5) Migrants did not attend the lectures since it was voluntary. 6) Migrants felt they did not need the services provided in the intervention, that they did not trust the service, or that the facility was located too far away - Young women preferred family planning services that protected their privacy. They preferred to use health care services outside of the factory.	- Future research should focus on the specific needs and service preferences of this population to determine the most effective way of promoting contraceptive use among female migrants.
Singh & Siddhanta (2017)	India	276 key informants (functionaries, secondary stakeholders, outreach workers, peer educators, People living with HIV, Community Based Organization, Self-help group, and etc.)	Key informant interviews Semi structured In-depth Interview Focus Group Discussion	- Alcoholism, a more liberal environment, indulging in casual sex, lack of knowledge and awareness, and poor attitudes towards safe sex increased the risks of contracting HIV. - Because migrants felt discriminated against, they rarely sought treatment or testing even when their lifestyle exposed them to HIV. - Lack of awareness about HIV/AIDs resulted in the inconsistent use of	

				condoms; sexual harassment and forced to have sexual relations by their male colleagues exposed women to possibilities of contracting HIV.	
Tangmunkongvorakul et al. (2017)	Thailand	43 males and 41 females young cross-border Shan migrant workers.	Focus Group Discussion	- Being away from parents, migrants can freely express their sexuality and to enter relationships, without parental disapproval or offending traditional values which emphasised chastity and morality. - Limited knowledge about, and experience with, contraceptives influenced lifestyles and sexual behaviours. Many did not know how to use condoms, or were reluctant to use one, or preferred their girlfriends to take contraceptive pills. - Female migrant workers had less knowledge of contraception than their male counterparts.	- Enable young migrants access to a youth friendly clinic (ideally in their native language) to help them personalise HIV risks and risks of other sexually transmitted diseases and unintended pregnancies.
Troung et al. (2014)	Hong Kong, Singapore & Qatar	a) 147 Filipina domestic workers and 29 key informants. b) 7 Filipina domestic workers	In-depth interviews Case Studies	- Structural vulnerabilities prevented domestic workers' access to health care: 1) whether national laws, policies and practices excluded these workers from protections; 2) whether employers and migrants' associations were sympathetic to the sexual and reproductive health needs of women migrants); 3) level of women's personal awareness of sexual and reproductive health issues; 4) the outcomes of collaborations between government officials and civil society organisations who work with migrant domestic workers.	
Ullah (2010)	Hong Kong	336 female domestic workers	Interview survey	- Women with low levels of education were deeply influenced by traditional ideologies and were less inclined to adopt new living styles. On the other hand, education improved women's knowledge about contraception, which reduced incidences of premarital pregnancies.	

				- Religion was a deterrent to premarital sex; women migrants who were deeply religious tended not to engage in premarital sex. - Unwanted pregnancies occurred due to: 1) unreliable contraceptive methods, or partners were not willing to use condoms; 2) many forgot or were reluctant to take the pill; 3) wrongly calculated the "safe period" in the menstrual cycle; 4) using contraception was regarded as a burden; 5) women thought they would not become pregnant even without contraception, and that contraception reduced sexual pleasure.	
Unnithan & Ally (2015)	The Cooperation Council for the Arab States of the Gulf	**Study 1:** a) 25 WMWs b) 120 WMWs c) 40 government officials, recruitment agents, health-care practitioners **Study 2:** a) 39 WMWs & 50 village women b) 100 WMWs	**Study 1:** a) Life history interviews b) Semi-structured interviews c) In-depth interviews with **Study 2** a) Demographic fertility-based study b) Quantitative study	- In the Gulf states, labour laws and social security did not extend to WMWs. They were not entitled to public health and social protections and depended on their employers' permission for them to seek health care. - WMWs themselves neglected or concealed sexual and reproductive health issues because they wanted to work, to present themselves as healthy, successful and 'good' women. - Their negative encounters with state service provision instilled in them a sense of being 'undeserving' of social care	- Home and host countries must counteract images of these women as 'lone, sexually-available women', and reduce the stigma associated with their need to access sexual and reproductive health care. - A more holistic view of migrant women's health beyond HIV, sexually transmitted diseases or pregnancy testing to tackle a broader range of health concerns. - Recruitment agencies need to synchronise with government representatives, health and social care professionals, to set a standard employment contract for migrant domestic workers, which include provisions for health insurance and confidential access to sexual and reproductive health care.
Vu et al. (2016)	Vietnam	Baseline: 411 Post-intervention: 482; female migrant workers aged 18-49 years	Worksite-based intervention Survey for baseline & post-intervention assessment Personal Interviews	Factor of success (**the hotline service)**: 1) calls to the hotline were made after regular office hours and did not interfere with work.	- Factory owners and employers supported the intervention because its activities kept workers healthy and productive. For health care providers in the local area, the

