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Continuation rates for injectable contraception and intra-uterine device (IUD) at Banyuning Village, Buleleng District

Lina Anggaraeni Dwijayanti 1,2, D.N Wirawan 2,3, A.A Sagung Sawitri, 2,3

1 Buleleng Health Institute, 2 Public Health Postgraduate Program Udayana University, 3 Department of Community and Preventive Medicine Faculty of Medicine Udayana University
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Abstract

Background and purpose: Surveys on the proportion of contraception uptake have been regularly conducted in Indonesia, including Bali Province. However, very limited studies have explored contraceptive continuation rates. This study aims to examine continuation rates for injectable contraception and IUD including its determinants.

Methods: A cross-sectional survey was conducted in Buleleng District. A total of 100 reproductive age women who ever used or currently using injectable contraception or IUD were recruited to participate in the study. One village at Buleleng District was purposively selected and samples were selected from all registered reproductive age couples at the village using a systematic random sampling method. Data were collected through home interviews and were analysed using survival analysis to calculate contraceptive continuation rates. Multivariate analysis were performed using cox regression to identify factors associated to continuation rates for injectable contraception and IUD. Analysis was done using STATA SE 12.1.

Results: The one year continuation rate for IUD for first child was 84.62% whereas for injectable contraception was 71.03%. When sex variable of the child was applied, the one year continuation rate for IUD for first child was higher among those who have male child (81.82%) than female child (66.67%). Similarly, the one year continuation rate for injectable contraception was higher among those who have male child (79.10%) than female child (57.58%). The one year contraceptive continuation rate is also higher for the second child than the first one (79.56 vs 71.03 for injectable and 87.88 vs 84.62 for IUD). The multivariate analysis showed that perceived quality of family planning services was associated to contraceptive continuation rates (AHR=2.54; 95%CI: 1.22-5.29).

Conclusions: The continuation rate for IUD was higher than injectable contraception. Higher contraceptive continuation rate was found among those who have male children. The contraceptive continuation rate was associated with perceived quality of family planning services. Interventions to improve the quality of family planning services are warranted.

Keywords: continuation rates, injectable contraception, IUD, Buleleng, Bali

Introduction

Fertility rate is determined by eight determinants, including contraceptive use.1 Over the last 10 years, fertility rate in Indonesia is steady at 2.6 children per woman. In contrast, fertility rate in Bali Province was increased from 2.1 in 2002 to 2.3 in 2012.2,3 The overall proportion of contraceptive use in Indonesia was increased from 57.4% in 2007 to 57.9% in 2012; the opposite trend was observed for Bali Province where the proportion of contraceptive use among married women was decreased from 65.4% in 2007 to 59.6% in 2012.2,3 The 2013 National Health Survey (Riskesdas) found that the overall proportion of contraceptive use in Indonesia was increased from 55.8% in 2010 to 59.7% in 2013, while in Bali Province was steady at 60% between 2010 and 2013.4
Surveys on contraception use have been regularly conducted in Indonesia, however survey on contraceptive continuation rates is rarely been done. Several studies have revealed that contraceptive continuation rates are associated with age, parity, education level, employment, and socio-economic status. In addition, the quality of health services and support from husband are also associated with contraceptive continuation rates. This study aims to examine contraceptive continuation rates and its determinants in Buleleng District, Bali Province.

**Methods**

Banyuning Village was purposively selected because it is the largest village in Buleleng District with the highest number of reproductive age couples. The social-economic variables of Banyuning Village were comparable to the rest of the villages in Buleleng District as can be seen from the proportion of poor households. In 2006, the proportion of poor households in Banyuning Village was 14.30%, only slightly lower than the average proportion of Buleleng District of 18.85% and Bali Province of 17.9%.

A cross-sectional survey was conducted at Banyuning Village. Data were retrospectively obtained. Out of 2013 reproductive age couples, 100 women who ever used or currently using IUD or injectable contraception were selected using a systematic random sampling.

Data collected included age, parity, sex of the children, education, employment status, family income, perceived quality of health services, support from husband, healthcare facilities, and contraceptive continuation rates. Data were collected from March to April 2017 through home interviews. Data were analysed using STATA SE 12.1. A survival analysis was employed to determine contraceptive continuation rates. Cox regression was used to examine factors associated to contraceptive continuation rates. The last contraception method was used for the multivariate analysis. This study protocol has been approved by the Human Research Ethic Committees Faculty of Medicine Udayana University and Sanglah General Hospital Denpasar.

