

# Attitudes of Family Planning Workers on the Provision of Sexual and Reproductive Health Services to Unmarried Young Adults in China

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## Introduction

Under the influences of economic globalisation, cultural change, public opinion and exposure to new ideas, sexual attitudes and norms have been rapidly changing among adolescents and young people in China and there is emerging evidence from rural and urban areas of increasing premarital sexual activity among adolescents and youth. Despite this, contraceptive practice remains limited and irregular <sup>[1]</sup>. Several obstacles have been identified that inhibit the access of unmarried young people, particularly females, to contraceptive and other sexual and reproductive health services. Prominent among obstacles to the provision of sexual and reproductive health information and services is the persistence of traditional patriarchal norms controlling young women's sexuality on the part of adult gatekeepers – policymakers, programme managers, service providers and parents. Young people continue to have limited awareness of sexuality, contraception or sexually transmitted infection. They fear that by accessing services, they may inadvertently disclose their sexual activity status, and face parental disapproval, ostracism from and *loss of face* for the entire family. Gender power imbalances are wide and there is a tendency among young females to rely on partners for contraceptive decision-making. And there is concern that services do not cater to unmarried youth and that providers are judgmental, threatening and may violate young people's confidentiality <sup>[1-3]</sup>

Few studies have explored the perspectives of adults, be they parents, teachers or health care providers, on the provision of contraceptive and other sexual and reproductive health services to adolescents. One exception is a study that has highlighted the ambivalence of parents, largely suggesting that the perceptions of young people concerning parental disapproval are largely justified <sup>[4]</sup>. The views of service providers, however, are surprisingly under-researched and the objective of this paper is to fill this gap. The paper explores the perceptions and attitudes of service providers in eight sites in China on the provision of sexual and reproductive health services to unmarried youth, and in doing so, it assesses the extent to which the perceptions of providers do indeed reinforce those of young people.

## Background

A number of studies have suggested that significant proportions of young people, and particularly those aged 18-24, have experienced sexual activity. For example, a survey conducted in 7 provinces in China during 1987-1991 showed that the proportions of married women who had premarital pregnancy in urban and rural areas were 16.8% and 12.2%, respectively, during the survey period and proportions experiencing premarital pregnancy increased over the study period 1987 to 1991 <sup>[5]</sup>. More recent studies report higher rates of

premarital sexual activity. A recent study of unmarried youth aged 15-22 in Sichuan province reported that 31% of girls and 44% of boys who were dating had sexual experience, with average age of debut just under 20 for young men and just under 19 for young women. About 12% of sexually active young women (or the partners of young man in the study) had undergone at least one abortion<sup>[6]</sup>. Highest rates of premarital sexual activity were reported among young people who were about to be married: for example, a study of young about-to-be-married young people undergoing the mandatory premarital physical examinations in Shanghai, Nanjing and other cities in the 1990s reports that about 70% of the young women were sexually experienced<sup>[1, 7, 8]</sup>; a relatively small proportion had practised contraception and disturbing levels of unwanted pregnancy were reported. About 37% of sexually active about-to-be-married young women had experienced at least one abortion<sup>[1]</sup>.

In general, health and family planning services are widely available in China. Family planning services are provided in two ways: the health system including hospitals, MCH centres and drug stores; and the family planning system consisting of family planning service units available from the village level to the province level. It is the staff of the family planning service units who are primarily responsible for the provision of information, counselling and contraceptive services. Staff of the family planning service units fall into two categories: (a) contraceptive providers who are in charge of providing contraceptives to the local FP service units at the primary level, and also in charge of management and supervision of contraceptives; and (b) community-based distributors who are in charge of distributing contraceptives, as well as general counselling for clients in their service areas.