				2) the hotline service was anonymous, women could discuss taboo/sex-related subjects without fear. 3) service was private and confidential, allowing women to be frank with their questions. 4) service was easy to access. Factor of success (**the SMS service)**: 1) covered a wide range of sexual and reproductive health topics. 2) SMS sent with regular frequency 3) content of the SMS was easy to understand Factor of success (**the map of local health services providers**): 1) provision of information about several health care providers in the vicinity (e.g. services offered, address, hours of operation, staff credentials, average cost and promotions etc. 2) provision of detailed information about reproductive health topics which were of significance to the women.	project was a channel to promote their services more widely. For the local authorities, it added valuable services to its efforts to support the migrant population, given that migrants are a valuable resource for economic development.
Webber et al. (2007)			Literature Reviews	- Gender power dynamics exposed women migrants to HIV: 1) Migrant men acquired HIV through extra marital relations and then passed it on to their wives when they returned. 2) Women may feel unable to enforce condom use, as this might imply mistrust in their relationships with their husbands. 3) Male migration offers sex work to migrant women as primary or secondary employment to supplement incomes. - Human rights abuse of women migrants, such as sexual exploitation and sexual violence, further limited their ability to protect themselves.	- Interventions based solely on behaviour change (e.g. promote condom use) were too simplistic and not sufficient to prevent HIV among these women.
Webber et al. (2010)	Cambodia	a) 20 migrant garment workers and 8 key informants	a) Interview b) Focus Group Discussion	- Garment workers' economic and social vulnerabilities increased their risk of contracting HIV.	- Social supports for migrant workers. Factories can set up peer orientation committees for new employees to reduce sense of

		b) 13 health care providers		- Occupational vulnerabilities. Migrants' access to health care services and health education programs were limited because they were not allowed time away from the production line. - Factories only offered basic health care services and only treated minor health problems such as headaches. The quality of service was inconsistent and migrant workers did not approach the factory clinic for reproductive health problems.	loneliness and isolation to serve as a source of sexual and reproductive health knowledge. - Factories could also work with other stakeholders to make available affordable and accessible health care services to employees.
Webber et al. (2012)	Cambodia, Laos, Thailand and Vietnam	a) 160 beer promoters & 55 key informants b) 390 beer promoters	a) Focus Group Discussion/ Interview b) Survey questionnaire	- Factors preventing beer promoters from accessing health care are: 1) costs of health care services 2) the location of clinics 3) waiting times 4) cleanliness 5) assurance of confidentiality 6) staff attitudes 7) clinic hours 8) availability of medications	- Evening and weekend clinics to enable these workers to access health care. - Provision of health insurance through employer or government. - Provision of free or low-cost clinic. - Recruitment of more medical staff to reduce waiting times. - Arrangement of mobile clinics to visit workplaces or provision of free transportation for beer promoters to clinics. - Provision of improved training to reduce prejudice on the part of health care providers against beer promoters. - Introduction of public education about the pivotal roles of reproductive health care.
Yi et al. (2015)	Cambodia	556 female entertainment workers aged 18-47 years	Face-to-face interviews using a structured questionnaire.	- Induced abortions were not significantly associated with either the number of commercial partners or inconsistent condom use in commercial sexual relationships, but with non-commercial partners.	
Zhu et al. (2014)	China	base line: 1060 unmarried female migrants in "routine" factory & 2980 in the intervention factory;	Worksite-based intervention Survey for baseline & post-intervention assessment	- After six months, the intervention cluster showed higher levels of knowledge regarding HIV/AIDs, higher levels of awareness of places offering free contraceptives and a significantly lower	- Community or workplace-based educational intervention programmes can improve knowledge, attitudes and behaviours around sexual and

		6- month: 2139 unmarried female migrants in “routine” factory & 1425 in the intervention factory		proportion of female migrant workers accepting and practising premarital sex or suffering from gynaecological disorders.	reproductive health, leading to healthier sexual behaviours among unmarried migrant female workers. - The involvement of other stakeholders; notably community health care providers, in implementing and supporting the programme.

Summary

Existing research on the sexual and reproductive health of women migrant workers in Asia has focused on HIV/AIDs, other sexually transmitted diseases, unwanted pregnancies and abortions (and their psychological effects). We also found a small handful of research papers on reproductive tract infections. Other sexual and reproductive health conditions remain unexplored.

Even within the narrow body of research we have identified, barriers and challenges to meeting the sexual and reproductive health needs of women migrant workers, were very apparent. The research papers revealed the challenges which women migrant workers faced, as they navigated their work and health needs. When women migrate to work, they are vulnerable in new settings. Low awareness of sexual and reproductive health issues, loneliness, a new-found sense of freedom all encouraged risky behaviours on the part of these migrants. Young, unmarried female migrants were particularly vulnerable. At other times, concerns over cost, prejudice on the part of health care providers, long waiting times, unfriendly clinic hours, non-availability of medications meant that even if women migrant workers could get to the clinic, they were not able to be treated. Meanwhile, discriminatory laws excluded women migrant workers from the health care services which local citizens are entitled to. Often, the problems experienced by women migrant workers were compounded by the nature of the industry in which they worked. Those working in entertainment sectors faced high HIV/AIDs risks, but many women migrant workers also undertook sex work to supplement their incomes even where they worked in more benign sectors. Finally, traditional norms and beliefs around gender and sexual purity acted as barriers to women migrant workers seeking health care, for example, the belief that gynaecological examinations were only for married women, or that asking partners to use condoms signified mistrust. At times, in adhering to the hegemonic gender order with a focus on respectability and virginity, women placed themselves at risk by denying they had a need for sexual and reproductive health information or services (even when they are engaging in sexual relationships) and therefore, refrained from obtaining and using contraceptives.