**Results**

The majority of respondents were aged between 14-34 years (85%); with parity of >2 (65%); have a male child (82%); being employed (72%); with education level up to junior high school (58%); and with a family income of ≤2,372,000 rupiah or USD 197 (54%). The average age for respondents' husband was 37 years; working in informal sector (53%) and with education level of senior high school and above (62%). The majority of respondents were not supported by their husband on contraception use (60%), had low perceived quality of services (56%), and accessed private services for contraceptive services (88%). As many as 63% of respondents were current user with contraception mix of injectable contraception (60.3%), IUD (31.7%) and pill contraception (8.0%).

Table 1 shows continuation rates for IUD was higher than injectable contraception for both first and second child. Continuation rates for both IUD and injectable contraception were higher among second child than first child. The one year continuation rate for IUD for first child was 84.62% and 87.88% for second child, whereas for injectable contraception was 71.03% for first child and 79.56% for second child. The five year continuation rate for IUD was 84.62% and 87.88% for second child, whereas for injectable contraception was 71.03% for first child and 79.56% for second child. The five year continuation rate for IUD was 84.62% and 87.88% for second child, whereas for injectable contraception was 71.03% for first child and 79.56% for second child. The five year continuation rate for IUD was 84.62% and 87.88% for second child, whereas for injectable contraception was 71.03% for first child and 79.56% for second child.

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higher than injectable contraception with prominent difference was observed among the second child and the first one. The continuation rate also differed based on sex of the child. Table 2 demonstrates the one year continuation rate and can be observed that the one year continuation rate for both IUD and injectable contraception was higher among those who have male child than female child. This different was more prominent for the first child.

Table 3 shows bivariate and multivariate analyses using backward method for the last contraception method used by respondents. All variables with p-value >0.25 were excluded one by one – started from variable with the highest p-value that were in order: parity, sex of the child, family income, place of services, support from husband, and employment status. Multivariate analysis revealed that perceived quality of services contributed the most to continuation rates for the last contraception method used by respondents (AHR=2.54; 95%CI: 1.22-5.29).

Table 1. Continuation rates for IUD and injectable contraception among the first and second child

<table>
<thead>
<tr>
<th>Month</th>
<th>Injectable contraceptive</th>
<th>IUD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First child</td>
<td>Second child</td>
</tr>
<tr>
<td>12</td>
<td>71.03</td>
<td>79.56</td>
</tr>
<tr>
<td>18</td>
<td>66.91</td>
<td>71.65</td>
</tr>
<tr>
<td>24</td>
<td>52.75</td>
<td>63.69</td>
</tr>
<tr>
<td>36</td>
<td>25.66</td>
<td>45.62</td>
</tr>
<tr>
<td>48</td>
<td>14.26</td>
<td>34.98</td>
</tr>
<tr>
<td>60</td>
<td>4.28</td>
<td>32.07</td>
</tr>
<tr>
<td>72</td>
<td>1.43</td>
<td>22.25</td>
</tr>
<tr>
<td>84</td>
<td>0.00</td>
<td>17.80</td>
</tr>
<tr>
<td>Median</td>
<td>25.33</td>
<td>30.43</td>
</tr>
</tbody>
</table>

Figure 1. Kaplan-Meier for continuation rates for IUD and injectable contraception among the first and second child
Table 2. Contraceptive continuation rates based on sex variable of the child

<table>
<thead>
<tr>
<th>Month of- Injectable first child</th>
<th>IUD first child</th>
<th>Injectable second child</th>
<th>IUD second child</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>12</td>
<td>57.58</td>
<td>79.10</td>
<td>66.67</td>
</tr>
<tr>
<td>24</td>
<td>36.36</td>
<td>60.49</td>
<td>50.00</td>
</tr>
<tr>
<td>36</td>
<td>12.12</td>
<td>35.02</td>
<td>33.33</td>
</tr>
<tr>
<td>48</td>
<td>6.06</td>
<td>19.10</td>
<td>11.11</td>
</tr>
<tr>
<td>60</td>
<td>0.00</td>
<td>9.55</td>
<td>-</td>
</tr>
<tr>
<td>72</td>
<td>-</td>
<td>3.18</td>
<td>-</td>
</tr>
<tr>
<td>84</td>
<td>-</td>
<td>0.00</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3. Incidence and predictors of discontinuation for the last contraception method