In many settings, studies have observed that family planning providers perceive their roles as serving the needs of married adults and not those of the young or unmarried<sup>[9]</sup>. Several studies of providers conducted elsewhere have pointed to factors influencing providers' willingness to serve young people. One study has observed that such socio-demographic characteristics of FP workers as marital status, age and education levels can have a bearing on the quality of services they provide to adolescents<sup>[10]</sup>. More studies, however, point to provider attitudes as a prominent factor constraining adolescents from using reproductive health services especially in settings where sexuality is closely associated to marriage and childbearing<sup>[11-13]</sup>. Changing the attitudes of providers is a major concern in these societies<sup>[14, 15]</sup>. Unfortunately, there are few studies in China that have explored providers' perspectives and attitudes towards provision of sexual and reproductive health services to unmarried youth.

## **Data and methods**

Data are drawn from a multi-centre project on unmet needs and factors impeding access to sexual and reproductive health services among sexually active unmarried young adults in eight Chinese sites: Shanghai and Chongqing cities, and Hebei, Henan, Jiangsu, Zhejiang, Fujian and Sichuan provinces in the period of 1998-1999. These eight sites are located in areas of north, east, southeast and southwest China – areas of high population density and fairly representative of rapidly developing areas of China. Sites from which FP workers were drawn were purposively selected to represent areas in which economic development levels

were representative of the local province or city.

The objectives of this multi-centre study were to assess the perspectives of various gatekeepers, and particularly service providers, on sex education and sexual and reproductive health services for unmarried youth, and to identify feasible and acceptable ways of addressing the sexual and reproductive health needs of young unmarried people in China.

The study consisted of a mix of quantitative and qualitative methods. Focus group discussions (FGDs) were conducted with unmarried young adults, as well as such gatekeepers as parents, FP workers, and policymakers. In addition, a survey was conducted among the two types of FP workers, namely contraceptive providers and community-based distributors. Study participants were recruited after informed consent was obtained. This paper focuses on one group of gatekeepers, namely FP workers, and explores their perceptions of changing sexual norms among young people, and their need for services and programmes.

A total of 16 focus group discussions were held with a total of 123 FP workers, two in each site, one in each site with contraceptive providers and one with FP staff (full time involved in administrative affairs in FP at neighbourhood/township level or above). Four of the eight sites (Shanghai, Fujian, Sichuan and Chongqing) drew their sample from rural areas (Shanghai and Chongqing administrative regions contain both rural and urban areas); while in the four remaining sites (Henan, Hebei, Jiangsu and Zhejiang), FP workers were drawn from urban areas. All participants were married and were selected with the assistance of local organisers who were familiar with the demographic characteristics of FP workers. In assembling focus groups, care was taken to ensure that participants were not acquainted with each other, local leaders, who may have inhibited free discussion, were excluded. Moderators made it clear that the intention was to discuss perceptions and attitudes towards the provision of services for unmarried youth in general.

The survey was conducted among 1927 providers, including 965 contraceptive providers and 962 contraceptive distributors. In each of the eight sites, 120 providers and 120 distributors comprised, on average, the sample. Trained interviewers administered face-to-face interviews.

In both phases of study, FP workers were asked to estimate the proportion of young people aged 18-24 who may have experienced sexual relations, discussing whether premarital sexual relations were 'unavoidable' in prevailing circumstances and whether they perceived premarital sexual behaviour and abortion as health problems for youth. They also provided insights into the extent and kinds of knowledge young people have on issues relating to sex, contraception and STIs, and the kinds of services currently available to them. The core of the investigation, however, focused on FP workers' attitudes towards the provision of sex education, contraceptive, abortion and counselling services to young people, appropriate age for the provision of such education, and preferences with regard to content and mode of delivery.

## **Findings**

### ***Profile of providers***

As was described earlier, while providers include those who have some supervisory role at the primary level, distributors are more likely to be community level workers supervised by those at primary and higher levels. This is reflected in the socio-economic differences presented in Table 1 of characteristics of FP workers included in the survey. While both groups comprise largely of married females, it is clear that providers are, in general, more likely to be young, well educated and urban than are distributors.

