

Counselling to include tailored use of combined oral contraception (COC) in clinical practice – an evaluation

Authors:

Hannat Akintomide (Corresponding author)
Specialty Doctor, Sexual and Reproductive Health
Central and North West London NHS Trust
Margaret Pyke Centre
London, UK

Katherine Margaret Rank
Specialty Doctor, Sexual and Reproductive Health
Central and North West London NHS Trust
Margaret Pyke Centre
London, UK

Nataliya Brima
Research Associate, Centre for Sexual Health & HIV Research
Infection & Population Health
University College London
London, UK

Fiona McGregor
Research Nurse, Sexual and Reproductive Health
Central and North West London NHS Trust
Margaret Pyke Centre
London, UK

Judith Stephenson
Margaret Pyke Professor, Sexual & Reproductive Health
Interim Director
Institute for Women's Health
University College London
London, UK

Short title: COC counselling to include tailored pill use

Key words: Combined oral contraception (COC), counselling, pill taking, tailored

Correspondence: Hannat Akintomide, New Croft Centre, Market Street (East), Newcastle upon Tyne, NE1 6ND, UK. Tel: +44 191 282 6742. Fax: +44 191 261 0206. Email: h.akintomide@nhs.net

Disclosures

Funding: This study was funded by a small grant received from the Margaret Pyke Centre Research Awards Scheme

Competing interests: Nil

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ABSTRACT

Title

Counselling to include tailored use of combined oral contraception (COC) in clinical practice – an evaluation.

Introduction

Combined oral contraception (COC, 'the pill') remains the most prescribed method of contraception in the UK. Although a variety of regimens for taking monophasic COC are held to be clinically safe, women are not routinely counselled about these choices and there is a lack of evidence on how to provide this information to women.

Aim

To assess the usefulness and feasibility of including tailored use of monophasic COC within routine COC counselling in a sexual and reproductive health (SRH) service using a structured format.

Method

Using a structured format, health care professionals (HCPs) counselled new and established COC users attending an SRH service about standard and tailored ways of taking the pill. Questionnaires were used to survey both the HCPs and patients immediately after the initial consultation, and then the patients again eight weeks later.

Results

Nearly all patients (98%, $n=95$) felt it was helpful to be informed of the different ways of using monophasic COC by the HCP, without giving too much information at one time (96%, $n=108$). The HCPs were confident of their COC counselling (99%, $n=110$) and did not think the consultations took significantly longer (88%, $n=98$).

Conclusion

This study demonstrates that information on different pill taking regimens is useful and acceptable to patients, and can improve contraceptive pill user choice. It is also feasible for HCPs to perform COC counselling to include tailored pill use during routine consultations in a clinical setting.

Counselling to include tailored use of combined oral contraception (COC) in clinical practice – an evaluation

Introduction

Two million women are estimated to be using combined oral contraception (COC, 'the pill') in the Great Britain.¹ England's sexual and reproductive health (SRH) services provided COC to over 400,000 women in the last year, a figure that has remained fairly stable over the last decade.^{2,3} When the pill first became available in 1960 it was licensed for standard use which became the norm - taking the pill daily for 21 days, followed by seven pill-free days during which a 'monthly' withdrawal bleed occurs. However alternative ways of taking the pill have slowly gained ground which have been grouped under tailored use.⁴

Tailored pill use tends to be unlicensed by the pill manufacturer but is safe, and applies only to monophasic combined oral contraceptives.^{4,5} It includes:

1. extended use with shortened pill free interval (PFI), where a woman takes a pill daily until bleeding for at least three consecutive days triggers a PFI of three or four consecutive days;
2. tricycling, where one pill is taken every day for nine consecutive weeks followed by a pill free interval of seven days.

We did a randomised controlled trial of tailored versus standard use to compare COC continuation rates at one year and user experience.⁶ In those women familiar with standard use of the COC at trial recruitment (83%, n=417), switching to tailored COC use or continuing with standard use were both associated with high COC continuation rates and high satisfaction with contraceptive regimen and bleeding pattern. Tailored COC use was associated with significantly less bleeding, suited some women very well and can provide a suitable alternative to standard use.