<table>
<thead>
<tr>
<th>Variables</th>
<th>Bivariate</th>
<th>Multivariate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Observation (month)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-34 years</td>
<td>35</td>
<td>3509</td>
</tr>
<tr>
<td>≥35 years</td>
<td>2</td>
<td>594</td>
</tr>
<tr>
<td>Child sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (present)</td>
<td>30</td>
<td>3567</td>
</tr>
<tr>
<td>Male (absent)</td>
<td>7</td>
<td>536</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;2</td>
<td>11</td>
<td>1294</td>
</tr>
<tr>
<td>≤2</td>
<td>26</td>
<td>2809</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>26</td>
<td>3336</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11</td>
<td>767</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥Senior high</td>
<td>14</td>
<td>1332</td>
</tr>
<tr>
<td>≤Junior high</td>
<td>23</td>
<td>2770</td>
</tr>
<tr>
<td>Family income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;2,372,000 IDR</td>
<td>15</td>
<td>1877</td>
</tr>
<tr>
<td>≤2,372,000 IDR</td>
<td>22</td>
<td>2226</td>
</tr>
<tr>
<td>Support from husband</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate</td>
<td>12</td>
<td>1748</td>
</tr>
<tr>
<td>Inadequate</td>
<td>25</td>
<td>2355</td>
</tr>
<tr>
<td>Perceived quality of services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate</td>
<td>13</td>
<td>2234</td>
</tr>
<tr>
<td>Inadequate</td>
<td>24</td>
<td>1869</td>
</tr>
<tr>
<td>Service provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>4</td>
<td>655</td>
</tr>
<tr>
<td>Public</td>
<td>33</td>
<td>3448</td>
</tr>
</tbody>
</table>
Discussion

Our study found that the current user was 63.0%, with contraception mix of injectable method (60.3%), IUD (31.7%), and pill contraception (8.0%). Our finding is higher when compared to data from the 2012 Indonesia Demographic and Health Survey for Bali Province, which found current user of contraceptive use 59.6%, with contraception mix of injectable method (21.6%), IUD (19.0%), pill contraception (21.6%), and other methods including tubectomy, vasectomy, implant and condom (9.9%). Our study confirmed that the proportion of IUD use is relatively stable, while our study also found that the proportion of injectable method is relatively higher and pill contraception is relatively lower.

In this present study, continuation rates for pill contraceptive was not assessed due to small sample size. The one year continuation rate for IUD was 84.62% for first child and 87.88% for second child. This finding is similar with a study conducted in Bali Province in 1982, which was 83.9%. The continuation rate for injectable method was 71.03% for first child and 79.56% for second child. A study in 1982 found only 51.9%. Our study confirmed that continuation rates for IUD were higher than injectable method which is consistent with the majority of studies being done in Indonesia or other countries. The 2007 Indonesia Demographic and Health Survey showed that the continuation rate for IUD was 90.1% while for injectable method was only 77%. In addition, the 2002-2006 Demographic and Health Survey (DHS) revealed that the continuation rate for IUD in several countries was varied between 64.5% and 93.9% while for injectable method was only between 32.2% and 81.9%.

In our study, contraceptive continuation rates among second child were higher than the first child. This finding is probably associated with the desire of respondents to have two children. Similar finding was also reported in the 2007 National Basic Health Survey, which found that contraceptive continuation rates among women with higher parity were higher than those with low parity. A study conducted in Alexandria also found that women with three or four children have higher contraceptive continuation rates than those who have one child or two children.

Our study found that contraceptive continuation rates differed based on sex variable of the children where higher continuation rates were associated with male child. In the bivariate analysis, we categorized our respondents as those with male child and those without male child. We found that the discontinuation rate among those who do not have male child was 1.31 per 100 person month while those who have male child was only 0.84 per 100 person month (CHR=1.43; 95%CI: 0.62-3.33). Though this trend is not statistically significant, this might be related to the Balinese culture that promotes patriarchal and patrilineal systems where male children are perceived as the backbone of families and hold the family ancestry line. Similar finding is also found in provinces of Hebei and Shandong, China that also adopt patriarchal culture. Study in these provinces revealed that contraceptive continuation rates among women who have male child were higher than those who have female child.

Multivariate analysis of our study showed that the only factor contributed to the last contraceptive continuation rate is the perceived quality of services (AHR=2.54; 95%CI: 1.22-5.29). Sex variable of the child and parity were not statistically associated with the last contraceptive discontinuation rate. Our study adopted a framework developed by Bruce when assessing the quality of family planning services, which included six elements of services: choice of methods, information given to clients, technical competence, interpersonal relations, follow-up and continuity.
mechanisms, and the appropriate constellation of services. Several studies in Indonesia and other countries also showed that contraceptive continuation rate is associated with quality of services. In order to increase contraceptive continuation rates, family planning services need to be improved based on the above six elements.

