Chinese Women in Italy – Menarche, Pregnancy and Maternity

Lisa Argnani1, Stefania Toselli2 and Emanuela Gualdi-Russo1

1 Department of Natural and Cultural Resources, University of Ferrara, Ferrara, Italy
2 Department of Experimental Evolutionary Biology, University of Bologna, Bologna, Italy

A B S T R A C T

The purpose of this study was to assess the well-being and health status of Chinese immigrant women in Italy. The subjects (mean 29.5 years) frequented the «Health Center for Foreign Women and their Children» in Bologna, Italy. Information on living conditions, biological characteristics and pregnancy or maternity was obtained through interviews of the women in the Center during normal medical visits. Data on menarche age were based on the retrospective method since all the women were in China at the onset of menarche. Social factors influencing the health and behavior of Chinese women in Italian society are discussed. The analysis on children sex ratio at birth indicates that the old cultural Chinese tradition of son preference still continues to exist. These women have achieved a socio-economic improvement and generally good health status in Italy. The difficult living conditions they faced in China are indirectly reflected in their delayed puberty (14.4±1.4 years). The delayed sexual development was probably due to the same situation of severe poverty that forced them to migrate.

Key words: age at menarche, immigration, China

Introduction

Italy is one of the main new destinations of Chinese immigration to southern Europe. Chinese people are the fifth largest immigrant group in Italy (about 57,000 individuals1) and the third largest in Bologna (northern Italy), with about 3000 people living in the city2. The Bologna commune has made great progress in improving the health of foreign women and children in the last decade, with new and easily accessible health services, like the «Health Center for Foreign Women and their Children» (established in 1991).

Human health and well-being have a complex multifactor nature, particularly within the new Italian multi-ethnic context. An analysis of the status of recent female migrants from China could lead to

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a better understanding of the people involved in the migration process.

The age at menarche is a very reliable biological indicator of ecological and social influences and thus of a population’s general well-being. The onset of menstruation is the beginning of a female’s biological maturity and reproductive capacity. Secular trend in age at menarche or differences in this age among contemporaneous samples have often been attributed to environmental factors. The age at menarche has declined in both developed and developing countries in recent years and China is no exception. Moreover, there are still differences in age at menarche according to the place of residence (urban-rural environments) in China. In view of the wide variation in living conditions of Chinese people, it would be interesting to examine this biological marker in women forced to leave China in search of a better life. The age at menarche has decreased in the Italian population during the last century in both urban and nearby rural environments as a consequence of the general improvement in the standard of living.

The main aim of this study was to assess several female characteristics related to important biological aspects (from age at menarche to pregnancy and maternity) in order to obtain some indications of the socio-cultural conditions of a sample of young women who recently immigrated to Italy from rural areas of Zhejiang province.

Subjects and Methods

The sample consists of 458 Chinese women, living in Italy for about 4 years (on average). The subjects are from the same region, Zhejiang Province (southeastern China), and belong to the Han ethnic group, the main one in China. Each woman was interviewed at the »Health Center for Foreign Women and their Children« in Bologna, Italy, during a medical examination of her or her child.

A cultural mediator helped the women fill in the questionnaire, as they did not speak Italian.

The questions dealt with the subject’s chronological age, the number of years living in Italy, the level of knowledge of Italian, educational level, work activity, work hours, home conditions and number of cohabitants.

The following terms described the home conditions: »good conditions« refer to a house with bathroom and kitchen, heating, good illumination and normal humidity; »bad conditions« refer to a house with outdoor bathroom, heating only in the kitchen, poor illumination and high humidity. All other situations were classified as »intermediate«.

The following obstetric-gynecological information was obtained: menarche age, number of deliveries and abortions, age at first delivery and its modality, sex of the children and birth order.

The retrospective method was the only available source of information for the assessment of age at menarche. All of the women had reached menarche in China. The cultural mediator, working at the Foreign Women’s Health Center, helped us to convert the age at menarche from the Chinese lunar calendar to the Western one.