We also did a literature review on the evolution of extended COC use which concluded that women needed to be better informed about pill-taking regimens in line with scientific evidence.⁷

Despite national guidance, supporting scientific evidence as well as health care professionals' awareness, patients do not routinely receive counselling to include tailored pill use even in SRH services.^{8,9} There is a lack of evidence about how to provide such counselling effectively.

We therefore wanted, as the next logical step, to assess the feasibility and usefulness of routinely providing information about different ways of taking the pill in a busy SRH service.

Materials and Method

A structured format and advice sheet for the study were developed and evaluated at the Margaret Pyke Centre, a London SRH service with an average of 18,000 attendances per year, of which about a fifth are for COC. These tools that had been used for the tailored versus standard contraceptive pill use trial⁶ were combined, modified and validated to

produce a Script for use by health care professionals (HCPs) and an Advice Sheet (see appendix 1) for patients to provide information on tailored COC use. Questionnaires were also developed to obtain information from both the HCP and patient immediately after the initial consultation (HCP and patient baseline questionnaires), and again from the patient after eight weeks – either by telephone, email or in person at their follow up visit (follow up questionnaire).

Recruitment to the study took place from 14 May 2015 until 14 March 2016, during which there were 3, 874 attendances for, or related to, COC. Patients aged 18-45 wishing to start or currently taking COC, who were able to give written consent to participation including follow up by a short telephone interview, email questionnaire or during their next clinic visit eight weeks later, were invited to participate in the study. These patients needed to be requesting COC as a contraceptive method for at least the next 3 months and should not have any recognised contraindications to COC use.⁴ All consultations took place with two experienced HCPs, trained to use the study's Script to counsel patients on the different ways of taking COC as part of a routine COC consultation. The COC counselling was done with the aid of the study's Advice Sheet and the Family Planning Association leaflet 'Your Guide to using the combined pill'¹⁰ as per usual clinic procedure.

The sample size was obtained by estimating that the prevalence of patients agreeing it was helpful to be offered information on the different ways of COC use would be 80%, so that a sample of 100 of women would allow an estimate with good precision, with an expected 95% confidence interval of 72% to 88%. Allowing for 10% lost to follow up at 3 months we aimed to recruit 112 women.

Descriptive statistics are presented in the tables for all patients who were eligible to participate and provided consent, and the HCPs that undertook consultations; and based on all available responses. Formal statistical testing was carried out to compare ways of taking the pill chosen after the initial consultation and that at follow up, and to compare the ways of taking the pill chosen by patients after their initial consultation based on prior knowledge of more than one way of taking the pill (marginal homogeneity test and chi squared tests respectively). All analyses were performed using StataSE 14. A 5% significance level was used.

Study procedure using the Script (see appendix 2)

- Discussion of appropriate contraceptive methods after history taking. If patient chooses COC, further information was provided on this method (counselling)
- During the consultation, the HCP discussed the different ways of using COC and provided information on tailored COC use in addition to that on standard COC use with the aid of the Script and Advice sheet respectively
- Thereafter, the HCP informed the patient about the study and provided the Participant Information Sheet. If the patient was willing to participate in the study, the HCP obtained the patient's consent (written, using the Participant's Consent Form). After this,

the HCP gave the patient the baseline questionnaire for completion immediately after leaving the consultation room with her supplies of COC. Should the patient require more time to decide on taking part, she could take the consent form and baseline questionnaire away with her and complete and return these to the service within one week of the visit (a stamped addressed envelope was provided in such circumstance) if she eventually decided to take part.

- After the consultation, the HCP completed a questionnaire to give their opinion on how the counselling on the different ways of taking the pill went with the patient.
- At eight weeks, the patient was followed up by their method of choice (phone, email or during their clinic visit) and the follow up questionnaire was completed.