Limitation of our study is that it involves only one village therefore finding from this study cannot be extrapolated to a wider population. However, the characteristics of our study site are quite similar with the rest of villages in Bali Province. Other limitation of our study is that data were retrospectively collected leading to probable recall bias, especially when related to the start and end date of the contraceptive use.

Conclusion

Contraceptive continuation rate for IUD was higher than injectable. Contraceptive continuation rate was higher for the second child than the first one. Contraceptive continuation rates were also higher among those who have male child than those who have only female child. The contraceptive continuation rate was significantly associated with perceived quality of health services. In order to improve contraceptive continuation rates, improvement on the quality of family planning services is warranted.

Acknowledgement

Researcher would like to thank the head of village, family planning workers, health cadres, and all respondents who have supported this study.

References

9. Wirawan D. Penelitian pengembangan dengan sistem moduler, suatu penelitian tentang ciriciri sosial ekonomi, keluarga berencana, fertilitas, kesehatan dan kelangsungan pemakaian alat kontrasepsi di Bali [A development research with moduler system, a study on socio-economic, family planning, fertility, health and continuation rates of contraception in Bali province]. Denpasar: Faculty of Medicine, Udayana University/Bali Family Planning Coordination Board; 1984.


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Needs for sexual and reproductive health education for students with hearing impairment in Buleleng District, Bali Province; 05(02): 128-134

Predictors of treatment interruption among tuberculosis patients in public health centres in Bali, Indonesia; 05(02): 165-173
Instruction for authors

1. Manuscript must be written in English or Bahasa Indonesia of maximum of 3000 words (not includes abstract) and consists of 3-4 key arguments, and 3-4 tables and or graphs. It must be written in Microsoft Word with the maximum file capacity of 5 MB. Manuscript must be electronically submitted. Editors can change the format of the manuscripts but not the content.

2. Title must be concise and ensure it reflects the subject matter. Title page should be no longer than 18 words.

3. Authors’ name and affiliation must be placed under the title. Corresponding author’s email address must be stated to allow further discussion and interaction with the audience.

4. **Abstract** should be no longer than 300 words and must reflect the subject matter which includes: background and purpose, methods, results, and conclusion. It should also be accompanied by 3-5 key words.

5. **Introduction** must concisely address the existing gaps in the literature and state precisely study objectives.

6. **Methods** must clearly outline the study design, population, sample, source of data, data collection techniques, research instruments, and data analysis.

7. **Results** present findings of the study without opinion of the authors. Findings should be concise and can be presented using tables, graphs, and narratives. Table must be single space and must be numbered based on its occurrence in the text. The maximum of four tables and/or graphs are allowed which must contain a short self explanatory title. The title of table is placed above the table with left alignment, single space. The title of graph is placed under the graph with centre alignment, single space.

8. **Discussion** explains precisely findings of the study supported by sound theoretical and evidence from previous studies. Specific to qualitative studies, findings can be presented along with the discussion.

9. **Conclusion** should answer the research questions and can include a brief recommendation.

10. **Acknowledgements** should be addressed to related stakeholders who had supported the study, including respondents.

11. **Reference lists**
    It contains all references cited in the text. Referencing format must follow the Vancouver style (superscript without bracket), and should refer to the most up-to-date available evidence. Author’s last name followed by the initials of their first and middle name should be consistently used. When the authors are up to six, all authors should be written, but when those are more than six, the first six authors should be written followed by et al. The title of article must be written in sentence case. If the journal acronym is used, it should confirm to Medicus Index. Examples of referencing styles of different sources can be seen in the appendix.

12. Authors should pay attention on their writing structure, including sentence structure, accuracy of the text, table or graph. All accepted manuscripts will be provided back to the authors if the format has not complied with the instruction guidelines.

13. Authors must state their full name, qualifications, corresponding address, and affiliations. They should also complete the agreement form of right transfer for publication purposes only.

14. All manuscripts are subject to peer review processes and reviewed by editors. Further revision is requested prior to publication, or rejected for publication. Editors will provide the final decision and notify the authors whether the manuscript is accepted for publication.

15. Accepted manuscript written in Bahasa Indonesia will be translated by the PHPMA production editor, with the cost of IDR 3,000,000.