In order to make temporal comparisons among women sub samples from different birth cohorts (about 34% of women were born during 1971–75; 32% of them before this interval; 34% of them after this interval), we compared the ages at menarche of the three women sub samples by ANOVA, considering 0.05 as the probability level of significance. Linear regression analysis was used to determine if there was a significant association (p<0.05) between biological or socio-cultural variables.
Results and Discussion

Data on the biological and reproductive history and on immigration obtained from the sample of Chinese women are reported in Tables 1–4.

The average young Chinese woman examined at the Center has lived in Italy for only a few years; she has generally been pregnant and perhaps has had an abortion. As a consequence of China's family planning program promoting the delay of marriage to age 23 for women⁹, her first delivery was not precocious. Deliveries were generally eutocic and at full term (93% of the total). The health care of the woman and her child are assured by frequent and regular medical checkups at the Center.

The home conditions are usually good, but the young Chinese woman frequently lives with other people of the same nationality – sometimes at the same place where she works. The »community family«, consisting of several cohabiting couples, is rather frequent in the Chinese community¹⁶. The poor or complete lack

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TABLE 1
MEAN MENARCHEAL AGE IN THREE SUBSAMPLES OF CHINESE MIGRANT WOMEN LIVING IN BOLOGNA

<table>
<thead>
<tr>
<th>Year of birth</th>
<th>(\bar{x})</th>
<th>SD</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>=1970</td>
<td>14.9</td>
<td>1.5</td>
<td>12.5</td>
<td>18.0</td>
</tr>
<tr>
<td>1971–1975</td>
<td>14.3</td>
<td>1.9</td>
<td>13.0</td>
<td>19.0</td>
</tr>
<tr>
<td>&gt;1975</td>
<td>14.1</td>
<td>1.3</td>
<td>12.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

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TABLE 2
SOCIO-DEMOGRAPHIC CHARACTERISTICS OF CHINESE WOMEN WHO IMMIGRATED TO BOLOGNA

<table>
<thead>
<tr>
<th>Variables</th>
<th>(\bar{x})</th>
<th>SD</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronological age (yrs)</td>
<td>29.5</td>
<td>5.7</td>
<td>18</td>
<td>53</td>
</tr>
<tr>
<td>Years in Italy</td>
<td>4.1</td>
<td>2.7</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Working hours</td>
<td>8.7</td>
<td>1.7</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Number of cohabitants</td>
<td>4.9</td>
<td>2.1</td>
<td>1</td>
<td>13</td>
</tr>
</tbody>
</table>

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TABLE 3
SOCIO-CULTURAL CHARACTERISTICS AND LIFE CONDITIONS OF CHINESE WOMEN LIVING IN BOLOGNA

<table>
<thead>
<tr>
<th>Variables</th>
<th>% frequency</th>
<th>Variables</th>
<th>% frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian language knowledge</td>
<td></td>
<td>House conditions</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>84</td>
<td>Good</td>
<td>72</td>
</tr>
<tr>
<td>Bit</td>
<td>15</td>
<td>Intermediate</td>
<td>21</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>Bad</td>
<td>7</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>Occupation</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>7</td>
<td>Housewife</td>
<td>27</td>
</tr>
<tr>
<td>Grammar school</td>
<td>17</td>
<td>Workwoman</td>
<td>57</td>
</tr>
<tr>
<td>Junior high school</td>
<td>70.5</td>
<td>Craftswoman</td>
<td>11</td>
</tr>
<tr>
<td>Senior high school</td>
<td>4.5</td>
<td>Else</td>
<td>5</td>
</tr>
<tr>
<td>Degree</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
of knowledge of Italian and the middle-
low educational level mean that she is
forced to take only manual labor – some-
times for an excessive number of hours
per day.

In China, an abnormal sex ratio at
birth has been recorded even in recent ti-
tes\textsuperscript{17,18}. It is a consequence of the family
planning program and is related to the
traditional patriarchal ideology and diffe-
rent social functions of males and fema-
les. Traditional Chinese medical practice
is highly accurate in identifying the fetal
sex\textsuperscript{17}, which allows the realization of the
strong preference for sons. There is no
particular sex ratio discrepancy in the
Chinese sample living in Bologna, with
49.51\% of sons. Nevertheless the sex ra-
tio at birth fluctuates around parity (Fig-
ure 1), suggesting that there are possible
arrangements after the birth of the first
child and that childbearing stops when
the goal is approached. Moreover although
the Chinese »one-child policy«\textsuperscript{19} does not exist in Italy, the Chinese immigrants
still want at least one son to continue the
family name, to help work and later to
care for the elderly parents, since daugh-
ters will marry out of the family.

