

A FAMILY - PLANNING ACCEPTOR STUDY

FINAL REPORT

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ATENEO DE MANILA
INSTITUTE OF PHILIPPINE CULTURE
Quezon City
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Final report submitted to USAID and the Commission
on Population by the Institute of Philippine
Culture on 15 February 1974

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THE INSTITUTE OF PHILIPPINE CULTURE is a research organization that studies local problems of education and development in the hope of promoting a better understanding of Filipino ways of life.

Its approach is broadly interdisciplinary, for it knows that only the combined efforts of many arts and sciences can hope to reveal some part of the mystery that is man.

It starts with the assumption that there are, in fact, shared and patterned ways of thinking and doing, of valuing and feeling, that are characteristically Filipino.

It operates on the principle that these qualities, with their local and other variations, can be discovered through patient investigation prosecuted in an orderly fashion by members of various social-science and humanities disciplines working in close cooperation with one another.

It is inspired by the conviction that the knowledge derived from this effort will be of transcendental importance for all those who must reckon with the cultural backgrounds of the Filipinos they serve.

Since its founding in 1960, the IPC has undertaken 105 research projects to date, of which this one is the 98th. The following report reflects the basic applicable type of research which the IPC now frequently undertakes. Usually this type of research is requested by a government or private agency interested in evaluating one of its programs or an essential element in its program. The IPC then undertakes the study or survey, analyzes the strengths and weaknesses of the subject to be evaluated, and draws implications from the findings. Through such research, the IPC is able to fulfill its objective of discovering and promoting a better understanding of Filipino lifeways.

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- Figure 16. Rashes
- Figure 17. Sexual relations not as usual

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As originally designed, the purpose of the family-planning acceptor study was threefold: namely, (1) to compare the frequency and kind of side effects reported by users of Norinyl (1 + 50) with the frequency and kind of side effects reported by users of other anovulant pills; (2) to compare the side effects reported by Norinyl users with those reported by users of other family-planning (FP) techniques; and (3) to relate reported side effects to selected social and physical characteristics of respondents.

Plan of the Research

Side-effect interviews and physical observations were to be made on all women coming to six purposively selected FP clinics, regardless of the FP technique they were practicing. To be included were users of Norinyl, other pills, the IUD, condom, and rhythm.

*This study was conducted in accordance with a contract (AID 492-491, "Norinyl Acceptor Study") between the Institute of Philippine Culture and the United States Agency for International Development (Manila) dated July 13, 1973.

Essential to the design of the study was the inclusion of two kinds of FP users other than those who had shifted to Norinyl from some other technique: first, those who had previously practiced no form of conception control (new acceptors, in other words); and second, those who during the study period were using some FP technique other than Norinyl. Only by including these comparative data would we be in a position to judge to what extent Norinyl users differed from the "normal" population of FP eligibles (prior to any FP practice) and from the users of FP techniques other than Norinyl.

For each respondent four interviews were planned. The first was a baseline interview in which background information would be gathered, together with the first of a series of side-effect inquiries. The second and following interviews, generally at one-month intervals, would inquire into the respondent's general state of health since the last interview, and then ask about the specific side effects mentioned in the baseline interview. As at the time of the baseline interview, the respondent's weight and blood pressure would be recorded.

Two forms of interview schedule were pretested on a sample population. One featured open-ended questions regarding the various parts and functions of the body mentioned in a second schedule form (furnished by USAID). The latter schedule called for fixed-alternative replies. Since

pretesting showed no significant differences in the replies of respondents interviewed first by the open-ended approach and (the next day) by the fixed-alternative approach, it was decided to use the more easily administered closed-type schedule, with a minimum of additional open-ended questions.

One change was made in the fixed-alternative replies called for by the schedule. Respondents were allowed to expand on any reply in which they said they had experienced a particular side effect. This could (and did) lead, under some symptoms, to respondents' giving alternative reasons for their discomfort, unrelated to the FP technique they were using. In these cases the reply was not considered a negative side-effect report.

In all, some 4500 interviews were planned, the number of sessions sufficient to accommodate those acceptors who were expected to visit, and return to, the six sample clinics during the three-month field period agreed on (an estimated average monthly caseload of 250 per clinic). The IPC representative working in the clinic was to interview, in other words, every acceptor who came there.

The Research as Conducted

The first two weeks of July 1973 were spent preparing the research design and instruments, as well as training the six research assistants who would be assigned to the sample clinics. These clinics were the following:

FOREWORD

The original suggestion to undertake this study was prompted by the many complaints on side effects reported by users of Norlestrin. With the expected introduction of Norinyl 1 + 50 and 1 + 80 into the Asian market by FY 1974, the U.S. Agency for International Development (Washington, D.C.) initiated a study on Norinyl acceptors which would monitor the incidence of side effects during the first few months of use and give some indication of the acceptability of Norinyl to Filipino women.

The initial research design made use of a simple check-list of possible side effects. However, we thought it more fruitful to design a truly evaluative study which involved analysis of an experimental group of Norinyl users (shifters and new acceptors) and several control groups of users of other family-planning (FP) techniques. By including these comparative data, we would be in a position to judge to what extent Norinyl users differed from the normal population of FP eligibles (prior to any FP practice) and from the users of other FP techniques. The design likewise called for several interviews generally held at one-month intervals, the first of which constituted a baseline interview. The resulting time-series analysis enabled us to predict the trend of side effects over time.

We are confident that the time, money and effort that have been put into this study have resulted not only in reaching more valid conclusions but also in setting some methodological precedents for studies of this nature.

I would like to acknowledge the support and cooperation given us by USAID (Manila) in our desire to conduct a study using this approach and orientation. Special thanks are also due our consultant, Dr. Frank Lynch, who was originally requested to provide only the design guidelines, but whose continued commitment to the project carried his involvement to the actual analysis and report-writing phase. In a situation where highly technical resources are difficult to harness, I appreciate his having given part of his time for the Norinyl project. Last but not least, I would also like to mention the actual participation of the agencies involved, namely, the Department of Health, the Manila City Health Department, and the provincial governments of Bulacan and Laguna. Mention must be made of the whole-hearted cooperation extended to the project by the Municipal Health Officers, the Physicians in charge of the six clinics, and the clinic personnel, a support without which this study would not have been possible.

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1. T. Mendoza Health Center
2158 Hesus, Pandacan, Manila
2. Bagong Buhay Health Center
1806 Herran, Paco, Manila
3. Rural Health Unit
Obando, Bulacan
4. Rural Health Unit I
Sta Maria, Bulacan
5. Family Planning Clinic
Sta Cruz, Laguna
6. Family Planning Clinic (replaced on August 1 by:
Victoria, Laguna Family Planning Clinic,
Sta Rosa, Laguna)

Field operations began July 17, 1973, when six IPC research assistants began interviewing acceptors in the sample clinics. Problems were encountered from the outset: ignorance of clinic personnel regarding the official nature of the study (where they had not been told about the project, they understandably resisted it); lack of equipment essential for the study (blood-pressure instruments, weight scales); and a higher caseload than had been predicted. A fourth difficulty was the high dropout rate of interviewees, especially after the first two clinic visits: of 1950 women in the study, only 738 could be interviewed the full four times, despite our extending the field phase one month beyond the original allowance of three months. Fieldwork was terminated November 22, 1973.

Codes were constructed and the interview data punched into standard 80-column IBM cards--three cards per interviewee.

The first card contains background data on the respondent and, for each interview, information on weight, blood pressure, general state of health, and the number of negative side effects reported. In the second and third cards, reports on these side effects are listed one by one, interview by interview. Those reported on here are the following:

1. Frequent headaches;
2. Increased appetite;
3. Dizziness and nausea;
4. Leg swelling;
5. More than usual tiredness;
6. Skin more oily than usual;
7. Stomach gas pains;
8. More than usual depression;
9. Menstrual cramps;
10. Leg cramps;
11. More than usual impatience;
12. More than usual irritability and nervousness;
13. Discomfort in the breasts;
14. Greater than usual vaginal discharge;
15. Itchiness (pruritis);
16. Rashes; and
17. Sexual relations not as usual.

Eight "acceptor classes" were distinguished. By an acceptor class is meant those women who have accepted, and

are practicing a particular FP technique. Among pill users each class was further distinguished by the brand of pill taken by the women belonging to it. The seven acceptor classes discussed in this study are the following:

(1) Norinyl--new acceptors with no previous FP history; (2) Norinyl shifters--who previously practiced some other technique; (3) Ovral continuers; (4) Demulen continuers; (5) Norlestrin continuers; (6) IUD (intrauterine device) continuers; and (7) Condom continuers. The eighth class, "Others," consisted of those women who during the study period changed from one to another of the first seven classes. However, because of complications inherent in an analysis of their side-effect replies, they are not included in the section dealing with this.

The remainder of this report presents the major findings of the study and selected conclusions.

Findings

Three major sections are included here. The first concerns the clinics and their clients. The second concerns background characteristics of the women who participated in the study, while the third is about reported side effects.

Clinics, caseloads, and dropouts

1. In the period July 17 through November 22, 1973, the recorded total caseload handled by the six sample clinics

was 7835, an overall average of 1959 per month, or 326 per clinic. The range was considerable, however: from 242 per month in Paco to 503 in Sta Rosa, Laguna (Table 1).

