

## **The Service Factors Influencing IUD Removal among Post-menopause Women: Results from an Exploring Study in Rural China**

**Key Words:** IUD removal, post-menopause women, China

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### **Background:**

Since 1980, more than half of women at reproductive ages received IUDs for contraception after they had one or two children as mandated by a fertility-control oriented national family planning policy in rural China. Our previous research found that the women aged 40-64 in rural China has been increasing rapidly during the past 10 years, and a great number of women who used IUD are entering their middle ages, so that the national family planning program has been experiencing a big challenge to provide IUD removal services safely for the post-menopause women. Particularly for women aged 50-64, the free IUD removal service for them become problematic as they are not the target population of the national family planning program any more. The reproductive health services for women aged 40-64 should be provided by both maternal health service system and family planning service system. However, all these required services, particularly for safely IUD removal, are not well included in current China's public health service system. This study is exploring the factors influencing IUD removal among post-menopause women in rural China.

### **Method:**

A cross-sectional, questionnaire-based survey was conducted among representative samples of women aged 40-64 from rural areas of seven provinces in China: Jiangsu, Liaoning, Jiangxi, Chongqing, Hainan, Guizhou and Qinghai. These provinces were, however, selected to represent different geographic and socioeconomic and cultural spectrums. We used a multistage cluster sampling design to allocate study site and recruit samples in these seven selected provinces. First, one county was selected from each province for a total of 7 counties; Secondly, two townships were randomly selected from each county and then two villages were also randomly selected from each township for a total of 28 villages; Finally, all women aged 40-64 in 28 selected villages were recruited for a total of 3463 individuals completed interviews. We first examined demographic characteristics, reproductive behaviors, health status around menopause period and demands on reproductive health services of the study population overall and separately by age groups of 40-49 and 50-64. For IUD removal study among post-menopause women, we used the chi-square test to assess

statistical significance when examining categorical variables by age group. With multivariate regression analysis, we examined the association of IUD removal as dichotomous outcomes with the participants' general information and KAP towards sex, contraception and reproductive health. Analysis was performed using SPSS version 17.0

## **Results:**

The results showed that the women who finish their menstrual cycle were 50% overall, 94.7% among aged 50-64 and 18.7% among aged 40-49. The average age of menopause was 48.4 years. 33.1% did not know women's menopause, with a significant difference that was higher in aged 50-64 (43.0%) than in aged 40-49 (24.1%). Among women who had experienced menopause, 51.8% reported they experienced climacteric symptoms and 13.3% said the symptoms were relatively serious. Among respondents with climacteric symptoms, they pointed the order of the symptoms were Backache (53.7%), menstrual disorder (48.6%), irritability (44.6%), hot perspiration (28.0%) and lose presence of mind (27.6%). There were no significant differences between two age groups.

The responses to the question about sexual life after women's menopause were: still need (5.9%), sometimes need (53.5%), unclear (25.3%) and no need at all (15.5%). Actually, the average sex frequency with their husbands for the last month was 2.7 times overall, 3.6times for aged 40-49 and only half (1.8 times) for aged 50-64 respectively.

Among 628 women who used IUD for contraception, after their menopause, 23.6% had not had IUD removed by the time of survey, which was significantly higher in women aged 40-49 (45.0%) than whom in aged 50-64 (19.1%). The proportion correctly answering the question for the time of IUD removal was 32.8%, and about half of them (50.1%) were unclear if IUD should be removed after menopause.

The multivariate regression analysis showed some interesting results of respondents who used IUD and had experienced their menopause from having IUD removed or not. Some characteristics were significant for IUD removal (odds ratio): among them, awareness of IUD removal time (5.88), sex needs after menopause (2.13) and received formal health education (2.33) were positively associated with having IUD removed. Also among them, experienced once or twice abortions were positively associated with having IUD removed (1.37 and 1.61, respectively), while once being migrant worker were negatively associated with having IUD removed (0.61), but not significant.

## **Discussion**

Our study addresses the IUD using issues and demonstrates a large number of the

respondents used IUDs during their reproductive ages. In most cases, the IUD was usually inserted just 42 days after baby delivery and then followed up every 3 months for confirming effectiveness. However, our results also reflect the lack of focus on safely IUD removal for middle-age women who experienced menopause in government family planning programs aimed at women's sexual and reproductive health, as documented by past researches. The respondents, who had not had IUD removed after menopause, reported that they would have not obtained any free services from national family planning program when they reached their menopause period, so that they missed the best time to remove it. For the main reason not to make IUD removal, they said they were not aware of the removal of IUD and no people told them to do so. If they wanted to have IUD removal after 50 years old, they had to pay themselves because of the costs not covered by the rural medical insurance system, which were induced both operation risks and economic burdens.

According to the population age structure of 2010 census and the proportion of women aged 40-64 who still used IUD after menopause by the time of our survey, the overall calculation showed that 6.70 million women aged 40-64 who were already after menopause did not have IUD removed, and among them, women aged 50-64 were 4.62 million.

It is not surprising that our results from rural China shows a great number of women aged 40-64 still use IUD after their menopause. Because, the family planning services in China is only targeting on the married couples aged 15-49, and the safely IUD removal is not an indicator to evaluate the service quality. Whether local family planning program doing it, doing how much and doing well only depend on the awareness of family planning workers towards quality of care. In the same way, the family planning services including IUD removal are also not a working target of maternal health service facilities. The IUD removal for women aged 50-64 has become important factor influencing their reproductive health status in current rural China.

As the rapid increase of middle-age women in China, we suggest that the national health and family planning commission should propose and initiate a new health service program with a core on reproductive health promotion for women in menopause period and the effective implementation of strategies outlined in the framework of National Rural Primary Health Care Program. The special attention should be focused on the demands and unmet need of women aged 50-64, to make a complementation of reproductive health for middle-age women. An outpatient division for menopause health should be established in all public medical facilities, particularly in maternal health centers and family planning service clinics all of the country, while top-down service mechanism also should be established for the follow-up and program monitoring. The services should include formal sexual and reproductive health education and counseling, healthy check-up, effective prevention and treatment for RTIs. The priority should be focused on knowledge

distribution of sexual and reproductive health, healthy counseling and check-up for menopause, safely IUD removal for women during menopause period.

**Conclusions:**

China is facing a new challenge of rapid population aging. The study shows that large part of middle-age women in rural China are lack of quality reproductive health and family planning services, particularly the IUD removal services for the post-menopause women. The family planning services are responsible to have IUD removed for women after their menopause, so that a comprehensive program on reproductive health should be well-designed and the service priority for middle-age women should be focused on IUD removal and other reproductive health issues, particularly for the women aged 50-64.