User involvement in the design and development of this study and study materials, including questionnaires and participant information, was from Involve@MPC - the Margaret Pyke Centre's patients' forum (a public engagement group) and experienced SRH clinicians.

Ethical approval for this evaluation was granted following review by the Proportionate Review Sub-committee of the NRES Committee Yorkshire & The Humber – Leeds West, UK. Local NHS Research and Development approval was obtained from the North Central London Research Consortium.

Results

One hundred and twelve patients were recruited to the study. Eighty-seven patients completed the follow up questionnaire at the end of the study. Nearly all patients recruited (98%, $n=110$) were current or past pill users and two-thirds (68%, $n=76$) were already aware that there was more than one way of taking the pill. Nearly all patients also responded that they understood the different ways of taking the COC that had been explained to them, they did not feel it was too much information at the time, and they found it helpful to have received all this information in one consultation. (Table 1)

Straight after the initial consultation, tailored COC use (48%, $n=53$) was chosen by more patients than standard COC use (27%, $n=30$), with the tricycling way of taking the pill chosen by a third of patients ($n=37$). Also, almost half (44%, $n=16$) of those patients who had stated that prior to their initial consultation they were only aware of standard COC use ($n=36$) chose the tailored way of taking the pill. However there was no significant difference in the ways of taking the pill chosen by patients after their initial consultation based on prior knowledge of more than one way of taking the pill ($p=0.374$).

At follow up 87 responses were received and most respondents (94%, $n=82$) were still using COC. Majority (97%, $n=84$) also felt it was helpful to have been informed about the different ways of taking COC. (Table 2) Twenty-one of the 82 patients still using COC at follow up were patients who had stated they were 'undecided' after their initial consultation.

Table 1: Patient baseline questionnaire responses (post initial consultation), N=112.

| Question | Answer | %, (n) |
|---|---------------------------|------------|
| 1. I am clear about the three different ways the pill can be taken that has just been explained to me | Strongly agree | 25.5 (28) |
| | Agree | 74.5 (82) |
| | Neither agree or disagree | 0 |
| | Disagree | 0 |
| | Strongly disagree | 0 |
| 2. I previously knew there was more than one way to take the pill | No | 32.1 (36) |
| | Yes | 67.9 (76) |
| 3. I am already using or have used the pill in the past | No | 1.8 (2) |
| | Yes | 98.2 (110) |
| 4. It was helpful to be told the three different ways to take the pill | Strongly agree | 71.1 (69) |
| | Agree | 26.8 (26) |
| | Neither agree or disagree | 2.1 (2) |
| | Disagree | 0 |
| | Strongly disagree | 0 |
| 5. It's better to be told just one way of taking the pill | Strongly agree | 1.0 (1) |
| | Agree | 2.1 (2) |
| | Neither agree or disagree | 9.2 (9) |
| | Disagree | 46.9 (46) |
| | Strongly disagree | 40.8 (40) |
| 6. Hearing about more than one way of taking the pill was too much at one consultation | Strongly agree | 2.7 (3) |
| | Agree | 0 |
| | Neither agree or disagree | 0.9 (1) |
| | Disagree | 52.7 (59) |
| | Strongly disagree | 43.7 (49) |
| 7. After receiving the information, my chosen way of taking the pill is: | Standard | 27.1 (30) |
| | Extended | 14.4 (16) |
| | Tricycling | 33.3 (37) |
| | Still undecided | 25.2 (28) |

Table 2: Patient follow up questionnaire responses, N=87.