2. Clinics differed in the kinds of FP assistance they provided the women who participated in the study. No clinic, for example, had any rhythm acceptors. Again, Norlestrin was for all practical purposes dispensed only at the Paco and Pandacan clinics. Ovral, available at all clinics, was clearly more popular than Norinyl during the study period (used by 27 percent of the sample, as against 17 percent for Norinyl). See Table 2.
3. The total number of interviews completed by IPC personnel in the study period was 5482, or 70 percent of the total caseload. The monthly figures differed greatly: making up the average of 1370 interviews completed each month were clinic totals that ranged from 133 in Sta Maria, Bulacan, to 369 in Sta Cruz, Laguna. The per-clinic monthly average number of completed interviews was 228 (Table 1).
4. In all, 1950 women were interviewed one, two, three, or four times in the course of the study. Of this number, 82 percent began as continuing acceptors; 5 percent, as resuming acceptors; and 13 percent, as new acceptors (Table 3).

Of the original 1950 only 738, or 38 percent, completed all four interviews (Table 4).

5. After one month, the percentage of acceptors had dropped from 100 percent of the original 1950 women to 80 percent; after two months, to 65 percent; after three months, to 43 percent (Table 3).
6. However, not all of the other 20, 35, and 57 percent can be identified with certainty as discontinuers. In fact, at the second, third, and fourth interviews, formally identified discontinuers represent only 2, 6, and 11 percent, respectively, of the original 1950 acceptors. And in only a very small number of cases (14 out of 207, or about 7 percent) is unexpected or unwanted pregnancy given as the reason for discontinuation (Table 3).
7. Most clinic dropouts can be identified only as of "unknown acceptor status." This is so because they did not return to the clinic after one or more interviews and either could not be found at home or could not be interviewed there. From a third to a half of these "question marks" could not be contacted at all; another third reported, directly or indirectly, that returning to the clinic was simply too inconvenient for them; most of the others had moved away (Table 5).

Background characteristics of sample acceptors

8. In terms of median categories, the women interviewed for the study may be described as 25-29 years of age; they have had between five and six years of elementary schooling, and have 3-4 living children (Table 6).
9. Women using Norinyl (especially those for whom it is the first FP technique ever practiced--the so-called "new" Norinyl acceptors) are a relatively young group. Thus, while for all others the percentage of women under 30 years of age ranges from 44 to 55 percent, for the Norinyl shifters the figure is 64 percent, and for the new Norinyl users, 78 percent. IUD users are the oldest group (median age category, 30-34 years). See Table 6a.
10. On the average, 38 percent of the women in the study reported having fewer than three living children. The new Norinyl users stand out, however, in that 61 percent of them make this claim; IUD users represent the opposite tendency, with only 23 percent in this category (Table 6b).

Norinyl users, in other words, are younger than most and have fewer children, while IUD users are older and have more children.
11. Norlestrin users have the highest percentage of high school and college attenders (55 percent), with Norinyl users next in line (44 and 41 percent, respectively, for the new acceptors and shifters). Least well educated in

this sense are the users of Demulen (23 percent), the IUD (26 percent), Ovral (34 percent), and the condom (36 percent). See Table 6c.

12. With few exceptions (7 percent), FP acceptors patronize clinics that are very close to where they live. In the provinces, this means going to a clinic in the same community or municipality; in Manila, it means going to a clinic located in the same district, or at least within the City of Manila (Table 6d).

Reported side effects

Each time she was interviewed, the respondent was asked if she had in the past few weeks (or since her last clinic visit) experienced particular physical symptoms, such as frequent headaches, leg swelling, and so on. In all, 17 different conditions were inquired about each time she was interviewed. Her replies were collected and analyzed in such a way as to get answers to the following questions:

A. Do women using Norinyl (or some other technique) report negative side effects significantly more frequently than others do? Further, is there any trend discernible over time, that is, from interview to interview? Here we used the mean, or average, number of complaints reported by respondents at each interview and compared each acceptor class with every other (the \underline{t} test was employed).

B. Do women using Norinyl (or some other technique) report a particular side effect significantly more frequently than others do? Does the pattern change from interview to interview? Here we tested for the significance of differences among the acceptor classes for each symptom at every interview. The Chi-square test for k independent samples was used, and the results recorded in Figures 01-17, Appendix B.

C. To what extent does "switching" occur? That is, do women belonging to a particular acceptor class tend more than others to report (or not report) a side effect at one interview and give a different answer at the next? Are any trends discernible for the various side effects and acceptor classes? Here we used the so-called McNemar test for the significance of changes. We also developed a new but simple measure, the "Stability Coefficient," to be explained below.

D. Aside from acceptor class, are there other variables significantly associated with side-effect replies? In particular, what relationships can be found with age, blood pressure, number of living children, and educational attainment?

Average number of complaints, by acceptor class. The first measure of differences among acceptor classes is the mean number of negative side effects mentioned at each interview. Of the maximum of 17, how many were reported, on the average, by women belonging to the various acceptor classes?

Are there significant differences present? We give the answers to these questions in a continuation of our numbered findings.

13. Out of a possible 17.00, the overall average number of side-effect complaints is 3.60 at the baseline interview and 3.03 at the fourth and last interview in the series (Table 7).
14. Norinyl shifters have the highest average number of complaints (4.23) at the baseline interview. On the other hand, notably low starting means are recorded by continuing users of Demulen (3.10), the IUD (3.05), the condom (2.42). See Table 7.
15. Significant differences between means number 11 at the baseline interview, four at the second, 12 at the third, and two at the fourth. In 22 out of these 29 differences the significantly higher mean was reported by users of Norinyl (new, 6; shifters, 8) or Norlestrin (8); in 21 cases the lower figure was reported by users of Demulen (11) or the condom (10).

Particular side effects, by acceptor class. Each of the 17 side effects inquired about in this study is the subject of a separate figure in Appendix B. In each figure the percentage of each acceptor class reporting the particular symptom in each of four interviews is shown graphically (for

the percentages themselves, see Table 8). If the difference among the groups was for a particular interview and side effect significant (by the Chi-square test), the level of significance is indicated below the column for that interview (Baseline, Baseline plus 1, Baseline plus 2, or Baseline plus 3). Otherwise the letters "n.s." ("not significant") are inserted in the same space.

The reader is encouraged to look through Figures 01-17 at this point, and to read the brief comments at the bottom of each figure. The major findings may be summarized as follows:

16. Out of a possible 68 times (17 side effects times 4 interviews), significant differences among acceptor classes occur in 35 cases, diminishing from 13 at the first interview, through eight each at the second and third, to only six at the fourth.
17. For seven out of the 17 side effects presented in the figures, Norinyl shifters have the highest percentage of complaints at the baseline interview; similarly, Norlestrin users lead all others in complaints regarding four side effects; new Norinyl acceptors complain more than others only about stomach gas pains.
18. Whereas the percentage of complainers among Norinyl shifters tends to decline after the first interview, corresponding percentages among Norlestrin users often

remain at their relatively high starting levels; this is true in particular of the following side effects: more than usual skin oiliness, more than usual depression, more than usual impatience, and greater than usual vaginal discharge.

Interview-to-interview shifting. An ideal FP technique would conceivably be one which would give rise to no negative side-effect reports. Alternatively, even if there were such complaints when the technique was first used, the frequency of these complaints would consistently drop from interview to interview. At the very least, there would be no significant increase in reported problems over time.

For each acceptor class and side effect we compared what each woman said at one interview with what she said at the next. Looking at a summary of these findings, we were then able to answer a most important question: From interview to interview, do more women report changes for the better than for the worse? If they do not, is the tendency in the other, unfavorable, direction, or is there no clear trend discernible?

Examining three transitions (interviews 1-2, 2-3, and 3-4) for each of 17 side effects and seven FP techniques meant testing for the significance of 357 changes. Twelve percent of these shifts were (by the McNemar test) indeed significant, most of them in the downward, or "improving,"

direction. However, these changes were not randomly distributed among the respondents. The finding is that, compared with others, certain acceptor classes are much more likely to show steady improvement over time.

19. Users of Demulen, Ovral, and Norinyl (in that order) are likely to show positive significant changes from interview to interview.

Thus of eight significant shifts recorded by Demulen users, seven were in the downward, or improving, direction; of 17 such changes among Ovral users, 13 were favorable; of 10 reported by Norinyl users, seven were positive.

20. Among Norlestrin users, three of the six significant changes went one way, three the other. The two such changes among IUD users were also split, while the lone significant shift recorded by condom users was an increase in complaints.
21. Side effects most likely to show significant changes in percentages over time are increased appetite, dizziness and nausea, stomach gas pains, and more than usual irritability and nervousness. Least likely to show such shifts are frequent headaches, leg swelling, skin oiliness, menstrual cramps, leg cramps, breast discomfort, greater vaginal discharge, itchiness, rashes, and sexual relations

not as usual. Somewhere in the middle are more than usual tiredness, depression, and impatience.

Another way of looking at these shifts over time is to ask this question: Of those women who completed all four interviews, what proportion consistently said that a particular side effect was not experienced? This proportion can be taken as a measure of the likelihood of members of an acceptor class not reporting that side effect, and can be used to compare one FP technique with another in this regard. This measure is a "Stability Coefficient," the proportion of consistently no-problem acceptors to the total number of acceptors.

The data presented in Table 9 indicate that side effects differ considerably in the average magnitude of their Stability Coefficients, ranging from 0.93 for leg swelling (no problem for most people) to 0.06 for increased appetite (a problem for most at least now or then). These side effects may be grouped on grounds of the differences or nondifferences found among them when the Difference-of-proportions test is applied. This same test, applied to the mean Stability Coefficients of the seven acceptor classes (Table 9, last section), indicates that all treatments are in this regard alike.