[Table 1 here]

### ***Perceptions of changing sexual norms and behaviours among unmarried youth***

In both qualitative and quantitative phases, providers were asked about their attitudes to premarital sexual activity of young people and their perceptions about extending contraceptive and other reproductive health services to unmarried youth. With regard to perceptions concerning leading problems faced by unmarried youth, over one third (35%) of survey respondents cited sex related problems, including unprotected premarital sex, unwanted pregnancy and induced abortion. Such other concerns as employment, housing and suitable partners were less likely to be cited. Almost all respondents cited premarital sex as a serious concern and almost 90% agreed that larger proportions of unmarried young people were sexually active than when they themselves were at similar ages.

*'Compared with the situation when I was young, now more young people are engaged in premarital sex especially in rural areas because cohabitation after engagement and premarital sex in young people with steady dating relationship is acceptable by parents in rural areas.'* (Contraceptive provider, aged 38, female, college, engaged in FP work for 15 years, one daughter, Zhejiang)

*'Now the traditional value that the unmarried should not be sexually active is weakening. Young people usually cohabit after dating. I believe about 90% of them (unmarried young adults aged 18-24) have experienced sexual relations.'* (Contraceptive provider, aged 45, female, college, engaged in FP work for 3 years, one son aged 17, Chongqing)

Although both groups of providers agreed not only that considerable proportions of unmarried young people were sexually active, and that community attitudes towards it had become increasingly liberal, survey findings suggest that a majority continue to disapprove of sexual activity among the unmarried. Table 2 suggests for example, that only 28% of providers and 21% of distributors argued that premarital sex was common and unavoidable, and another 13% approved conditionally, in couples in a committed relationship (those intending to marry or in love). The large majority, however, about three fifths of all survey respondents, irrespective of provider status, disapproved of pre-marital sex. It was only in two settings – Fujian and Chongqing – that larger proportion of respondents approved than disapproved premarital sexual activity (Table 3).

[Tables 2 and 3 here]

***Attitudes towards provision of information on sexuality and contraception to unmarried youth***

Providers, irrespective of group, agreed that young people in China are poorly informed on issues related to sex, contraception and infection, and over 90% argued that sexuality education activities were inadequate and limited. In focus group discussions, many related their experiences of the consequences of this lack of information. For example:

*'Some young people bought oral pill from drug store, but they did not know how to use it. They took the pill every day. Some of them used long-term oral pill which is not suitable for the unmarried but they did not know about it'. (FP worker, aged 50, female, technical school, engaged in FP work for 10 years, two daughters, Shanghai)*

*'The young people, particular those in rural areas just know the name of some STDs, but they don't know how it is infected and how can prevent it'. (FP worker, aged 42, male, college, engaged in FP work for 19 years, one daughter, Sichuan)*

Not surprisingly then, provider attitudes concerning the provision of sexual health information to unmarried youth was overwhelmingly positive, irrespective of age, sex or area of residence. As many as 95% of providers and 89% of distributors argued for more in-depth and explicit information about sexuality and contraception for unmarried adolescents and perceived that the advantages of complete information far outweigh the disadvantages. These views were reinforced in focus group discussions:

*'Now some of the young people have premarital sex because they are curious. If they knew more about sex, they may not do so. Furthermore, if they have knowledge about contraception, they will use contraceptives to prevent unwanted pregnancy, and this is better for their health.' (Contraceptive provider, aged 45, female, college, engaged in FP work for 3 years, one son aged 17, Chongqing)*

*'(Sex education) will guide young people to understand sex correctly.' (Contraceptive provider, aged 40, female, senior high school, engaged in FP work for 6 years, one son aged 12, Sichuan)*

*'Sex education can raise their awareness of self-protection. For example, if knowledge on STDs is not provided to them, they will know little about it. If they know multiple sex partners increase the risk of STDs, they will protect themselves from this risk'. (FP worker, aged 51, male, college, engaged in FP work for 6 years, Jiangsu)*

Although differences were moderate, somewhat more positive attitudes were expressed by respondents who were better educated, were married, or had a longer employment history as a contraceptive provider/distributor than among others. Respondents who disapproved premarital sex were, however, significantly less likely to approve the provision of information on sexuality and contraception to unmarried youth than others (not shown here).