The literature provides a glimpse into the successful interventions which have been put in place to encourage safer behaviours and attitudes, and to increase knowledge of sexual and reproductive health among women migrant workers. Much of this research has been carried out in China. These interventions included educational programmes, but also provision of long term support to women migrants, and institution of comprehensive and multi-faceted interventions which included counselling, hot lines, provision of contraceptives and gynaecological examinations. Multi-stakeholder involvement was crucial to the success of these interventions. Mobile health interventions have also enjoyed success in transforming the knowledge, behaviour and attitudes of women migrants toward sexual and reproductive health. Last but not least, there is some evidence that assimilating migrants into their communities provided a supportive network which opens access to sexual and reproductive health care. There is a need for research to explore whether these interventions can be replicated in multi-country contexts.

Finally, the majority of the research papers we reviewed proposed many changes to improve women migrant workers' sexual and reproductive health knowledge and access to health care. These ranged from strategies to improve health services, implement innovative work-place interventions, more concrete government action and for interventions to be culturally sensitive. They reveal the

manifold concerns of researchers about women migrant workers' sexual and reproductive health. Although only at proposal stage, they may be of use when designing policies and practices of civil society organisations, governments, employers and health care providers.

Limitations of the Review

We highlight three limitations of the review. First, we found very few research papers on cross-border women migrant workers and their sexual and reproductive health. This meant that we had to draw on research on internal women migrants. This was pragmatic where similar barriers and challenges were experienced by both types of migrants. But some barriers and challenges are unique to women migrant workers migrating across national borders. In the few papers we have been able to review, cultural differences, language barriers, knowledge of legal rights in their host country, and prejudice and discrimination by health providers were identified as some of the difficulties preventing their access to sexual and reproductive health care. Research to explore interventions to address these challenges is currently lacking.

We have only reviewed research papers in which women migrant workers' sexual and reproductive health is of central concern (which means at least 50% of each research paper). Exceptionally, we have referred to papers where this has not been the case, but where these papers have highlighted particular ramifications for women migrant workers. It is likely that we have missed discussions and themes on women migrant workers and their sexual and reproductive health in other papers which did not fulfil the 50% threshold criteria.

Finally, existing research is narrow in terms of the range of sexual and reproductive health conditions explored. HIV/AIDs and other sexually transmitted diseases, unwanted pregnancies and abortions (plus their psychological effects) have attracted overwhelming attention. A few papers discussed reproductive tract infections. Nonetheless, other conditions equally affecting women migrant workers – menstruation related problems, reproductive health cancers, childbirth, sterility, violence against women, safe and accessible post-abortion care – have not been adequately researched, if at all.

Recommendations for Future Research

The majority of the research papers we reviewed did not discuss sexual and reproductive health from a gender perspective. For example, how does gender interact with other social health determinants to shape the health of migrant populations (Llacer el al, 2007)? We also did not find research papers which linked feminist notions of empowerment to the sexual and reproductive health rights of these women. Research rooted in the feminist tradition argues that change can only happen if women and their allies challenged and reformed the structures which currently constrain their lives (Kabeer, 1994; Longwe, 1999). We did not find research papers which focused on work by advocates at grass-roots level to enable women migrant workers themselves to exercise agency to bring about this change. Such research has always been encouraged by feminist advocates, yet remains strangely absent in this crucial area where millions of women continue to work with serious threats to their sexual and reproductive health.

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Appendix

Title of Article					
Citation					
Database					
Country of Origin					
Host Country					
Who were the subject of investigation, is it male or female migrant workers, and if the latter, who are these?					
Methodology (e.g. focus groups, interviews, survey, questionnaire)					
Sample Size					
What aspect of sexual and reproductive health, is it e.g. cancers, RTI, pregnancies or abortions, STI, breast pain?					
What specific challenges does the article say that wmw face, in the area of srhr? (please focus on wmw, as much as possible, make this clear, because many articles discuss srhr of all migrants. This is fine, but we want to know about wmw).					
Why did wmw face these problems, is it because of government,					

employer practice, xenophobia, local culture, lack of health services etc.					
What are the conclusions					
Does the article propose changes, and what are these changes?					
Does the article discuss to what extent proposals have been put into action? Any recent changes been achieved to improve srhr of wmw? What is the evidence for this?					
Any grassroots work to improve SRHR of women migrant workers, which has been identified in the literature (examples of good practice, challenges, barriers)					