| Question | Answer | %, (n) |
|---|---------------------------|-----------|
| 1. I found it helpful to be given a choice of ways to take the combined pill | Strongly agree | 69 (60) |
| | Agree | 27.6 (24) |
| | Neither agree or disagree | 2.3 (2) |
| | Disagree | 1.1 (1) |
| | Strongly disagree | 0 |
| 2. Being given the option of three ways of taking the pill has increased my chances of continuing with it | Strongly agree | 17.2 (15) |
| | Agree | 26.4 (23) |
| | Neither agree or disagree | 36.8 (32) |
| | Disagree | 14.9 (13) |
| | Strongly disagree | 4.7 (4) |
| 3. I have changed the way I decided to take the combined pill since the first questionnaire | No | 56.3 (49) |
| | Not sure | 2.3 (2) |
| | Yes | 41.4 (36) |
| 4. My current way of taking the combined pill is: | Standard | 46.0 (40) |
| | Extended | 18.4 (16) |
| | Tricycling | 27.6 (24) |
| | No longer taken pills | 5.7 (5) |
| | Bicycling* | 2.3 (2) |

*As reported by patients

There were therefore 61 responses available to compare the way of taking the pill chosen by patients after their initial consultation and then that at follow up. Of these 61 patients, 29% ($n=17$) had changed the way they took the COC since their initial consultation, a difference which was statistically significant ($p=0.046$). One patient changed from standard to tailored (extended) COC use, 6 patients (extended $n=1$, tricycling $n=5$) changed from tailored to standard COC use, and 10 patients changed their way of tailored use – 2 changed from extended to tricycling, 1 patient from extended to bicycling, 6 patients from tricycling to extended and 1 patient from tricycling to bicycling.

The HCPs were confident of their pill taking explanations (99%, $n=110$) and believed the patient to have understood and retained the information (98%, $n=109$) for almost every consultation. Nearly half of the patients (48%, $n=53$) had demonstrated to the HCP some prior knowledge of the different ways of taking the pill. No HCP reported that the consultation had taken significantly longer than it would have done if they had not followed Script. (Table 3)

Table 3: HCP questionnaire responses (post initial consultation), N=111.

| Question | Answer | %, (n) |
|--|---------------------------|-----------|
| 1. I was able to clearly describe the three different ways the combined pill can be taken to the patient | Strongly agree | 69.4 (77) |
| | Agree | 29.7 (33) |
| | Neither agree or disagree | 0 |
| | Disagree | 0 |
| | Strongly disagree | 0.9 (1) |
| 2. The patient demonstrated previous knowledge of more than one way to take the combined pill | No | 52.3 (58) |
| | Yes | 47.7 (53) |
| 3. Describing more than one way of taking the combined pill took too long for one consultation | Strongly agree | 0 |
| | Agree | 0 |
| | Neither agree or disagree | 11.7 (13) |
| | Disagree | 73.0 (81) |
| | Strongly disagree | 15.3 (17) |
| 4. It was helpful to be able to offer the patient three different ways of taking the combined pill | Strongly agree | 18.0 (20) |
| | Agree | 65.8 (73) |
| | Neither agree or disagree | 15.3 (17) |
| | Disagree | 0.9 (1) |
| | Strongly disagree | 0 |
| 5. It is better to teach the patient just one way of taking the combined pill | Strongly agree | 0.9 (1) |
| | Agree | 0 |
| | Neither agree or disagree | 4.5 (5) |
| | Disagree | 83.8 (93) |
| | Strongly disagree | 10.8 (12) |
| 6. The patient understood and retained the counselling information | Strongly agree | 32.4 (36) |
| | Agree | 65.8 (73) |
| | Neither agree or disagree | 1.8 (2) |
| | Disagree | 0 |
| | Strongly disagree | 0 |

Discussion

Our study findings show that counselling information including tailored COC use appeared to have been both conveyed by the HCPs and received by the patients very clearly. This outcome was better than we had expected. Patients welcomed all the information and did not find it confusing, nor did the HCPs think it too time-consuming to discuss in one consultation. COC counselling to include tailored use of the pill was determined feasible for HCPs as well as useful to patients with the aid of a Script and an Advice Sheet.

