European Journal of Obstetrics & Gynecology and Reproductive Biology 160 (2012) 60–65

Contents lists available at SciVerse ScienceDirect

European Journal of Obstetrics & Gynecology and Reproductive Biology

journal homepage: www.elsevier.com/locate/ejogrb

Sexual and reproductive health status and related knowledge among female migrant workers in Guangzhou, China: a cross-sectional survey

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ARTICLE INFO

Article history:
Received 10 November 2010
Received in revised form 21 June 2011
Accepted 12 October 2011

Keywords:
Female migrant worker
Knowledge level
Sexual and reproductive health

ABSTRACT

Objective: The objective of this study was to investigate the current sexual and reproductive health (SRH) status including SRH-related knowledge and associated factors, self-reported symptoms of reproductive tract infection (RTI), medical assistance seeking behavior, sexual experience and contraceptive use, reproductive information approach and reproductive service utilization among female migrant workers in Huangpu district, Guangzhou city, China.

Study design: A cross-sectional study was conducted in 2008 in eight factories, which were selected randomly from 32 eligible factories in the Huangpu district in Guangzhou. Descriptive statistics were used to describe the SRH status of migrant workers. Factors associated with the level of SRH knowledge were determined by a logistic regression model.

Results: Of 1346 female migrant workers, 831(61.7%) were unmarried and 515 (38.3%) were married. 27.2% of the unmarried respondents and 40.2% of the married respondents had suffered self-reported RTI symptoms. Among unmarried respondents, the median knowledge score was 5 points, compared to 8 points for the married. For unmarried migrant workers, factors associated with the knowledge level were age, education level, access to SRH information and service, sexual experiences and RTI symptoms. For married migrant workers, factors associated with the knowledge level were age, education level, access to SRH services and RTI symptoms.

Conclusions: A high prevalence of self-reported RTI symptoms and a low knowledge level were found among young female migrant workers. Unmarried migrant workers are more vulnerable to SRH problems. Those findings demand more specific interventions targeting female migrants and in particular the unmarried.

1. Introduction

Since the 1980s, with the policy of Reform and Opening up, the Chinese economy has achieved inspiring progress. Industrialization and the upgrading of China's economic structure have created a great number of job opportunities in urban areas, and released millions of rural laborers from agricultural production. As a result, the number of rural-to-urban migrant workers began to increase dramatically during the late 1980s and early 1990s [1]. Guangzhou city, regarded as the economic center of the southern area and the forefront of Chinese reform and opening up, has attracted a large amount of migrants from the rural areas. According to Guangdong census data, there were a total of 26.5 million migrants in the Guangdong province in the year 2005: 48.7% of them were female, and finding work was the major reason for female migration to big cities [2]. Female migrant workers mainly work in small, non-state-run factories or workshops, or in the commercial service sectors, where relatively less social support and fewer services exist. These 'work units' do not have labor unions, a women's federation or a family planning association, and employees are often not covered by any medical insurance paid by the employer [3].

Abbreviations: SRH, sexual and reproductive health; RTI, reproductive tract infection; OR, odds ratio; CI, confidence interval; NS, no significance.

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doi:10.1016/j.ejogrb.2011.10.001

Sexual and reproductive health (SRH) problems (e.g., unplanned pregnancies, induced abortions, and reproductive tract infections) are the most common health problems affecting female migrant workers [4–7]. Numerous studies have documented poorer SRH status for female migrants compared to non-migratory populations [4,5]. Rates of unprotected sexual behavior (35–56%) and induced abortion (11–55%) are high among female migrants, and the knowledge level related to SRH is low [6,7]. It is well known that different socio-cultural groups, such as different marital status, vary relative to their sexual attitude and behaviors. Unmarried migrant workers, as a special group in urban migrants, may have greater exposure to SRH problems [6]. Studies indicate the odds of having relevant knowledge of reproductive health being up to six times as high for married young people as for those who are unmarried [8]. In Shanghai, about half of unmarried young migrant women have experienced pregnancy, and 40% of them chose not to attend legal clinics for safe abortion [9].