Since 1949, a significant acceleration in
growth and development of Chinese
children was reported\textsuperscript{20} with a decline in
menarche age. Also if we did not observe
significant differences in the menarche
ages among the sub samples of women
with different birth rate, a tendency to a
decreasing in age at menarche resulted
(Table 1). Moreover, comparing the avera-
ge age of menarche of the youngest sub
sample with that of Chinese contemporar-
ies\textsuperscript{20}, a two years earlier onset of men-
struation resulted in the last ones (mean
age = 12.5 yrs). Although statistical met-
hoodologies differ across the studies, anal-
ogous results were observed in the com-
parison with data of the Chinese national
survey of 1985 for the rural population of
Zhejiang Province\textsuperscript{21}. In this case there is
about one year of difference, the age at
menarche being earlier in the sample
from the literature (median age = 13.62
yrs) than in the sample of Chinese wo-
men who immigrated to Italy.

Delayed sexual maturation in the Chi-
nese immigrants is also confirmed by other
comparisons with literature data\textsuperscript{8–10,22}.
The same environmental and socio-econo-
ic factors that caused the trend toward
decreasing age at menarche in China
could explain the differences among se-
lected samples from the same Chinese
province. Numerous determinants of the
onset of menarche have been assessed in
rural Chinese environments\textsuperscript{9}, from pesti-
cide exposure to heavy physical labor. Since we did not have such information
for our sample, we assumed that the de-
layed age at menarche (14.4±1.4 years) in
the Chinese women living in Bologna was
the result of poor socio-economic conditi-

\textbf{TABLE 4}

<table>
<thead>
<tr>
<th>Variables</th>
<th>X</th>
<th>SD</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivers</td>
<td>1.5</td>
<td>0.7</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Abortions</td>
<td>0.5</td>
<td>0.7</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Age at first delivery</td>
<td>24.9</td>
<td>4.1</td>
<td>17</td>
<td>40</td>
</tr>
</tbody>
</table>

\textbf{Fig. 1.} Sex ratio vs birth order in children of
Chinese women interviewed.
The profound socio-cultural and economic changes experienced by these Chinese immigrants to Italy will probably influence their future behavior, lifestyle and characteristics. Thus, it is important to continue to monitor and improve their health and quality of life. This will provide support in the transition from traditional customs, which may result in an abnormal sex ratio at birth, to modern ones. It will also promote a better integration of these women into their new society, while fully respecting their Chinese values and beliefs and bio-cultural diversity.

Acknowledgements

The authors wish to thank the cultural mediator and the medical staff of the «Health Center for Foreign Women and their Children» in Bologna for their cooperation and assistance.
Svrha ove studije bila je ocijeniti blagostanje i zdravstveni status žena iz Kine koje su migrirale u Italiju. Ispitanice (srednje starosti od 29,5 godina) su posetile »Zdravstveni centar za žene iz inozemstva i njihovu djecu«, u Bologni, Italija. Tijekom posjeta centru kroz razgovor su dobiveni podaci o uvjetima življenja, biološkim osobinama i trudnoći ili majčinstvu. Podatak o menarhi je dobiven retrospektivno, jer su sve žene bile u Kini u doba menarhe. Razmatrani su socijalni čimbenici koji utječu na zdravlje i ponašanje žena u društvu u Italiji. Analiza omjera spolova pri porodu ukazuje na postojanje stare Kineske tradicije, koja preferira sinove. Žene koje su doselile iz Kine pokazuju socio-ekonomski napredak i uglavnom su boljeg zdravstvenog stanja u Italiji. Teški životni uvjeti kojima su izložene u Kini indirektno se reflektiraju na njihovoj kasnijoj pojavlj puberteta (14,4±1,4 godina). Zakašnjeli spolni razvoj vjerojatno je uzrokovani istim činiteljima koji su ih prisili na emigraciju.