We have tested a format of consultation that was experienced positively by both patients and HCPs; it gives patients additional useful information about the COC in a way that works within a busy SRH service. As these findings are positive, there should be little difficulty in adopting this aspect of clinical practice within the service in conjunction with other members of the SRH team. With the Script providing guidance to HCPs and the Advice Sheet an additional visual aid for patients during COC counselling, it seems that consultations take no longer than usual, perhaps because a structured format is followed. Patients will also receive improved contraceptive choice and advice and further, can make their own decision on which way to take their pill.

Only two-thirds ($n=53$) of those patients who stated on their questionnaire they were previously aware of more than one way of taking the pill ($n=76$), appeared to have shared this information with their HCP. This finding may not be surprising. For many years, some established COC users have skipped their pill free intervals to avoid withdrawal bleeds with or without discussion with a HCP. A picture has emerged from research and clinical experience that some patients may feel they are doing something reprehensible by straying from the standard way of taking the pill, even though an alternative regimen may suit them better. Some patients may consider it unwise to skip a PFI since it is unlicensed or having not been advised by a HCP to do so. Or they may deem it unhealthy not to have a 'period' monthly.^{11,12} Such patients may not confess to tailored pill use.

Our study findings may be considered contrary to those of a randomised trial¹³ that used a version of a WHO decision-making tool for structured contraceptive counselling as an intervention in comparison to their usual physician individualised counselling on effective contraceptive options. Recipients of structured contraceptive counselling were not more likely to choose a very effective contraceptive method or initiate their method compared to recipients of usual care. However this study was in a different clinical setting and following termination of pregnancy. Also, their outcomes were choice and initiation of methods of contraception and not the feasibility or usefulness of informing patients of different ways of using their chosen contraceptive method.

A possible limitation of our study is the fact that only two participants were new COC users. It would be useful to gain information from more women starting the COC for the first time. A second limitation could be that we did not ask current COC users which way they were taking the pill at their initial visit. Also, the number of patients who had changed the way they were taking their COC some weeks later at follow up may be reflective of the HCPs not warning patients they may need more time to adjust to tailored COC use if they chose this

way of pill taking.¹⁴ We did not collect demographic information, such as age, parity or educational attainment. This was in line with recommendations of our public engagement group and the need for the questionnaire to be as short and anonymous as possible.

We used a structured format for COC counselling with specialists in SRH, hence some of our study outcomes, for example similar duration of consultation, may not be generalisable to other clinical settings like general practice or pharmacy. HCPs in the study had not been asked to time the consultations. So their responses on whether the consultation took too long as a result of discussing different ways of taking the pill was opinion based. However both Script and Advice Sheet were brief, had been developed in conjunction with HCPs and been validated for use in patient consultations. There is also evidence that structured contraceptive counselling can be provided effectively by non-SRH specialists in a clinical research setting¹⁵ so it is likely that this intervention can be successfully used by non-SRH specialists and in other clinical settings.

The option of tailored COC use is believed to be one of the most important changes since the pill became available over five decades ago.¹⁶ Tailored pill use does not reduce COC efficacy nor cause significantly more side effects than standard pill use. In fact, studies have reported similar safety, increased efficacy, the alleviation of menstrual symptoms and acceptable bleeding patterns with tailored COC use.^{5,6,17-22} We therefore recommend that HCPs consider routinely including information about tailored COC use for patients in different clinical settings. Further research could explore the benefits and disadvantages with new COC users and explore demographic or contextual factors that might affect information on tailored COC use being given by HCPs or understood or accepted by patients.

COC is a user dependent contraceptive method. Hence correct use and user satisfaction will affect the efficacy and continuation of the method respectively. There appears to be no evidence that counselling in a clinical setting reduces unintended pregnancy rates.²³ Nevertheless, for a contraceptive method that is widely used the potential to better efficacy, improve choice and COC users finding the information useful, this structured counselling is unlikely to be harmful. Structured counselling is also patient-centred, standardised, and uses visual aids to provide adequate information during the consultation, which is efficient for both HCPs and patients.²⁴

Conclusion

A structured format by which patients are informed by their HCP about the different ways of COC use during routine consultations has not been reported in the literature as far as we are aware. Our study does not provide a quality of evidence comparable to that of a randomised trial but its findings are interesting and potentially useful for consultations regarding COC. Patients value information on tailored COC use in addition to standard use of COC. This information can be provided in a structured manner and using aids - a Script for the HCP and an Advice Sheet for the patient - during routine counselling prior to prescribing COC.