22. Side effects with high Stability Coefficients (0.73-0.79) are stomach gas pains, leg cramps, breast discomfort, and itchiness (pruritis). These bother relatively few people. In the middle-S.C. group (0.60-0.67) are menstrual cramps, more than usual depression, greater than usual vaginal discharge, and sexual relations not as usual. These side effects bother quite a few women. The low-S.C. group (0.47-0.56) includes dizziness and nausea, frequent headaches, more than usual tiredness, and more than usual impatience. Many women are bothered by these symptoms.
23. Acceptor classes do not differ significantly from one another in Stability Coefficient. Among the members of all these classes, about three out of five women report no side-effect problems at any interview (the overall S.C. is 0.59). Demulen, however, has the highest S.C. (0.65) and the condom the lowest (0.47).

Side effects, by other variables. Aside from the FP technique which a woman is practicing, other variables might account for her reporting or not reporting a particular side effect. Ones which we considered were age, blood pressure, number of living children, and education. As in earlier sections, we report on the average number of complaints, as well as on particular side effects.

24. Wherever significant differences occur in the mean number of side-effect complaints reported, it is the younger age groups which record the larger totals. This occurs notably at the baseline interview (where the 15-19-year-olds report larger numbers of complaints than all other groups except the 25-29-year-olds). Significant differences occur only twice at the second and fourth interviews, and not at all at the third.
25. At one or more interviews (generally one), significant differences by age are found for the following side effects: rashes and more than usual tiredness, depression, impatience, and irritability and nervousness. The 15-19-year age group invariably reports the highest percentage of complaints.
26. At one or more interviews, significant differences by blood pressure (low, normal, or high) are found for the following side effects: frequent headaches, increased appetite, dizziness and nausea, leg swelling, more than usual skin oiliness, more than usual depression, more than usual irritability and nervousness, greater than usual vaginal discharge, itchiness (pruritis), rashes, and sexual relations not as usual. Acceptors with high blood pressure record the highest percentage for every one of these side effects except one: increased appetite. Here the women with normal blood pressure lead

the way, while those with low blood pressure have the lowest percentage.

27. Where significant differences occur in the mean number of side-effect complaints reported, those with fewer living children always record the larger totals. But these differences occur only four times in all, twice at the baseline interview and once each at the third and fourth interviews.
28. At the second and third interviews, significant differences by number of living children occur for the side effect of more than usual irritability and nervousness. Those with fewer than three children record larger totals than others.
29. Where significant differences occur in the mean number of side-effects complaints reported, those with higher educational attainment generally record the larger totals. An exception is the group with 5-7 years of schooling: at the baseline and second interviews they have fewer complaints than the women with 1-4 years of formal education.
30. At one or more interviews (generally more than one), significant differences by education occur for the following side effects: increased appetite, leg swelling, more than usually oily skin, stomach gas pains, more than usual depression, menstrual cramps, leg cramps,

more than usual impatience, greater than usual vaginal discharge, and rashes. With only two exceptions, the higher incidence of complaints is associated with higher (high school or college) education. Menstrual cramps and rashes are reported most frequently by women with less than a complete elementary education.

Summary of findings

The findings reported in numbered paragraphs 1-30 may now be summarized briefly. The major headings are four: Norinyl, other FP techniques, possible side-effect determinants other than acceptor class, and the FP-dropout pattern.

Norinyl. On grounds of the side-effect replies of the women who used this pill, and with due recognition of the limitations of the self-report approach, we can state with confidence that Norinyl (1 + 50) appears to be well suited to the Filipinas who took it during the three-cycle study period. One of the clearest evidences of this is the pattern of interview-to-interview changes that was revealed by the study: in seven out of 10 of the significant changes among Norinyl users the direction was downward, that is, side-effect complaints dropped dramatically as women continued to use this pill (paragraph 19). In average number of complaints, it is true, Norinyl users led all others in 14 out of 22 significant cases (paragraph 15), but in most of these instances

(8 out of 14) the users were shifters, and almost all the differences occurred at the baseline interview. New Norinyl acceptors generally show a very moderate level of complaints for all side effects (the one possible exception being stomach gas pains, which is a highly stable, no-problem complaint--see paragraphs 17 and 22), while Norinyl shifters often start high but drop off quickly.

This latter characteristic deserves some elaboration, for it throws further light on the suitability of Norinyl. Shifters are by definition women who at the outset of the study period (at the baseline interview, before taking Norinyl) were in need of a change of FP technique precisely because they were experiencing undesirable reactions to whatever practice they had been following. Hence, it is no wonder that their aggregate complaint level is consistently high at the first interview (paragraph 17). What is remarkable, and to Norinyl's credit, is the way in which the incidence of these shifters' problems goes down after even one Norinyl cycle (paragraphs 18 and 19).

Another consideration in Norinyl's favor is this: though many Norinyl users have the background characteristics associated with high complaint levels, they do not manifest this undesirable tendency to a significant degree. Youth, few children, and higher educational attainment are all positively associated with high average numbers of side-effect

complaints, and with more than ordinarily frequent problems with certain symptoms in particular (paragraphs 24-25, 27-28, and 29-30). Norinyl users, despite their youth, few children, and relatively higher educational attainment (paragraphs 9-11), do not follow the expected pattern. All in all, then, Norinyl gets a good rating from this study.

Other FP techniques. Demulen and Ovral deserve the same kind of approval on grounds of this study. Demulen especially is associated with low average numbers of side-effect complaints (paragraphs 14-15), consistent drops in reported problems from interview to interview (paragraph 19), and the greatest likelihood of no complaints at all while using this pill (paragraph 23). Demulen users, it is true, do not have the background characteristics of high-level complainers (see above, and paragraph 11), but their very low incidence of reported side-effect problems is nonetheless notable. Ovral has only a slightly less impressive record (see paragraph 19 and Figures 01-17).

Norlestrin, on the other hand, gets no such credentials from the study. Whether the evidence be mean number of complaints (paragraph 15), consistent association with high percentages of reported particular problems (paragraphs 17-18), or an ambiguous interview-to-interview pattern (paragraph 20), Norlestrin users do not come off well. Certainly they are not in the same relatively problem-free class as women using Demulen, Ovral, or Norinyl.

Users of the IUD and women whose husbands use the condom seem to fall somewhere between the Demulen-Ovral-Norinyl group, on the one hand, and Norlestrin users, on the other. In general, these two acceptor classes are associated with low average numbers of complaints (paragraphs 14-15) but with debatable interview-to-interview patterns (paragraph 20). However, the small number of IUD and condom users who participated in the last two interviews (42 and 8, and 27 and 8, respectively, for IUD and condom) make it impossible to take a firm position regarding the relative merits of these FP techniques.

Other determinants of side-effect complaints. While it is true that significant differences in the numbers and kinds of reported side-effect problems are most often associated with differences in acceptor class (compare paragraphs 15-16 with paragraphs 24-30), other factors show a similar relationship. High blood pressure, being by definition a pathological symptom, is predictably such a variable, with significant ties to 11 out of the 17 side effects about which we inquired (paragraph 26). Surprisingly, however, higher education, relative youth, and having fewer than three children are also significantly associated with high percentages of particular complaints, as well as with high average numbers of reported side effects (paragraphs 24-25 and 27-30).

The FP-dropout pattern. One of the more interesting and illuminating by-products of this study is an increased understanding of what happens to FP acceptors over time. We are dealing here with a particular population and sample, of course, but we do learn something about the dropout pattern that may have general applicability.

Consider the fact that of the women who were acceptors at the baseline interview, only 43 percent were still acceptors after three months had passed (paragraph 5). More than half the starting acceptors, it seems, were no longer such after just 90 days. Or were they? For of the non-acceptors at the second, third, and fourth interviews only a small percentage were positively identified as discontinuers (paragraph 6). Most were simply of "unknown acceptor status"--leaving open the possibility that (a) they might still be practicing some FP technique, or (b) they might quite easily resume that practice if some impediment (such as the inconvenience of resupply) could be removed (paragraph 7). Nonacceptors, in other words, do not necessarily discontinue; or, if they do, they do not necessarily do so irrevocably. It is likely that in many cases, perhaps most, they simply disappear. Hence the dropout pattern is twofold: a swift fall-off of known acceptors, but few proven discontinuers.

Conclusions

What implications do these findings have for the family-planning program of the Commission on Population? What suggestions are latent in the information generated by the study?

The first would seem to be that Norinyl, Demulen, and Ovral are (from the viewpoint of side-effect complaints) acceptable anovulant pills for the population under study. Norlestrin, on the other hand, is questionable in this regard.

The second is that when certain kinds of women--the young, those with few children, or a higher educational attainment--express side-effect complaints, this should be seen as following a general statistical tendency and weighed appropriately. On the other hand, when older women, with more children or less education, report side-effect problems, their action should be viewed as contrary to the overall tendency of their kind and for that reason deserving of special attention. In no case, of course, need any individual conform to the tendency of his class.

Third, it would seem to follow from our findings on the FP-dropout pattern that family-planning agencies might consider renewed efforts to seek out and return to active acceptors status those large numbers of women who were

formally such but simply dropped, not necessarily out, but out of sight. Better still, agencies might consider what means could be taken to prevent such women from losing contact with the program and their source of supply. Since most women patronize nearby FP clinics (paragraph 12) and are generally susceptible to peer-group influence, the idea of local resupply depots and of motivation-reinforcing "satisfied users' clubs" may well be appropriate in this context.

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Appendix A
TABLES TO ACCOMPANY FINAL REPORT

Table 1. Caseload and number of FP-acceptor study interviews conducted in six clinics during the study period (July 17 to November 22, 1973)

Clinic location	Caseload		Interviews		Percentage of caseload interviewed
	Total	Ave./mo. ^a	Total	Ave./mo. ^a	
Paco	969	242	630	158	65%
Pandacan	1555	389	1223	306	79
Obando	1114	279	808	202	73
Sta Maria	1083	271	533	133	49
Sta Cruz	2012	503	1475	369	73
Sta Rosa	1102	276	813	203	74
Total	7835	1959	5482	1370	70%

^aStudy period (July 17 to November 22, 1973) is considered four months.