Providers and distributors were more conservative however in their perceptions regarding appropriate timing and content of sex education. With regard to content, 81% of all respondents argued that “sex morals, psychology and physiology” was a central component of sex education; 53% argued, in addition, for the inclusion of information on contraception and available methods, and one third argued for the inclusion of counselling facilities alongside the provision of sex education. In focus group discussions, however, many argued that the kind of information, particularly on the consequences of unsafe sex, should not be as explicit as that provided to married couples. With regard to appropriate timing of sex education, similarly, there was considerable ambivalence. Fewer than one-third of all respondents (30%) approved the provision of sex education to adolescents aged under 18, the majority, about 40%, considered 18 – the average age for graduation from high school and the age at which young people are issued identity cards – as appropriate, while the remaining 30% argued for waiting till young people reach the legal minimum age at marriage, that is, 20. In focus group discussions, workers appeared to be in favour of age appropriate provision of sex education, arguing that sex education should be initiated at junior high school level (at ages 14-15) because it was at these ages that adolescents experienced rapid physiological changes.

Whatever their misgivings, the majority -- 84% -- of respondent family planning workers expressed their willingness to provide sex and contraception related information and counselling to unmarried young people who sought it. In fact, almost all survey respondents (95%) reported that they routinely provided information and counselling to unmarried youth who came to them for help.

#### ***Attitudes toward provision of contraceptive services for unmarried youth***

Findings reveal a similar ambivalence about providing contraceptive and other reproductive health services to unmarried young people. Responses to a series of questions probing attitudes to the provision of services to unmarried youth are reported in Table 4. Findings suggest for example that while over two thirds of all respondents were willing to provide contraceptives to the unmarried, they qualify this willingness with the condition that these clients are aged 18 or older. At the same time, respondents are more divided about regularising the provision of services to unmarried youth. About 60% of respondents approved government provision of contraceptive services to unmarried youth, and about half agreed that services should be provided at workplaces and colleges or universities (51% and 55% respectively). However, no more than a quarter agreed that contraceptive services should be provided at senior high school level. Differences between providers and distributors were negligible.

[Table 4 here]

Regional differences are, however, more apparent. Table 5 shows that respondents from Shanghai, Fujian, Sichuan and Chongqing were, by and large, far more open to the provision of services to unmarried youth than were respondents from other settings. In contrast, FP workers from Hebei, Henan, Jiangsu and Zhejiang were least likely to hold positive attitudes

(particularly Hebei). The possible explanation for this might be that traditional Chinese values are still strong in Hebei and the people's attitudes on sex are more conservative than in other provinces.

[Table 5 here]

Regional differences were repeated in focus group discussions. Conservative attitudes were expressed in FGDs for FP workers in urban Hebei, Henan, Jiangsu and Zhejiang. Participants from Hebei and Henan were clear, for example that the provision of contraceptive services was contrary to traditional Chinese values, and that it would mislead unmarried youth and increase premarital sex.

*'It is in contradiction with traditional values, which say that young people should be virgin before marriage. Providing contraceptive services actively for them seems to encourage them to have sexual intercourse.'*(Contraceptive provider, female, 33 years old, college, engaged in FP work for 9 years, one son aged 9, Henan).

*'We provide the services actively to the married because they are legal to live together. However, what will it means if you provide contraceptive methods to the unmarried? It will mislead them.'*(FP staff, aged 47, female, senior high school, engaged in FP work for 15 years, one son aged 23, Hebei)

The majority of participants from other sites, particularly those in rural Shanghai, Sichuan and Chongqing favoured the active provision, by FP departments, of contraceptive services to unmarried youth, and especially for those who had a steady partner or who were cohabiting.

*'If we know he/she is dating or if the unmarried couple is living together, we have to give them contraceptives, otherwise she might be pregnant and then more trouble would be caused to us.'*(Contraceptive provider, aged 35, female, engaged in FP work for 12 years, one son aged 12, Sichuan)

*'Young people in rural area usually date earlier and then cohabit. For these young people, we will provide services.'* (FP staff, aged 45, female, technical school, engaged in FP work for 18 years, one daughter aged 12, Shanghai).