There is a scientific consensus that rural-to-urban migrants are at greater risk concerning their SRH and that relevant SRH policy (e.g., family planning) should address their needs [3,6,7]. Little is known, however, on the determinants of the SRH of migrants, or on how these determinants may differ between married and unmarried female migrant workers. Although some previous studies have been conducted to describe the poor SRH situation of female migrants in China [10,11], the SRH status of female migrants who work in factories is still largely unknown. We believed that a survey on the SRH knowledge status of female migrant workers could help us to better understand their SRH status and the factors associated with it. In addition, the results and conclusions derived from this survey can guide future studies and actions.

The objective was to investigate SRH status including SRH-related knowledge and associated factors, self-reported symptoms of reproductive tract infection (RTI), behavior of medical assistance seeking, sexual experience and contraceptive use, reproductive information approach and reproductive service utilization among female migrant workers in Huangpu district, Guangzhou city, China.

2. Materials and methods

2.1. Study design

A cross-sectional study was conducted between July and September 2008. A self-administered questionnaire was used for the data collection.

2.2. Setting

Eight factories in Huangpu district, Guangzhou city, China were selected randomly from the district administration's exhaustive list of 32 eligible factories by using cluster sampling. Huangpu district is a major industrial district in the Guangzhou with a large rural-to-urban migrant population.

2.3. Participants

2.3.1. Factories

Factories were eligible if they: (1) had between 200 and 400 female migrant workers; (2) were non-state-run factories. No exclusion criteria were applied.

2.3.2. Subjects

In all participating factories, the criteria of eligible participants were: (1) being a rural-to-urban female migrant, aged between 18 and 29 years old, (2) having worked at the worksite for more than one month, (3) being able to give oral informed consent. Exclusion criteria were: inability to read or answer the study questionnaires (e.g., dementia, difficulties with the language)

2.4. Outcomes and variables

The primary outcome was the SRH knowledge score. The variables related to the current SRH status included self-reported symptoms of RTI; medical assistance seeking behavior; sexual experience and contraceptive use; reproductive information approach and reproductive service utilization.

2.5. Data sources and measurements

The female migrant reproductive and sexual health questionnaire (FMRSHQ) was used for collecting information. FMRSHQ is a self-administered questionnaire, which was developed based on literature review [1,6,8,9] and consultation with several experts. The questionnaire was pre-tested and administered in other cities among female migrant workers [12]. It contained five components: (1) general demographic characteristics; (2) self-reported symptoms of RTI and medical assistance seeking behavior; (3) sexual experience and contraceptive use; (4) reproductive information approach and reproductive service utilization; (5) knowledge level of SRH. The content and face validity of the questionnaire were established by professionals at Sun Yat-sen University, Department of Epidemiology, together with the researchers of the International Centre for Reproductive Health (ICRH), Faculty of Medicine and Health Sciences, Ghent University. The internal consistency of the tool (reliability) was estimated on the basis of Cronbach's Alpha (=0.78). Generally, alpha coefficients greater than 0.70 on a new questionnaire are considered to be adequate.

The FMRSHQ was anonymous, which maximizes protection of confidentiality. Confidentiality and privacy were guaranteed for every respondent. Both interviewer-assisted and self-administered methods were offered to participants. During lunch and dinner time, the participants privately completed a self-administered questionnaire following oral informed consent. For participants with limited literacy (about 2.1%), one female interviewer who provided assistance as needed was allowed to stay with the participant: the interviewer read each question and response options from the questionnaire while the participant marked the response on her own questionnaire. Supervisors and managers of factories were not involved in the data collection and consent process. All interviewers received training in human subjects' research, questionnaire administration, human protection, and safeguarding confidentiality.

2.6. Ethics

The study was approved by the Ethical Committee of the School of Public health, Sun Yat-sen University. The study was anonymous and no identifying information was collected as part of this research. Procedures to protect confidentially of data included limiting access of personnel to data, adequate locks for rooms and files where data were stored, and use of passwords, encryption, and other security measures in computer systems. All procedures are compliant with the Personal Data (Privacy) Ordinance of Sun Yat-sen University.

2.7. Bias

A potential bias involved in our study is selection bias, which was diminished by the use of the random cluster sampling methodology. A concern with surveying respondents on sexual behavior is that of honest self-disclosure of a stigmatized behavior.