Table 2. FP-acceptor study respondents classified by FP technique accepted, crossclassified by clinic (July 17 to November 22, 1973)

FP technique accepted	Paco		Pandacan		Obando		Sta Maria		Sta Cruz		Sta Rosa		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Norinyl (new)	25	10%	73	19%	28	10%	20	7%	19	4%	11	4%	176	9%
Norinyl (shifter)	17	7	35	9	20	7	12	4	37	7	41	15	162	8
Ovral	42	17	85	22	101	37	78	29	138	28	88	32	532	27
Demulen	0	0	34	9	26	9	2	1	87	17	34	12	183	9
NoFlestrin	30	13	51	13	0	0	0	0	1	a	0	0	82	4
IUD	8	3	5	1	17	6	2	1	39	8	7	3	78	4
Condom	0	0	8	2	12	4	0	0	28	6	0	0	48	2
Others ^b	119	49	97	25	71	26	157	58	151	30	94	34	689	36
Total	241	99%	388	100%	275	99%	271	100%	500	100%	275	100%	1950	99%

^aLess than 1 percent. ^bAlmost all the acceptors included in this large "Others" category are women who shifted from one technique to another during the study period.

Chi-square, 514.52

df, 35

p < 0.01

Table 3. FP-acceptor study respondents by acceptor status at each of four interviews (July 17 to November 22, 1973)

Acceptor status	Baseline		B + 1		B + 2		B + 3	
	N	%	N	%	N	%	N	%
STATUS KNOWN	<u>1950</u>	<u>100%</u>	<u>1605</u>	<u>82%</u>	<u>1386</u>	<u>71%</u>	<u>1044</u>	<u>54%</u>
Continuing	1604	82	1562	80	1261	65	837	43
Resuming	92	5	0	0	0	0	0	0
New	254	13	0	0	0	0	0	0
Discontinuing/ discontinued	0	0	43 ^a	2	125 ^b	6	207 ^c	11
STATUS UNKNOWN	<u>0</u>	<u>0</u>	<u>345</u>	<u>18</u>	<u>564</u>	<u>29</u>	<u>906</u>	<u>46</u>
Came to clinic	0	0	26	1	55	3	62	3
Did not return to clinic	0	0	319	17	509	26	844	43
Total	1950	100%	1950	100%	1950	100%	1950	100%

^aIncludes seven cases of unexpected pregnancy. ^bIncludes 10 cases of unexpected pregnancy (only three in addition to the seven reported in note a). ^cIncludes 14 cases of unexpected pregnancy (four in addition to the 10 in note b). The most common reason for discontinuation, given in about 60 percent of cases, is the fear of harmful side effects.

Table 4. FP-acceptor study respondents interviewed during study period, classified by FP technique accepted, crossclassified by number of interviews completed (July 17 to November 22, 1973)

FP technique accepted	Number of interviews completed				Total
	1	2	3	4	
Norinyl (new)	0	48	68	60	176
Norinyl (shifter)	0	24	32	106	162
Ovral	0	120	138	274	532
Demulen	0	23	45	115	183
Norlestrin	0	9	14	59	82
IUD	0	36	33	9	78
Condom	0	20	20	8	48
Other	374	78	130	107	689
Total acceptors	374	350	480	730	1950
Total interviews	374	716	1440	2952	5482

Table 5. FP-acceptor study respondents who did not return to clinic after first, second, or third interview and whose acceptor status could not be discovered, classified by reason for nonreturn to clinic and by interview (July 17 to November 22, 1973)

Reason for non- return to clinic	B + 1		B + 2		B + 3	
	N	%	N	%	N	%
No reason ascertained	<u>203</u>	<u>64%</u>	<u>295</u>	<u>58%</u>	<u>548</u>	<u>65%</u>
Acceptor's address unknown	37	12	96	19	132	16
Acceptor moved away	17	5	43	8	48	6
Acceptor not followed up	149	47	156	31	368	43
Trip to clinic too inconvenient	<u>102</u>	<u>32</u>	<u>190</u>	<u>39</u>	<u>260</u>	<u>31</u>
Other reasons	<u>14</u>	<u>4</u>	<u>16</u>	<u>3</u>	<u>36</u>	<u>4</u>
Total ^a	319	100%	509	100%	844	100%

^aThe acceptors described in this table are those individuals referred to in the row at the bottom of Table 3 as "Status unknown: Did not return to clinic."

Table 6. FP-acceptor study respondents classified by age, number of living children, educational attainment, residence, crossclassified by FP technique accepted (July 17 to November 22, 1973)

Selected characteristic	Norinyl (new)	Norinyl (shifter)	Ovral	Demulen	Norlestrin	IUD	Condom	Other	Total
a. Age (in years)									
15-19	7%	6%	4%	2%	4%	1%	6%	5%	5%
20-24	41	22	26	22	23	15	17	24	25
25-29	30	36	24	29	29	28	28	26	27
30-34	15	23	23	24	23	22	21	20	21
35-39	6	10	16	14	13	26	13	15	14
40-49	1	2	6	10	7	8	15	10	7
Total N	176	162	531	183	82	78	47	686	1945
No data	0	0	1	0	0	0	1	3	5
	Chi-square, 89.08		df, 35	t ratio, 5.04		p < 0.01			
b. Number of living children									
0	1%	0%	0%	0%	0%	0%	0%	a%	a%
1-2	60	37	36	33	38	23	39	37	38
3-4	24	37	34	31	33	31	24	31	32
5-6	8	20	18	23	15	30	24	19	18
7+	7	6	12	13	14	16	13	13	12
Total N	176	161	529	181	81	77	46	604	1935
No data	0	1	3	2	1	1	2	5	15
	Chi-square, 67.32		df, 21	p < 0.001					

Table 6 (cont'd) - page 2

Selected characteristic	Norinyl (new)	Norinyl (shifter)	Ovral	Demulen	Norlestrin	IUD	Condom	Other	Total
c. Educational attainment									
None	1%	1%	2%	2%	0%	3%	2%	2%	1%
Grades 1-4	18	17	20	24	10	19	29	24	21
Grades 5-7	37	41	44	51	35	53	33	35	40
High school	29	29	27	17	43	10	19	29	27
College	15	12	7	6	12	8	17	11	10
Total N	174	160	532	183	81	73	46	677	1933
No data	2	2	0	0	1	0	0	12	17
	Chi-square, 66.10		df, 28		p < 0.001				
d. Residence									
Same poblacion or district as clinic	61%	41%	32%	24%	98%	23%	31%	42%	41%
Same municipality or within city of Manila	35	51	60	67	1	65	65	50	52
Other municipality or within Metro Manila	5	0	0	9	1	10	4	7	7
Elsewhere	0	0	a	0	0	1	0	a	a
Total N	176	162	531	183	81	78	48	686	1945
No data	0	0	1	0	1	0	0	3	5
	Chi-square, 189.76		df, 14		p < 0.001				

^aLess than 1 percent

Table 7. Mean number of side-effect complaints (maximum = 17) of FP-acceptor study respondents, classified by acceptor class, crossclassified by interview (July 17 to November 22, 1973)

Acceptor class	Interview			
	Baseline	2	3	4
a. <u>Norinyl</u> (new)				
Mean	3.43	3.44	3.00	3.40
SD	2.20	2.45	2.40	2.02
N	176	176	129	60
No data	0	0	47	116
b. <u>Norinyl</u> (shifter)				
Mean	4.23	3.39	3.33	3.19
SD	2.73	2.23	2.22	2.41
N	162	162	130	106
No data	0	0	24	56
c. <u>Ovral</u>				
Mean	3.45	3.10	3.23	2.05
SD	2.27	2.34	2.61	2.20
N	532	532	410	274
No data	0	0	122	258
d. <u>Demulen</u>				
Mean	3.10	2.78	2.72	2.78
SD	2.21	2.30	2.54	2.01
N	103	103	160	114
No data	0	0	23	69
e. <u>Norlestrin</u>				
Mean	3.02	3.52	3.36	3.68
SD	2.35	2.33	2.49	2.53
N	62	62	73	59
No data	0	0	9	23

Table 7 (cont'd) - page 2

Acceptor class	Interview			
	Baseline	2	3	4
f. <u>IUD</u>				
Mean	3.05	3.56	3.69	2.00
SD	2.31	2.43	2.71	1.60
N	78	78	42	8
No data	0	0	36	70
g. <u>Condom</u>				
Mean	2.42	2.05	2.07	4.75
SD	2.07	2.39	1.80	2.87
N	48	43	27	8
No data	0	0	21	40
h. <u>Other</u>				
Mean	3.06	3.39	3.50	3.00
SD	2.57	2.45	2.52	2.63
N	608	316	237	107
No data	1	373	452	582
i. <u>Total</u>				
Mean	3.60	3.23	3.32	3.03
SD	2.44	2.37	2.52	2.40
N	1949	1577	1216	786
No data	1	373	734	1214