16. Manuscript must be submitted electronically to the following email: jurnalmikm@gmail.com
Appendix 1. Referencing guidelines

Every cited reference must appear in the reference lists and vise versa. The citation in the text should be numbered, for example: 1 or 2. If the citation is more than two references, only the first and the last number are written separated by ‘dash’, for example 1-3 or 3-8. The citation must be superscript and must be placed after the text, for example: Nutritional assessments can be done by several methods which are anthropometric\(^1\), dietetic\(^2\), and biochemistry tests.\(^3\)

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**Editors, compilers as the authors**

**Example:**

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**Example:**
Appendix 2. Guidance for statistical reporting

This guidance is provided to assist authors preparing for their statistical report for publication. This guidance is not to replace the existing statistical guidelines required in a quantitative study. Each component is elaborated below.

**Abstract:**
Total sample and source of data must be clearly stated. Any conclusion made from statistical tests must be accompanied by descriptive statistic reports for example mean, median, mode, standard deviation, interquartile, variation coefficient percentage, 95% confidence interval, regression formula, and so forth.

**Methods:**
For an experimental study, sampling technique and randomisation procedure must be clearly provided. If applicable, analytical precision should also be stated. Statistical hypothesis must be clearly stated. Power of the study should be provided in relation to sample size calculation (it is recommended to use at least 80%). For a case control design, selection procedures for cases and controls must be explained in great depth. When applicable, matching procedure should also be clearly stated. For a diagnostic study or a clinical trial, it is recommended to refer to other reporting structures for example STARD, CONCORT, or STROBE.

**Results:**
Any insignificant precision should be avoided, especially when presenting data using table. A rounded data is easier to read and often decimal numbers are not essential. It is recommended for percentage data to report only one decimal digit (for example 27.9%). If the sample size is relatively small, it is strongly recommended to avoid decimal numbers. Data distribution must be reported in terms of mean, standard deviation, or coefficient variation percentage and must be reported as ‘mean (SD)’ instead of ‘mean ± SD’. If data are not normally distributed (after the Shapiro Wilk Test), median and interquartile range must be used to replace mean and standard deviation. A skewed data could be normalised by applying a logarithm or power transformation. All statistical analysis must use this transformed data which then must be re-transformed for data presentation. All individual values must be presented (if applicable) by deleting all overlapping values. Error bars which reflect standard error for each mean value or interquartile range for each median value can be used to guide data interpretation.

Each statistical test such as chi square test must be reported with the descriptive data, degree of freedom and p-value. Validity of each assumption prior to the test should be examined (for example data should be normally distributed when a t-test is used with the same variance for each data set). When a contingency table is used (2x2 table) for chi square test, continuity correction should be considered and if the expected count is low, the Fisher Exact value should be used. P-values should be clearly provided to show significance of such test. When the statistical test shows a very significant result and p-value from the computer program calculation is 0.0000, p-value should be presented as ’p<0.0005’. Confidence interval must also be clearly stated, particularly for the insignificant results. As a general principle, statistical analysis should be reported as p ≤ 0.05. If another method is used, this must be clearly justified on the method section of statistical analysis.

**Discussion:**
A result of statistical test is not the most critical point of discussion. It is recommended that p-value should not be compared for different data set or for a different statistical analysis. Each association must not be interpreted as causal relationship without a sound supporting evidence.


**Statistical issues:**

*Multiple Comparisons*

This can cause misleading interpretation for significance values. Primary hypothesis must be clearly stated. Every association identified from a retrospective method must be interpreted with cautions. If applicable, one statistical test should be performed to all variables, for example ANOVA test. If this test is not significant, multiple comparisons thus can be applied. If ANOVA test is not applicable (or related statistical tests), multiple comparisons can be applied by referring to Bonferroni test.

*Paired Data*

For paired data, the difference for each pair and variability from these differences is more significant than the values of each individual. It is recommended to use graph for example plotted lines to present paired data.

*Standard regression analysis*

To perform this analysis, independent data are required (repeated measurements are not an independent data). Independent variables are measured without significant errors and all data must be normally distributed without outliers. These can be easily tested using a scatter plot diagram.

*Method comparison*

It is inappropriate to compare methods using regression and correlation coefficient. It is recommended to use the Altman and Bland Difference Plot. If regression and standard scatter plot are considered useful, it can be presented along with the Altman-Bland Plot. It should always be considered that if two methods are supposed to measure the same matter, it is highly possible that both are correlated, therefore correlation value provides limited information for interpretation. When a more complex statistical analysis is performed for example a multivariate analysis including ROC test or other tests, it is recommended that the authors should consult to statisticians.
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