FGD participants from rural areas were actually more likely than those in urban areas to favour the provision of contraceptives to unmarried youth who were dating or living together, arguing that this was a need expressed by unmarried youth themselves as well as their parents. In fact in some rural areas, for example, Sichuan Province, FP workers not only provided contraceptives to young people but also required unmarried young clients to sign a contract promising not to give birth before marriage as a means of strengthening their commitment to safe sex.

However, FGDs also reveal that FP workers may not perceive unmarried youth as their target

clients:

*'Our task and role is to provide contraceptive services to married couples, especially to married women. We have no responsibility or obligation to provide services to unmarried people.'* (FP worker, female, 37 years old, college educated, engaged in FP work for 8 years, 1 son, Hebei).

### ***Correlates of attitudes to service provision***

Bivariate relationships suggest that it is the lesser educated rather than the educated, the rural rather than the urban and men compared to women who express attitudes in favour of the provision of contraceptive services to unmarried youth. This was similar as the finding observed among the parents <sup>[4]</sup>. A possible explanation for this counter intuitive finding might be that as there are many hospitals and drug stores in urban areas and it is convenient to get contraceptives, FP workers in urban areas might be less likely to have been approached by unmarried youth for contraceptive services and are hence less acutely aware of the need for services. Similarly, the practice of couples living together between engagement and marriage is relatively accepted in rural areas of China, and rural FP workers were correspondingly more tolerant towards premarital sex and the provision of contraceptives to the unmarried.

Bivariate relationships also show, as expected, that respondents who have a longer working experience as a provider or distributor, and those less likely to disapprove of premarital sex were also more likely to approve the provision of contraceptive services to unmarried youth.

Logistic regressions presented in Table 6 provide insights into the net effects of attitudes on the provision of contraceptive services for unmarried youth. The dependent variable was coded to equal one if the respondent agreed that "the government should provide contraceptive services for unmarried young adults", and zero if s/he did not. Independent variables included attitudes to premarital sex and contraception on the one hand, and such socio-demographic variables as region of residence, sex, age, education level, marital status, type of FP worker and duration of employment on the other. Of note is the finding that type of worker – provider or distributor – had no bearing on attitude towards service provision.

[Table 6 here]

Results suggest that socio-demographic variables are largely insignificant determinants of provider attitudes with one notable exception. Region of residence remains an important predictor, with respondents from Shanghai, Sichuan, Chongqing and especially Fujian significantly more likely to hold positive attitudes than are those from other settings.

It is clear that provider perceptions are paramount in determining perceptions of the need to provide contraceptive services to unmarried youth. Table 6 highlights that, even after controlling for socio-demographic factors, respondents who perceive premarital sex to be quite common, who do not disapprove of premarital sex and who recognise the need for contraception are indeed more likely to approve contraceptive services for unmarried youth

than are other respondents.

Findings reiterate the need to raise awareness among family planning workers about sexual risk behaviours among unmarried youth in China and their potential role in mitigating adverse consequences. Qualitative data also suggest a need to clarify for FP workers of the age and marital status of the populations they are expected to serve.

### **Conclusion and policy recommendations**

This paper has explored the perspectives of contraceptive providers and distributors about the provision of contraceptive services to unmarried youth in China. Findings confirm that FP workers in China hold a deeply felt ambivalence about the provision of sexual and reproductive health services to unmarried youth. Underlying this ambivalence are misperceptions, continued adherence to traditional norms and ambiguities and limitations in the current policy on the one hand, and their recognition of the need to protect the sexual health of unmarried youth on the other. Their concerns, together with the ambivalence of the parents of the unmarried youth (findings from the same study <sup>[4]</sup>) may pose a significant obstacle to the adoption of safe sex behaviours by youth, as well as to the provision of sexual and reproductive health information and services to young unmarried people in China.