Norlestrin				IUD				Condom				Other				Total			
B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
15%	9%	15%	17%	23%	21%	26%	33%	19%	15%	21%	75%	25%	23%	25%	21%	24%	19%	21%	21%
85	91	85	83	77	79	74	67	81	85	79	25	75	77	75	79	76	81	79	79
82	81	73	59	78	78	42	9	48	48	28	8	687	314	237	107	1947	1574	1217	730
0	1	9	23	0	0	36	69	0	0	20	40	2	375	452	582	3	376	733	1212
78	77	82	78	46	47	62	62	30	50	48	38	68	64	31	66	69	66	67	73
22	23	18	22	54	53	38	38	62	50	52	62	32	36	69	34	31	34	33	27
82	82	73	59	78	78	42	9	48	48	27	8	688	315	236	107	1946	1575	1215	735
0	0	9	23	0	0	36	70	0	0	21	40	1	374	453	582	4	375	735	1215
20	13	26	10	29	33	14	0	27	17	22	50	28	26	24	14	25	23	20	14
80	87	74	90	71	67	86	100	73	83	78	50	72	74	76	86	75	77	80	86
81	82	73	59	78	78	42	9	48	48	27	8	688	314	237	107	1947	1574	1215	738
1	0	9	23	0	0	36	69	0	0	21	40	1	375	452	582	3	376	735	1212
1	2	0	0	1	1	2	0	0	0	4	0	1	1	1	3	1	1	1	1
99	98	100	100	99	99	98	100	100	100	96	100	99	99	99	97	99	99	99	99
82	82	72	58	78	78	42	9	47	48	27	8	687	313	237	107	1946	1571	1214	737
0	0	10	24	0	0	36	69	1	0	21	40	2	376	452	582	4	379	736	1213

Table 8. FP-acceptor study respondents classified by side effect and reply regarding it, crossclassified by acceptor class and interview (July 17 to November 22, 1973)

Side effect	Norinyl (new)				Norinyl (shifter)				Ovral				Demulen			
	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
1. Frequent headaches																
Yes	19%	18%	21%	20%	35%	22%	22%	25%	22%	19%	19%	18%	25%	19%	18%	23%
No	81	82	79	80	65	78	78	75	78	81	81	82	75	81	82	77
Total N	176	176	128	60	162	162	138	106	531	532	411	274	183	183	160	115
No data/NAP	0	0	48	116	0	0	24	56	1	0	121	258	0	0	23	68
2. Increased appetite																
Yes	70	69	77	72	62	69	68	73	75	72	66	74	70	58	60	78
No	30	31	23	28	38	31	32	27	25	28	34	26	30	42	40	22
Total N	176	175	129	60	162	162	138	100	529	532	410	274	183	183	160	114
No data/NAP	0	1	47	116	0	0	24	57	3	0	122	258	0	0	23	69
3. Dizziness and nausea																
Yes	18	26	16	20	31	27	25	21	21	21	18	12	25	17	13	10
No	82	74	84	80	69	73	75	79	79	79	82	88	75	83	87	90
Total N	176	176	128	60	162	162	138	106	531	531	410	274	183	183	160	115
No data/NAP	0	0	48	116	0	0	24	56	1	1	122	258	0	0	23	68
4. Leg swelling																
Yes	1	2	2	2	1	2	0	1	1	a	1	0	2	1	1	2
No	99	98	98	98	99	98	100	99	99	99	99	100	98	99	99	98
Total N	176	175	128	60	162	162	138	106	531	531	410	274	183	182	160	115
No data/NAP	0	1	48	116	0	0	24	56	1	1	122	258	0	1	23	68

Norlestrin				IUD				Condom				Other				Total			
B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
26%	30%	24%	24%	31%	41%	43%	11%	30%	33%	19%	25%	34%	20%	27%	21%	31%	26%	27%	25%
74	70	76	76	69	59	57	89	70	67	81	75	66	72	73	79	69	74	73	75
82	82	72	58	78	79	42	9	47	48	27	3	686	312	237	107	1945	1572	1212	737
0	0	10	24	0	0	36	69	1	0	21	40	3	377	452	582	5	378	738	1213
38	38	49	42	8	12	7	0	8	15	11	30	17	20	21	18	17	17	20	21
62	62	51	58	92	88	93	100	92	85	89	62	83	80	79	82	83	83	80	79
82	82	73	59	78	77	42	8	48	48	27	8	687	312	236	107	1945	1571	1215	735
0	0	9	23	0	1	36	70	0	0	21	40	2	377	453	582	5	379	735	1215
11	4	14	7	9	14	19	11	12	12	11	25	14	13	13	10	10	11	12	9
89	96	36	93	91	86	81	89	88	88	89	75	86	87	87	90	90	89	88	91
82	82	72	59	78	78	42	9	48	48	27	8	687	313	236	107	1948	1571	1212	738
0	0	10	23	0	0	36	69	0	0	21	40	2	376	453	532	2	379	738	1212
30	26	27	32	13	10	7	11	15	10	4	12	19	16	15	14	18	16	18	16
70	74	73	68	87	90	93	89	85	90	96	88	81	84	85	86	82	84	82	84
82	82	73	59	78	78	42	9	48	48	27	8	688	314	237	107	1946	1573	1214	738
0	0	9	23	0	0	36	69	0	0	21	40	1	375	452	582	4	377	736	1212

Table 8 (cont'd) - page 2

Side effect	Norinyl (new)				Norinyl (shifter)				Ovral				Demulen			
	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
5. <u>More than usual tiredness</u>																
Yes	26%	22%	27%	32%	35%	23%	26%	31%	31%	25%	29%	23%	30%	21%	22%	26%
No	74	78	73	68	65	77	74	69	69	75	71	77	70	79	78	74
Total N	176	176	126	60	162	162	138	106	531	531	410	274	183	183	160	115
No data/NAP	0	0	50	116	0	0	24	56	1	1	122	258	0	0	23	68
6. <u>Skin more oily than usual</u>																
Yes	21	22	23	23	17	15	16	18	15	16	19	21	12	10	14	15
No	79	78	77	77	83	85	84	82	85	84	81	79	88	90	86	85
Total N	176	176	129	60	161	162	138	105	530	531	410	274	183	183	160	114
No data/NAP	0	0	47	116	1	0	24	57	2	1	122	258	0	0	23	69
7. <u>Stomach gas pains</u>																
Yes	14	18	12	18	12	11	11	8	6	8	11	7	5	8	12	4
No	86	82	88	82	88	89	89	92	94	92	89	93	95	92	88	96
Total N	176	175	128	60	162	162	138	106	532	530	409	274	183	183	160	115
No data/NAP	0	1	48	116	0	0	24	56	0	2	123	258	0	0	23	68
8. <u>More than usual depression</u>																
Yes	19	20	22	20	23	17	20	17	17	14	18	13	14	14	18	13
No	81	80	78	80	77	83	80	83	83	86	82	87	86	86	82	87
Total N	176	176	128	60	162	162	138	106	529	530	409	274	183	183	160	115
No data/NAP	0	0	48	116	0	0	24	56	3	2	123	258	0	0	23	68

Norlestrin				IUD				Condom				Other				Total			
B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
9%	2%	3%	2%	21%	20%	21%	0%	4%	15%	7%	25%	26%	17%	22%	14%	20%	15%	17%	13%
91	98	97	93	79	80	79	100	96	85	93	75	74	83	73	86	90	85	83	87
01	02	73	59	76	75	42	9	48	48	27	8	677	303	236	105	1909	1541	1205	725
1	0	9	23	2	3	36	69	0	0	21	40	12	386	453	584	41	409	745	1225
9	4	7	10	4	9	7	11	2	10	4	12	13	10	11	11	11	7	9	8
91	96	93	90	96	91	93	89	98	90	96	83	87	90	89	89	89	93	91	92
02	02	73	59	78	78	42	9	48	48	27	8	605	314	237	107	1941	1573	1214	738
0	0	9	23	0	0	36	69	0	0	21	40	4	375	452	582	9	377	736	1212
45	41	33	29	18	22	19	11	15	15	11	38	22	17	22	17	24	20	22	19
55	59	67	71	82	78	81	89	35	85	89	62	78	83	78	83	76	80	78	81
02	01	73	59	78	78	42	9	48	48	27	8	606	314	237	107	1945	1573	1215	738
0	1	9	23	0	0	36	69	0	0	21	40	3	375	452	582	5	377	735	1212
44	43	34	39	59	53	55	22	42	38	26	75	51	43	38	30	52	45	42	33
56	57	66	61	41	47	45	78	58	62	74	25	49	57	62	70	48	55	58	67
02	02	73	59	78	78	42	9	48	48	27	8	687	314	237	107	1948	1573	1215	738
0	0	9	23	0	0	36	69	0	0	21	40	2	375	452	582	2	377	735	1212

Table 8 (cont'd) - page 3

Side effect	Norinyl (new)				Norinyl (shifter)				Ovral				Demulen			
	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
9. Menstrual cramps																
Yes	13%	17%	14%	12%	25%	18%	19%	17%	18%	16%	19%	14%	14%	13%	14%	12%
No	87	83	86	88	75	82	81	83	82	84	81	86	86	87	86	88
Total N	167	175	128	59	155	154	134	103	523	525	405	270	182	179	160	112
No data/NAP	9	1	48	117	7	8	28	59	9	7	127	262	1	4	23	71
10. Leg cramps																
Yes	8	6	11	12	13	11	9	4	12	6	9	9	7	5	7	6
No	92	94	89	88	87	89	91	96	88	94	91	91	93	95	93	94
Total N	176	176	128	60	162	161	138	106	527	531	409	274	183	183	160	115
No data/NAP	0	0	48	116	0	1	24	56	5	1	123	258	0	0	23	68
11. More than usual impatience																
Yes	27	23	28	25	29	20	20	23	23	20	23	15	17	14	16	17
No	73	77	72	75	71	80	80	77	77	80	77	85	83	86	84	83
Total N	176	176	128	60	162	162	138	106	530	531	410	274	183	183	160	115
No data/NAP	0	0	48	116	0	0	24	56	2	1	122	258	0	0	23	68
12. More than usual irritability and nervousness																
Yes	43	42	50	35	62	48	50	36	55	44	41	33	54	47	39	29
No	57	58	50	65	38	52	50	64	45	56	59	67	46	53	61	71
Total N	176	176	128	60	162	162	138	106	532	531	410	274	183	182	160	115
No data/NAP	0	0	48	116	0	0	24	56	0	1	122	258	0	1	23	68

