The Linacre Quarterly

Volume 41 | Number 1 Article 19

February 1974

Teaching the Safe Period Based on the Mucus Symptom

John J. Billings

Evelyn L. Billings

Teaching The Safe Period Based On The Mucus Symptom

John J. Billings; KCSG, M.D. and
Evelyn L. Billings, MB, BS.

John J. Billings, KCSG, M.D. (Melbourne); FRACP, FRCP (London) and Evelyn L. Billings, MB, BS (Melbourne); DCH (London) are both attached to the Family Planning Clinic at St. Vincent's Hospital in Melbourne in an honorary capacity.

John Billings is senior neurologist at St. Vincent's and was created a Knight of St. Gregory by Pope Paul VI.

The Billings describe their program for introducing couples to the use of the mucus symptom as an indication of ovulation and the reaction to the program. A thorough explanation of the mucus symptom and its use in practicing periodic abstinence is also included.

Experience has shown that an overwhelming majority of women, probably nine out of ten, can immediately interpret their own mucus symptom, if it is accurately described to them in language that they understand. The remainder can also be taught to do so, if they can be persuaded to keep a careful daily record of their menstrual cycles, with individual assistance. Women are superior teachers, and it is not necessary for them to have had medical training. A simple method of keeping the record, using colored adhesive stamps, is useful both to the woman under instruction and the teacher. It is essential that the teaching be kept completely separate from the teaching of other methods of birth control and it is recommended that widespread use of the method be promoted by the provision in each community of a small group of women who are well-informed, who possess the capacity to teach with confidence and who are motivated toward success.

There will always be very large numbers of people, who, when they consider that it is necessary to avoid pregnancy, will use only a natural method. During the past few years, interest in the natural methods has increased, and this has been due in part to simplification of the practical techniques and greater reliability.

The occurrence of a fertile ovulation is always accompanied by the secretion of mucus from the glands of the cervix uteri. It is possible to define days of infertility and possi-

ble fertility according to the symptom pattern which results from the presence of this mucus. In an experience which has extended over approximately 20 years, involving thousands of women in different countries of the world, it has become clear that most women readily identify the mucus on first hearing an accurate description of it, and that the remainder can be taught to do so.

Many people have contributed to the development of our current teaching methods. It is reasonable to suggest therefore, particularly with regard to the detail of the content and presentation of the information, that at least initially the recommendations be closely followed. Success depends ultimately upon the quality of the teaching provided, given genuine motivation on the part of the husband and wife seeking assistance.

It has been essential to listen carefully to the words and phrases women themselves use naturally to describe the physiological events and to test the capacity of other women to understand them. The male teacher is inevitably at a disadvantage, and many doctors, including a number of gynecologists, have only a dim appreciation of what they are trying to describe. The gynecologist is prone to think in terms of what he himself may be able to observe by physical examination at a particular moment. Natural modesty makes it difficult for a woman to discuss the cervical mucus with a man even though he be a doctor. In some cases there is the problem that the woman has long ago made her own decis as to what the mucus means c as come to ignore it, and may ien decide that the teacher is t ing about something else or ab a symptom which is absent in her se.

As the menopause approac s, a woman may be ovulating infre ntly and this may be her reas for denying the presence of any m us. A number of women experie in- creased sexual inclination abo the time of ovulation and this may ave a hormonal basis to some e nt; however, there is little doub hat the lubricative mucus which the reliable indication of the immi nce of ovulation is physically st ula- ting to a variable extent, an nay awaken sexual interest; if the om- an has concluded that the mu s is the product of sexual thought she may be extremely reluctant ad- mit its occurrence, especially o a man.

Male teachers have other roblems. For example, they m be skeptical of the ability of w men to make "subjective" observ ions and demand an "objective" c umn of figures. Leaving aside the ossibility of error in producing an accurate temperature record, this attitude is unreasonable in that it would demand objective evidence for any symptom. The experienced physician knows very well how uniformly his patients describe symptoms, making allowance for different levels of education and intelligence, provided he has ears to listen and the wit to understand. Logically pursued the demand for objective evidence would involve denial of the woman's statement that her period had commenced, if the usual fall of temperature from its post-ovulatory level had not occured.

Many of our clients had already used the rhythm method or the temperature method, or the two combined, with success, and some of our teachers had experienced substantial success with these methods, especially the temperature method, in their own practice. There is no fundamental contradiction between any of the natural methods, and the detailed observation of the mucus symptom can be engrafted onto the knowledge the teacher and the woman already possess. However, it is now necessary to be very clear in teaching how the methods supply information in different ways and to insist that the indications provided by the mucus should *always* be strictly followed; a poorly-instructed woman will sometimes use the most fertile days in the cycle for intercourse, despite the clear indication of the nearness of ovulation provided by the mucus, because she is still thinking rhythm method and is counting days.