While FP workers were unambiguous about the need for government agencies to provide information and education on sexual and reproductive health to unmarried youth, however, perceptions concerning the appropriate age for and content of such education remained conservative. Ambiguities were equally evident in the case of service provision. For example, while they recognised that premarital sex has increased and in general approved of the provision of contraceptives to the unmarried, no more than three fifths advocated that the government should extend services to the unmarried, and only one quarter agreed that services could be extended to high schools. This was also a finding observed among the parents <sup>[4]</sup>. In short, while FP workers appeared genuinely concerned about the sexual health needs of the unmarried and many were accustomed to responding to the service or counselling needs of those who requested these, they were not entirely comfortable about providing targeted services to youth through government services or services provided at employment sites and educational institutions.

Limitations of the data must be acknowledged. Findings from the study are not intended to be representative of China generally nor could the huge ethnic and cultural diversity existing in the country have been captured in this in-depth study of eight sites. Hence caution must be exercised in generalising findings even to the province/city from which data are drawn.

Nevertheless, findings offer several suggestions for action. For one, the dilemmas faced by FP workers need to be recognised and addressed. Training programs are needed that are directed to FP workers: important aspects of such training include an overview of the current sexual risk taking situation of unmarried youth, ways in which FP workers can contribute to averting adverse consequences, and clarification that unmarried young people do indeed fall within

their target populations. At the same time FP workers need to be trained in techniques and skills required to serve unmarried youth.

Second, despite the ambivalence FP workers express, they are clearly concerned for the well-being of the unmarried youth, and agreed with the establishment of programs that enable young people to know about and protect themselves from unwanted pregnancy, disease and abortion. FP workers appeared willing to empower government to establish educational and service delivery programs for the unmarried, and it is important that government acts upon this expression of interest.

Finally, it should be noticed that any expansion of FP services in China needs policy and organisational supports. Also urgently required are activities that raise public awareness of the need for comprehensive sexual and reproductive health education and services for unmarried young people.

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**Table 1. Socio-demographic profile of FP workers**

Characteristics	Provider (N=965)	Distributor (N=962)	Total (N=1927)
<b>Sex</b>			
Male	20.0	6.0	13.0
Female	80.0	94.0	87.0
<b>Age</b>			
<30	22.3	14.2	18.3
30-39	32.4	36.8	34.6
40-49	36.3	35.8	36.0
≥ 50	9.0	13.2	11.1
<b>Educational level</b>			
Junior high or lower	9.1	42.3	25.7
Senior high/technical	53.0	42.0	47.5
College or higher	37.9	15.7	26.8
<b>Marital status</b>			
Married	91.8	96.4	94.1
Unmarried	8.2	3.6	5.9
<b>Area of residence</b>			
City and town	90.4	50.7	70.6
Village	9.6	49.3	29.4

**Table 2. Percentage distribution of FP workers' attitudes to premarital sex**

Attitudes	Provider (N=965)	Distributor (N=962)	Total (N=1927)
Disapprove	58.1	63.4	60.8
Acceptable but only under certain conditions*	12.5	14.3	13.4
Acceptable, understandable	27.7	20.6	24.1
Don't know or no opinion	1.7	1.8	1.7

\* if they plan to marry, if they love each other, are in a committed relationship.

**Table 3. Percentage distributions of FP workers' attitudes to premarital sex by region of residence**

Center	Provider (N=965)	Distributor (N=962)	Total (N=1927)
Shanghai	61.7	71.0	66.1
Hebei	70.0	75.8	72.9
Henan	60.0	60.5	60.3
Jiangsu	59.2	70.8	65.0
Zhejiang	73.8	84.7	79.2
Fujian	42.0	43.8	42.9
Sichuan	57.6	54.1	55.8
Chongqing	41.6	46.2	43.8

**Table 4. FP workers' attitudes about the provision of contraceptive services to unmarried youth, percentage distributions**