Norlestrin				IUD				Condom				Other				Total			
B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
9%	7%	7%	14%	19%	13%	17%	11%	8%	8%	0%	25%	12%	10%	13%	7%	10%	9%	8%	8%
91	93	93	86	81	87	83	89	92	92	100	75	83	90	87	93	90	91	92	92
02	02	73	59	78	78	42	9	48	48	27	8	607	313	237	107	1947	1572	1215	738
0	0	9	23	0	0	36	69	0	0	21	40	2	376	452	582	3	370	735	1212
23	24	38	36	13	15	19	0	8	12	4	25	20	15	16	22	10	16	19	21
77	76	62	64	87	85	81	100	92	88	96	75	80	85	84	78	82	84	91	79
81	82	72	59	78	78	42	9	48	48	27	8	606	312	237	107	1945	1571	1214	738
1	0	10	23	0	0	36	69	0	0	21	40	3	377	452	582	5	379	736	1212
6	7	10	8	13	19	24	22	19	19	15	25	15	13	13	6	13	12	11	9
94	93	90	92	87	81	76	78	81	81	85	75	85	87	87	94	87	88	89	91
82	82	73	59	78	78	42	9	48	48	27	8	607	313	237	107	1948	1571	1214	738
0	0	9	23	0	0	36	69	0	0	21	40	2	376	452	582	2	379	736	1212
2	0	0	2	9	5	10	0	4	8	4	0	7	8	4	3	6	5	4	3
98	100	100	98	91	95	90	100	96	92	96	100	93	92	96	97	94	95	96	97
82	82	73	59	78	77	40	9	48	48	27	8	608	313	237	107	1947	1570	1213	738
0	0	9	23	0	1	38	69	0	0	21	40	1	376	452	582	3	380	737	1212

Table 8 (cont'd) - page 4

Side effect	Norinyl (new)				Norinyl (shifter)				Ovral				Demulen			
	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
13. Discomfort in the breasts																
Yes	5%	11%	11%	12%	13%	7%	7%	8%	8%	7%	5%	7%	7%	8%	6%	7%
No	95	89	89	88	87	93	93	92	92	93	95	93	93	92	94	93
Total N	176	176	128	60	162	162	138	106	531	530	410	274	183	183	160	115
No data/NAP	0	0	48	116	0	0	24	56	1	2	122	258	0	0	23	69
14. Greater than usual vaginal discharge																
Yes	24	21	26	18	25	17	14	20	13	14	19	20	12	16	16	18
No	76	79	74	82	75	83	86	80	86	86	81	80	88	84	84	82
Total N	176	175	128	60	162	162	138	106	531	531	410	274	183	183	160	115
No data/NAP	0	1	48	116	0	0	24	56	1	1	122	258	0	0	23	68
15. Itchiness (pruritis)																
Yes	12	9	7	15	14	12	12	11	12	13	11	8	8	9	9	9
No	88	91	93	85	86	88	88	89	88	87	89	92	92	91	91	91
Total N	176	176	128	60	162	162	138	106	532	529	410	274	183	183	159	115
No data/NAP	0	0	48	116	0	0	24	56	0	3	122	258	0	0	24	68
16. Rashes																
Yes	5	3	4	2	6	4	6	4	5	5	5	3	2	4	3	5
No	95	97	96	98	94	96	94	96	95	95	95	97	98	96	97	95
Total N	175	176	128	60	162	162	138	106	531	530	410	274	183	182	160	115
No data/NAP	1	0	48	116	0	0	24	56	1	2	122	258	0	1	23	68

Norlestrin				IUD				Condom				Other				Total			
B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
24%	17%	16%	17%	10%	15%	5%	0%	10%	8%	0%	0%	10%	17%	17%	18%	16%	14%	12%	11%
76	83	84	83	90	85	95	100	90	92	100	100	82	83	83	82	84	86	88	89
82	82	73	58	77	79	42	9	48	48	27	8	684	311	235	107	1938	1568	1212	732
0	0	9	24	1	0	36	70	0	0	21	40	5	378	454	582	12	382	738	1218

Table 8 (cont'd) - page 5

Side effect	Norinyl (new)				Norinyl (shifter)				Ovral				Demulen			
	B	2	3	4	B	2	3	4	B	2	3	4	B	2	3	4
17. Sexual relations not as usual																
Yes	19%	18%	19%	17%	19%	17%	12%	13%	14%	11%	11%	5%	11%	10%	7%	9%
No	81	82	81	83	81	83	88	88	86	89	89	95	89	90	93	91
Total N	175	176	129	60	160	161	136	104	529	529	410	274	183	183	160	113
No data/NAP	1	0	47	116	2	1	26	56	3	3	122	256	0	0	23	70

^aLess than 1 percent.

Table 9. Stability coefficient of replies over four interviews, by side effect and acceptor class (July 17 to November 22, 1973)

Side effect and acceptor class	Stability coefficient ^a
<u>1. Frequent headaches</u>	
Norinyl (new)	0.52
Norinyl (shifter)	0.29
Ovral	0.52
Demulen	0.49
Norlestrin	0.60
IUD	0.22
Condom	0.25
<hr/>	
Total (N=625)	0.48
<u>2. Increased appetite</u>	
Norinyl (new)	0.08
Norinyl (shifter)	0.04
Ovral	0.07
Demulen	0.06
Norlestrin	0.07
IUD	0.00
Condom	0.12
<hr/>	
Total (N=629)	0.06
<u>3. Dizziness and nausea</u>	
Norinyl (new)	0.52
Norinyl (shifter)	0.39
Ovral	0.50
Demulen	0.50
Norlestrin	0.61
IUD	0.88
Condom	0.25
<hr/>	
Total (N=628)	0.51

^aThe Stability Coefficient is the proportion of respondents who, interviewed four times, gave consistently negative answers to a particular side-effect question.

Table 9 (cont'd) - page 2

Side effect and acceptor class	Stability coefficient
<u>4. Leg swelling</u>	
Norinyl (new)	0.49
Norinyl (shifter)	0.95
Ovral	0.99
Demulen	0.96
Norlestrin	0.96
IUD	1.00
Condom	0.88
<hr/>	
Total (N=627)	0.93
<u>5. More than usual tiredness</u>	
Norinyl (new)	0.95
Norinyl (shifter)	0.40
Ovral	0.42
Demulen	0.46
Norlestrin	0.43
IUD	0.50
Condom	0.40
<hr/>	
Total (N=630)	0.47
<u>6. Skin more oily than usual</u>	
Norinyl (new)	0.51
Norinyl (shifter)	0.62
Ovral	0.20
Demulen	0.69
Norlestrin	0.27
IUD	0.62
Condom	0.50
<hr/>	
Total (N=629)	0.40

Table 9 (cont'd) - page 3

Side effect and acceptor class	Stability coefficient
7. <u>Stomach gas pains</u>	
Norinyl (new)	0.57
Norinyl (shifter)	0.70
Ovral	0.78
Demulen	0.82
Norlestrin	0.76
IUD	0.75
Condom	0.50
<hr/>	
Total (N=623)	0.75
8. <u>More than usual depression</u>	
Norinyl (new)	0.54
Norinyl (shifter)	0.58
Ovral	0.65
Demulen	0.68
Norlestrin	0.45
IUD	0.67
Condom	0.57
<hr/>	
Total (N=626)	0.61
9. <u>Menstrual cramps</u>	
Norinyl (new)	0.55
Norinyl (shifter)	0.54
Ovral	0.61
Demulen	0.67
Norlestrin	0.89
IUD	0.75
Condom	0.57
<hr/>	
Total (N=624)	0.63

Table 9 (cont'd) - page 4

Side effect and acceptor class	Stability coefficient
10. <u>Leg cramps</u>	
Norinyl (new)	0.74
Norinyl (shifter)	0.75
Ovral	0.73
Demulen	0.81
Norlestrin	0.79
IUD	0.75
Condom	0.71
<hr/>	
Total (N=623)	0.75
11. <u>More than usual impatience</u>	
Norinyl (new)	0.47
Norinyl (shifter)	0.52
Ovral	0.57
Demulen	0.71
Norlestrin	0.40
IUD	0.75
Condom	0.29
<hr/>	
Total (N=624)	0.56
12. <u>More than usual irritability and nervousness</u>	
Norinyl (new)	0.25
Norinyl (shifter)	0.20
Ovral	0.29
Demulen	0.28
Norlestrin	0.40
IUD	0.22
Condom	0.00
<hr/>	
Total (N=627)	0.27