Acknowledgements

We are grateful to all the patients and staff of the Margaret Pyke Centre for their involvement in this study. Sam Khan, Lisa Charles and their great admin team deserve mention as well as Kate O'Donnell for providing data on attendances and study support.

Conflicts of interest

This study was funded by a small grant obtained from the Margaret Pyke Centre Research Awards Scheme.

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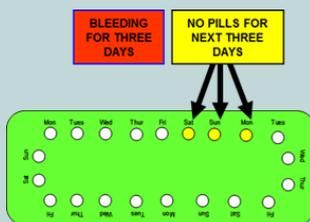
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Appendix 1 - Advice on tailored combined pill use

Extended use of the combined oral contraceptive pill Patient Instructions

Evidence for extended use

FRSH has issued guidance for the combined oral contraceptive pill that extended use is a reasonable approach to taking the combined oral contraception. It is noted, however, that this is 'off licence' use.



What is extended pill taking?

Taking the pill continuously without any breaks between strips. If bleeding occurs at any point for 3 continuous days (bleeding requiring use of a pad or tampon), then stop the pill for 3-4 consecutive days. And Then re-start irrespective of whether the bleeding has stopped. This discourages further irregular bleeding. Continue in this way and keep a record of any bleeding.

When to start

Start the pill on day 1-5 of your cycle. The pill can be started on any other day in the cycle if there is no risk of pregnancy, however in this circumstance you need to use another form of protection for the first 7 days. If you are already on a COC, patch, or vaginal ring method, implant, injection or desogestrel-only POP, and transferring directly over to the extended pill use, you do not need added precautions. If you are switching from IUD/S or any other POP you need to use added precautions for 7 days.

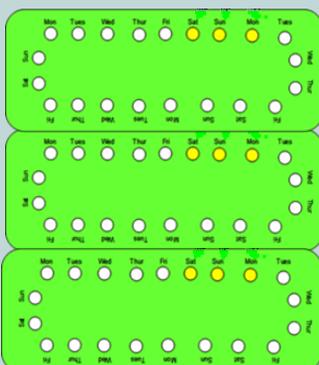
How to do extended pill taking

You need to take the pill each day for at least the first 21 days without any breaks until bleeding occurs for 3-4 continuous days (don't worry if this doesn't happen to you, it doesn't occur with everyone). Stop taking the pill for 3-4 days, even if the bleeding stops. Then resume taking the pill every day, and when the pack is finished go straight on to the next pack.

Tricycling use of the combined oral contraceptive pill Patient Instructions

Evidence for tailored use

FRSH has issued guidance supporting taking the combined oral contraceptive pill in the tricycling manner. It is noted, however, that this is 'off licence' use.



What is tricycling pill taking?

Taking the pill continuously without any breaks between strips for three strips (9weeks). You then take a break for 7 consecutive days during which time a bleed will occur. Continue in this way and keep a record of bleeding.

When to start

Start the pill on day 1-5 of your cycle. The pill can be started on any other day in the cycle if there is no risk of pregnancy, however in this circumstance you need to use another form of protection for the first 7 days. If you are already on a COC, patch, or vaginal ring method, implant, injection or desogestrel-only POP, and transferring directly over to the extended pill use, you do not need added precautions. If you are switching from IUD/S or any other POP you need to use added precautions for 7 days.

How to do tricycling pill taking

You need to take the pill each day without any breaks for at least the first 21 days. Keep on taking the pill until you have taken three strips continuously (9 weeks) Then stop for 7 days. Continue taking the pill in this manner (3 strips continuously followed by 7 days off).

Appendix 2 - Study Procedure Chart