Those teaching the temperature method should be careful to point out circumstances in which the temperature method fails or may be positively misleading; the woman must be encouraged to ignore the temperature record under these circumstances; if there has been excessive emphasis on the need to wait until the temperature rises it may only be possible to relieve her anxiety by persuading her to give up taking the temperature altogether.

Source of Failure — Combination of Methods

The tendency of some teachers to combine the mucus and the temperature into one record and one method is a serious source of failure and may lead to abandonment of all natural methods or of all sexual intercourse in the marriage. The influence of the teacher who is addicted to the thermometer is seen in various ways, for example, in the woman who marks the day of the peak symptom by reference to the temperature record instead of according to her judgment of the appearance of the mucus and more especially the sensation produced by its presence. Sometimes the woman loses confidence in the mucus symptom (instead of losing confidence in the temperature method) when she does not observe the rise of temperature she has been told the mucus will predict. The occurrence of only one anovular cycle may be sufficient to cause doubt and loss of confidence, unless the reliability of the mucus symptom in defining days of infertility has been clearly explained.

Evidence regarding the reliability of the mucus symptom as an indication of fertility has been accumulated in a number of different ways. It was our practice at first to teach the mucus symptom within a composite instruction involving also the rhythm method and the temperature method and other symptoms of ovulation. Many women elected to do nothing more than follow the mucus symptom; they proved that they could avoid pregnancy by "keeping clear of the mucus" and

later achieve pregnancy by an act of intercourse when the characteristic mucus was present. The use of the method spread extensively as the result of women who were using it successfully advising others about it.

Professor J. B. Brown of the Melbourne University Department of Obstetrics and Gynecology then began to assist us by monitoring the ovarian hormones, and there was some general astonishment, which has continued to the present day, at the revelation of the accuracy with which the woman nominated the proximity of ovulation. Careful instruction in the mucus symptom helped a number of women to achieve pregnancy when the marriage had been sterile for a number of years against the wishes of the husband and the wife. A number of women who conceived remarked that it was only in the cycle in which conception occurred that the normal mucus pattern described to her had occurred, after a succession of cycles in which a scanty, flaky mucus was a feature. This association between poor fertility and a poor mucus symptom is a well-known observation. We became a point of reference as attendance at our teaching center progressively increased, and were consulted by people using various natural methods, the rhythm method, the temperature method or methods that can only be described as entirely original.

We actively and publicly encouraged consultation with any couples who seemed to have experienced a failure of any natural method, including our own, and have done this from our earliest days, wh we were using the rhythm me od alone. If the woman has ke an adequate record of the mucus mptom and of acts of intercours n a cycle in which she becomes eg-nant, the explanation of the eg-nancy is generally obvious her and to her husband or can be em-onstrated to their satisfacti so that they return to the use the method afterwards with confi nce.

The Initial Instruction

The aim of the initial instr tion is to remind the woman of t mu-cus, to explain it and to co nce her of its importance. Each w man needs to be informed that very fertile cycle will have an i ntifi-able mucus pattern, and to be ven confidence that she will be e to understand it. Every effort ould be made to persuade the husb d to attend, in order that he demo trate acceptance of his share of e re-sponsibility. It is important th the husband should be made feel involved and not just an onl oker, and a discussion of the depe dence of the sperm cell upon the ucus for survival, transport and perhaps fertilization helps the husband and wife to think in terms of "our fertility" rather than "my fertility." With the help of simple diagrams, the anatomy and physiology of ovulation and menstruation, conception and implantation, and the role of hormones in the production of ovulation and the symptomatology of the cycle are explained at a level appropriate to the audience.

Individual variations with regard, for example, to the frequency of ovulation can be quoted and used to explain how nature directs attention to the fertile time of the cycle. Using circular, colored diagrams, we describe the onset of the menstrual period, marking the commencement of the cycle, with mention of the variable number of days of bleeding. Following the cessation of the bleeding there occur days of dryness, and now the opportunity is taken to emphasize that the mucus is better recognized by the sensation produced by its presence than by visual observation. (One of our colleagues, an experienced teacher, Dr. Lydia Sans, has been educating blind women to observe the mucus symptom and to record it and the other events of the menstrual cycle by buttons of different sizes on a string.) On the dry days there is a positive sensation of dryness of the parts external to the vagina. The number of dry days is variable, there being none at all in short cycles.

The commencement of the mucus is first recognized by the disappearance of the sensation of dryness, and its replacement by a wet or sticky sensation. Within a day or so of the disappearance of the dryness the amount of mucus increases, usually to an amount sufficient for it to be observed. Sometimes, at this stage of the cycle, there is a large amount of cloudy, somewhat tacky mucus, which appears to have come away from the cervix like a plug. Women must be warned that it is *not* the *amount* of the mucus which is important. In other cases the mucus is first seen as sticky, yellow or white flakes of very small quantity.