Table 9 (cont'd) - page 5

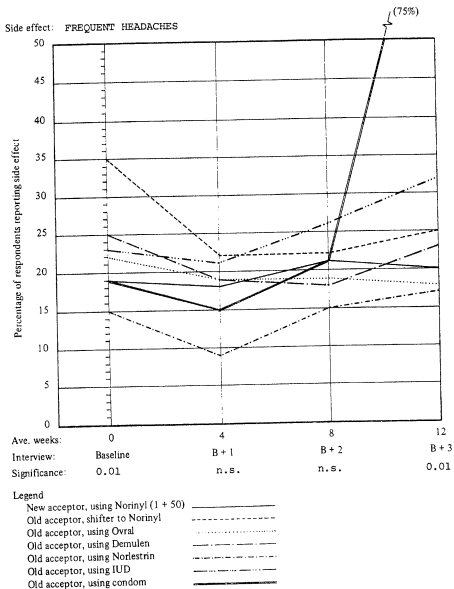
Side effect and acceptor class	Stability coefficient
13. <u>Discomfort in the breasts</u>	
Norinyl (new)	0.68
Norinyl (shifter)	0.79
Ovral	0.03
Demulen	0.03
Norlestrin	0.69
IUD	0.44
Condom	0.62
<hr/>	
Total (N=630)	0.79
14. <u>Greater than usual vaginal discharge</u>	
Norinyl (new)	0.54
Norinyl (shifter)	0.54
Ovral	0.62
Demulen	0.67
Norlestrin	0.44
IUD	0.89
Condom	0.62
<hr/>	
Total (N=631)	0.60
15. <u>Itchiness (pruritis)</u>	
Norinyl (new)	0.69
Norinyl (shifter)	0.71
Ovral	0.73
Demulen	0.76
Norlestrin	0.78
IUD	0.67
Condom	0.50
<hr/>	
Total (N=630)	0.73

Table 9 (cont'd) - page 6

Side effect and acceptor class	Stability coefficient
16. <u>Rashes</u>	
Norinyl (new)	0.92
Norinyl (shifter)	0.84
Ovral	0.89
Demulen	0.86
Norlestrin	0.98
IUD	0.78
Condom	0.75
<hr/>	
Total (N=631)	0.89
17. <u>Sexual relations not as usual</u>	
Norinyl (new)	0.63
Norinyl (shifter)	0.64
Ovral	0.68
Demulen	0.71
Norlestrin	0.68
IUD	0.75
Condom	0.50
<hr/>	
Total (N=630)	0.67
18. <u>Total</u>	
Norinyl (new)	0.57
Norinyl (shifter)	0.56
Ovral	0.59
Demulen	0.65
Norlestrin	0.56
IUD	0.63
Condom	0.47
<hr/>	
Total (N=631)	0.59

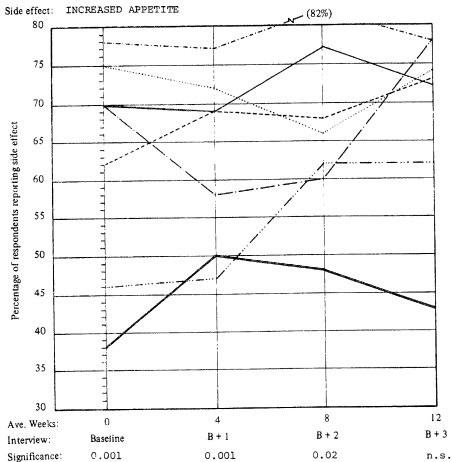
Appendix B
FIGURES TO ACCOMPANY FINAL REPORT

Figure 01 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study



Comment : Norinyl shifters, prior to their first Norinyl cycle, report frequent headaches much more often (35 percent) than others do. New Norinyl acceptors, who have practiced no FP technique at all as of the baseline interview, register 19 percent, which may be the "normal" rate for this complaint for non-FP users. Norlestrin users are in this sense below normal (starting percentage, 15). By the fourth interview all pill users are in the 17-25-percent range.

Figure 02 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study



Legend

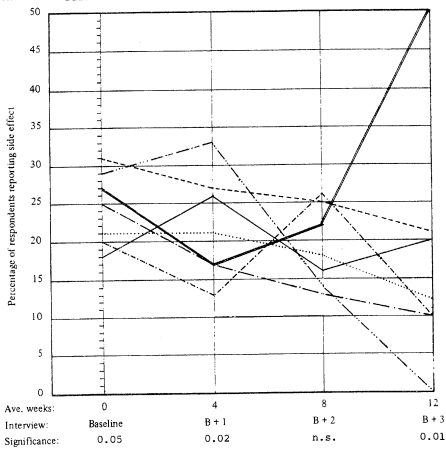
- New acceptor, using Norinyl (1 + 50) —————
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral
- Old acceptor, using Demulen ————
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD ————
- Old acceptor, using condom —————

Comment

Pill users tend to report increased appetite with significantly greater frequency than others do. Differences are not significant by the time of the fourth interview, however.

Figure 03 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: DIZZINESS AND NAUSEA



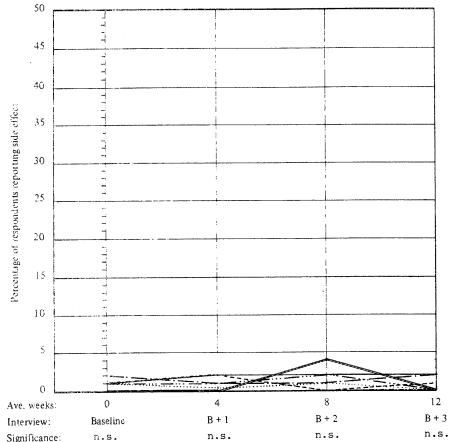
- Legend
- New acceptor, using Norinyl (1 + 50)
 - - - Old acceptor, shifter to Norinyl
 - Old acceptor, using Ovral
 - Old acceptor, using Demulen
 - Old acceptor, using Norlestrin
 - Old acceptor, using IUD
 - Old acceptor, using condom

Comment

Norinyl shifters report dizziness and nausea more frequently than most others, but they follow the general trend of a steady decrease in complaints over time. Condom users (N=8) are alone in showing a high ending percentage (50 percent).

Figure 04 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: LEG SWELLING



Legend

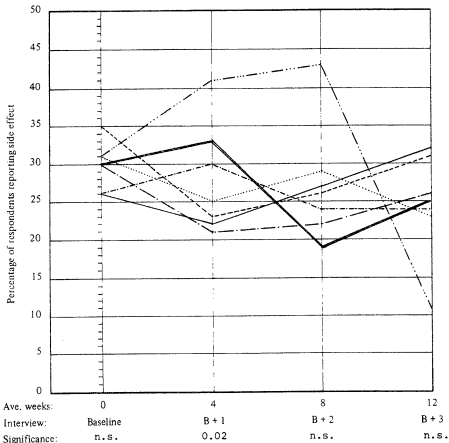
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen _____
- Old acceptor, using Noriestrin - - - - -
- Old acceptor, using IUD (dotted)
- Old acceptor, using condom _____

Comment

This is a very uncommon complaint, frequencies reaching only 4 percent at most. There are no significant differences among acceptor classes at any interview.

Figure 05 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: MORE THAN USUAL TIREDNESS



Legend

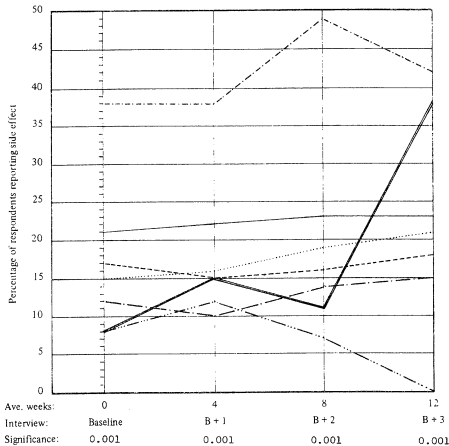
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

Norinyl shifters tend to report this side effect more frequently than others at the baseline interview (35 percent). But the general trend over time is downward for all acceptor classes (to a mean of 25 percent). IUD users have an exceptionally high percentage of complainers at the second and third interviews.

Figure 06 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: SKIN MORE OILY THAN USUAL



Legend

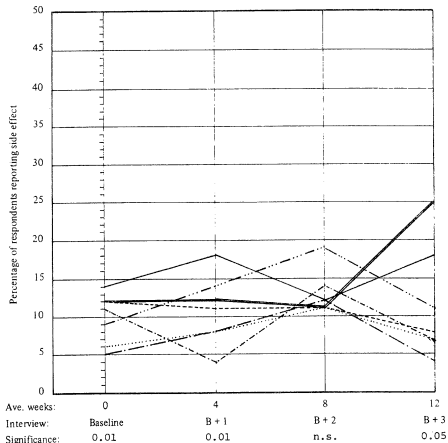
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

Norlestrin users consistently complain of skin oiliness more frequently than others do. The difference is always significant.

Figure 07 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: STOMACH GAS PAINS



Legend

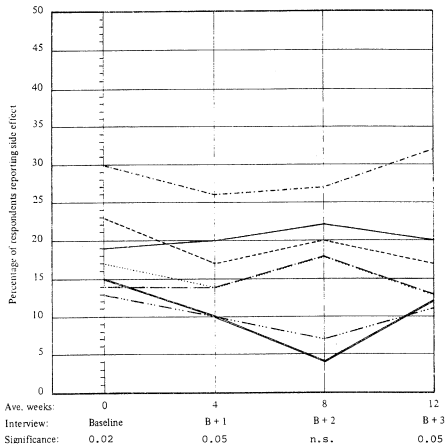
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen _____ (long dashes)
- Old acceptor, using Norlestrin - - - - - (short dashes)
- Old acceptor, using IUD _____ (dash-dot)
- Old acceptor, using condom _____ (thick solid)

Comment

New Norinyl acceptors complain about gas pains more than others do at the baseline interview. Further, at the fourth interview the new Norinyl percentage (18) is more than twice that of the nearest pill-user group.