Questions	Provider (N=965)	Distributor (N=962)	Total (N=1927)
Willing to provide contraceptives to unmarried aged 18-24 if they request it	70.8	67.8	69.3
Government should provide contraceptive services to unmarried	59.4	59.9	59.6
Contraceptive services should be provided to the unmarried at their workplaces	50.7	50.6	50.6
Contraceptive services should be provided at colleges/universities	56.3	54.0	55.1
Contraceptive services should be provided at senior high schools	23.5	27.7	25.6

**Table 5. FP workers' attitudes about the provision of contraceptive services to unmarried youth, percentage distributions, by region of residence**

Center	Questions*				
	1	2	3	4	5
Shanghai	83.3	77.6	76.7	67.3	26.9
Hebei	18.3	28.3	15.0	36.3	13.3
Henan	63.3	49.2	31.3	48.3	19.2
Jiangsu	70.4	55.8	31.3	47.5	14.6
Zhejiang	72.1	40.4	65.4	45.4	16.3
Fujian	77.9	80.0	57.5	63.3	39.2
Sichuan	84.2	69.2	57.9	67.5	36.7
Chongqing	85.1	76.4	68.6	65.3	38.4

\* 1: Willing to provide contraceptives to unmarried aged 18-24 if they request it

2: Government should provide contraceptive services to the unmarried

3: Contraceptive services should be provided for unmarried at their workplaces

4: Contraceptive services should be provided at colleges/universities

5: Contraceptive services should be provided at senior high schools

**Table 6. Factors predicting the likelihood of hold approval attitude on the provision of contraceptive services for unmarried young adults by government (N=1927)**

Variable	Odds ratio	95%CI	P
<b>Center</b>			
Shanghai	1.62	1.04-2.51	0.0314
Hebei	0.27	0.17-0.41	0.0001
Henan	0.38	0.24-0.58	0.0001
Jiangsu	0.59	0.40-0.89	0.0110
Zhejiang	0.34	0.23-0.51	0.0001
Fujian	1.84	1.17-2.91	0.0087
Chongqing	1.05	0.68-1.63	0.8255
Sichuan(ref)	1.00	--	--
<b>Age</b>			
<30	1.14	0.71-1.84	0.5869
30-39	0.79	0.53-1.18	0.2453
40-49	0.81	0.56-1.16	0.2424
≥ 50(ref)	1.00	--	--
<b>Sex</b>			
Male	1.07	0.84-1.36	0.6031
Female(ref)	1.00	--	--
<b>Education</b>			
Junior high or lower(ref)	1.00	--	--
Senior high	0.84	0.63-1.13	0.2521
College or higher	1.39	0.97-1.99	0.0723
<b>Marital status</b>			
Married(ref)	1.00	--	--
Unmarried	0.64	0.38-1.07	0.0892
<b>Area of residence</b>			
City and town(ref)	1.00	--	--
Village	1.19	0.89-1.59	0.2455
<b>Type of FP worker</b>			
Provider	0.82	0.59-1.13	0.2244
Distributor(ref)	1.00	--	--
<b>Duration of employment</b>			
<5(ref)	1.00	--	--
5-14	1.21	0.95-1.54	0.1325
≥ 15	1.09	0.79-1.50	0.6098
<b>The most serious problem that young adults face</b>			
Sex related	1.24	0.99-1.55	0.0645
Others (ref)	1.00	--	--
<b>Perceived premarital sex</b>			
Some what common	1.69	1.30-2.21	0.0001
Very common	2.45	1.68-3.57	0.0001
Don't know	0.76	0.46-1.26	0.2794
Not common(ref)	1.00	--	--
<b>Attitudes to premarital sex</b>			
Acceptable, Understandable	1.69	1.30-2.18	0.0001
Acceptable but only under certain condition*	1.66	1.19-2.31	0.0029
Disapproval(ref)	1.00	--	--
<b>Necessity for sexually active unmarried young adults to use contraceptives</b>			
No	0.55	0.38-0.78	0.0009
Depends on sexual partners	1.44	0.53-3.94	0.4751
Yes(ref)	1.00	--	--

\* if they plan to marry, if they love each other, are in a committed relationship.