Figure 08 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: MORE THAN USUAL DEPRESSION



Legend

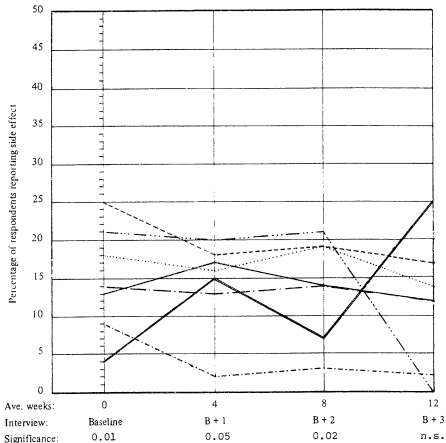
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl -----
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen - - - - - (long-dashed)
- Old acceptor, using Norlestrin - · - · - (dash-dot)
- Old acceptor, using IUD - - - - - (short-dashed)
- Old acceptor, using condom _____ (thick solid)

Comment

Norlestrin users consistently complain about depression more frequently than others do. The pattern is present at all interviews.

Figure 09 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: MENSTRUAL CRAMPS



Legend

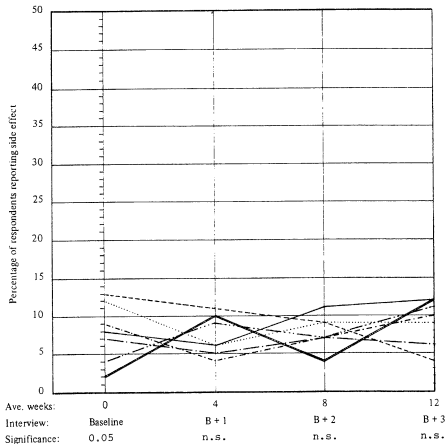
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

Norinyl shifters start high (25 percent), but are close to most other pill users after one cycle. Norlestrin users have a strikingly low incidence of complaints about menstrual cramps (2-3 percent after the baseline interview).

Figure 10 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: LEG CRAMPS



Legend

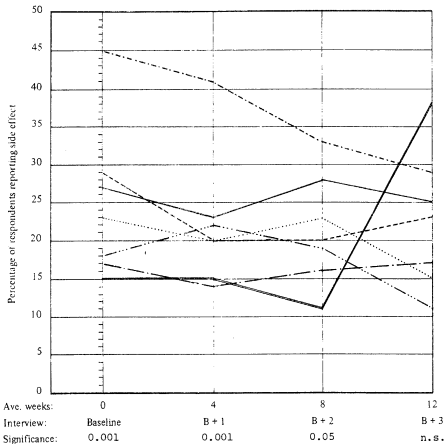
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

Like leg swelling, leg cramps are a rare complaint. Norinyl shifters have the highest initial frequency (13 percent) but the figure falls steadily after the first interview. For other pill users the trend is a very slight increase over time.

Figure 11 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: MORE THAN USUAL IMPATIENCE



Legend

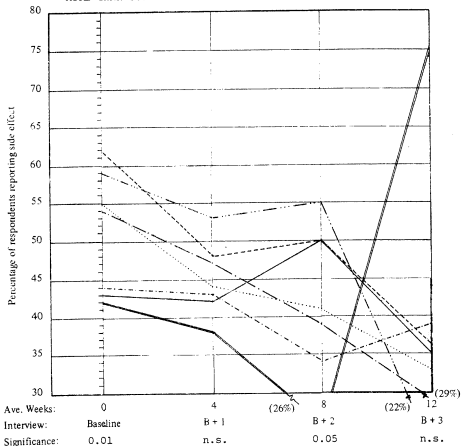
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

Norlestrin users consistently complain about this side effect more often than others do (the small sample of condom users alone outdo them at the fourth interview).

Figure 12 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: MORE THAN USUAL IRRITABILITY AND NERVOUSNESS



Legend

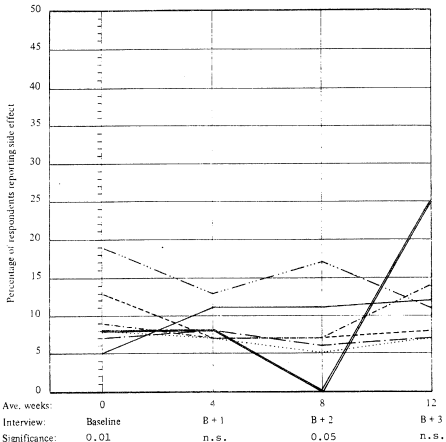
- New acceptor, using Norinyl (1 + 50)
- - - Old acceptor, shifter to Norinyl
- Old acceptor, using Ovral
- Old acceptor, using Demulen
- - - Old acceptor, using Norlestrin
- Old acceptor, using IUD
- Old acceptor, using condom

Comment

The incidence of this complaint is high. Even the "normal" (pre-FP-practice) population of new Norinyl acceptors shows a starting percentage of 43 (Norinyl shifters are highest, with 62 percent). By the fourth interview the average percentage is 33, however, and the intergroup differences are not significant.

Figure 13 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: DISCOMFORT IN THE BREASTS



Legend

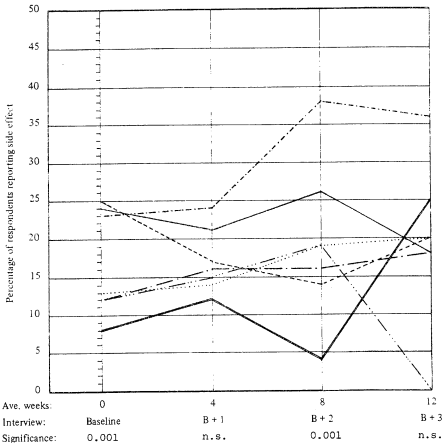
- ____ New acceptor, using Norinyl (1 + 50)
- Old acceptor, shifter to Norinyl
- Old acceptor, using Ovral
- Old acceptor, using Demulen
- Old acceptor, using Norlestrin
- Old acceptor, using IUD
- Old acceptor, using condom

Comment

This relatively uncommon complaint does not change much over time, the average moving only from 10 percent to 8 percent in the course of the four interviews.

Figure 14 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: GREATER THAN USUAL VAGINAL DISCHARGE



Legend

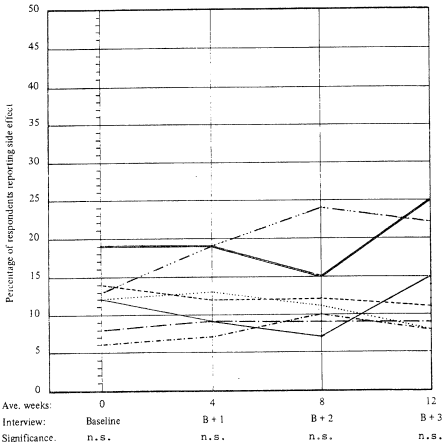
- New acceptor, using Norinyl (1 + 50)
- - - Old acceptor, shifter to Norinyl
- Old acceptor, using Ovral
- Old acceptor, using Demulen
- Old acceptor, using Norlestrin
- Old acceptor, using IUD
- Old acceptor, using condom

Comment

Norinyl shifters start relatively high (25 percent) but then drop off sharply. Norlestrin users, on the other hand, report more consistently high percentages, ranging from 24 to 38 percent.

Figure 15 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: ITCHINESS (PRURITIS)



Legend

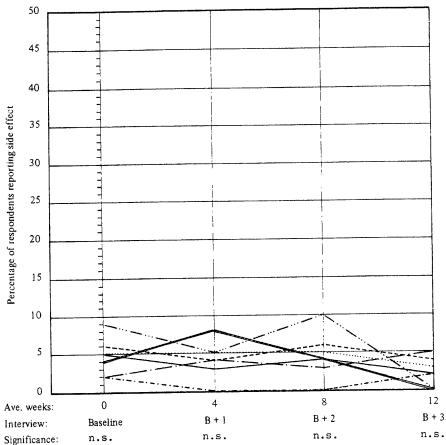
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

This relatively uncommon complaint tends to decrease in frequency over time, the average falling from 13 percent at the baseline to 9 at the fourth interview. There are no significant intergroup differences.

Figure 16 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: RASHES



Legend

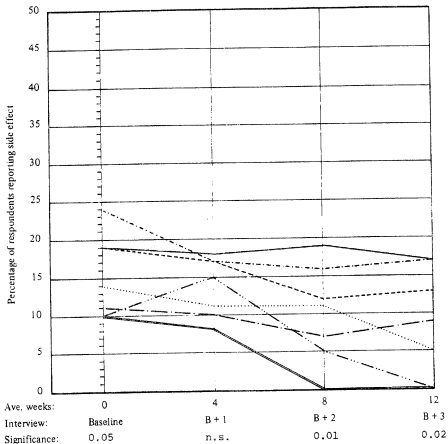
- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen _____ (long dashes)
- Old acceptor, using Norlestrin - - - - - (short dashes)
- Old acceptor, using IUD _____ (dash-dot)
- Old acceptor, using condom _____ (thick solid)

Comment

This is another uncommon complaint, the average percentage falling steadily from 6 to 3 percent over the four interviews. There are no significant intergroup differences.

Figure 17 to accompany the final report on the IPC/Popcom/USAID
Norinyl acceptor study

Side effect: SEXUAL RELATIONS NOT AS USUAL



Legend

- New acceptor, using Norinyl (1 + 50) _____
- Old acceptor, shifter to Norinyl - - - - -
- Old acceptor, using Ovral (dotted)
- Old acceptor, using Demulen _____
- Old acceptor, using Norlestrin - - - - -
- Old acceptor, using IUD _____
- Old acceptor, using condom _____

Comment

Complaints about unsatisfactory sexual relations fall from 16 to 11 percent over time. Users of the IUD and the condom complain less frequently than pill users.

Lynch 1974:66

Appendix C
PROJECT STAFF

PROJECT STAFF

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