As ovulation approaches the mucus becomes thinner, sometimes more copious, and sometimes less copious, and develops a slippery consistency, producing a sensation of wetness which is very easy for the woman to recognize in the course of her ordinary daily activities. At this stage of the cycle the untutored woman may say that she no longer has any mucus at all, and this would mean that she had so far learned to describe only what she could see. Usually *however*, there is now sufficient mucus for her to observe that it has become clearer and elastic so that it will stretch and can be pulled out to a considerable length without breaking. In every respect the mucus now resembles raw egg-white, and this marks the peak of the symptom. The peak symptom occurs very closely after the peak blood level of estrogens, marks the peak of fertility in the cycle and occurs, on the average, immediately before ovulation.

Some women cannot distinguish with certainty between the mucus on two or even more successive days; in this case they are taught that the peak symptom is recorded on the last day of this characteristic mucus, with a return to cloudy, tacky mucus thereafter. The peak of the mucus symptom is accompanied by vulval fullness, swelling and softness, all these phenomena contributing to the increase of sexual interest at this time.

Mid-line lower abdominal and low back pain, bearing-down pains and bleeding may occur in proxim-

ity to ovulation, usually in the days before ovulation, though sometimes afterwards. Pain in either iliac fossa of short duration and sometimes of a stabbing character is more closely related in time to the occurrence of ovulation. It is useful to mention ovulation bleeding as a further warning that the days of bleeding cannot necessarily be regarded as infertile, the woman being reminded that it is ovulation and not menstruation that determines the disposition of fertile and infertile days.

Most women immediately recognize their own pattern from this description and many later express their incredulity that anyone would look for an alternative method of family planning when this method is so simple. The remainder will learn to use the mucus symptom correctly if they can be persuaded to keep a daily record. We have tried various methods of doing this and have found that the colored stamps, first devised in Guatemala and based on our circular diagram, are the best. The women who say that they have no mucus at all, and those who say that they have mucus all the time, come to view with astonishment the pattern they will produce if they are sufficiently in earnest to make the effort of keeping the daily record, and have received competent instruction from a confident teacher. We have monitored the ovarian hormones of many cycles of women who claimed to have no mucus at all, and found that with the daily record they identified the peak symptom accurately, often on their first attempt.

Most women, even young w ien, have some infertile cycles, a in a number of women infertile cles are of common occurrence. T ob- servation that the fertile muc pat- tern does not occur in ever ycle may lead the woman and the her to the mistaken conclusion t the ovulation method will be un able in her case. It is important em- phasize that every fertile ov tion will be accompanied by the pro- priate indications, and that cess depends merely on follow the rules exactly.

The other advantage of the mps is the provision of a large unt of information for the teac r to take in at a glance. This bles the teacher of a large gr of women quickly to identify hose who require additional ind dual help, or who have unusual p erns to be explained, for exam by lactation, the approaching eno- pause, etc.

It is essential that in or r to learn the method reliably th hus- band and wife refrain from al xual contact during the keeping the daily record of at least on men- strual cycle. The inexper nced woman may have difficulty in dis- tinguishing between the normal mucus and seminal fluid which may escape from the vagina following intercourse. A poor record at the first attempt is often an indication of continuing sexual activity during the cycle.

Follow-up Interview

The error must be avoided of providing too much information at the first instruction. The woman and her husband are given an appointment to be seen with the daily record of the first cycle after the instruction, and then the points which have not been properly understood are evident and may be clarified. At this interview the timid, anxious woman is recognized, so too is the slap-dash woman, and very often important marital problems emerge, with the opportunity for useful counseling.

The teacher needs to remember details such as reminding the woman that the record is to be made at night, after observation during the day. No special technique is employed when looking for the mucus and in particular the woman is instructed not to explore the vagina nor to use any apparatus. She may, of course, observe the mucus in the ordinary use of toilet paper. She must also be persuaded that she must keep the follow-up appointment even though she may conclude that she has kept the record badly and is anxious to try again lest she be thought stupid.

After the first follow-up interview, many women require no more than an open invitation to return at any time they wish to do so. Many of our clients are young women about to marry, and they are concerned only to know that they can face the possibility of future problems requiring family planning without the fear that their attitude of conscience will create great difficulties. Many couples use the method for a few months and then having become confident elect to have more family. It is always made clear by the teachers that the decision to abandon the method in order to have another child is one which we welcome, and that the ultimate responsibility rests with the husband and his wife. Our philosophy, and probably the philosophy of teachers of natural methods in general, is that the husband and wife may use the method for as long or as short a time as they choose, and as carefully or as carelessly as they choose. But it is made absolutely clear that, if the avoidance of pregnancy is essential, the instructions must be followed exactly, and it is further emphasized that all sexual contact must be avoided on days of possible fertility. Indulgence in close contact between the sexual organs during the days of possible fertility makes a complete farce of any natural method, as does intercourse with the use of mechanical contraceptives at this time.

In other cases a series of regular interviews extending over several months may be required. The individuals may be over-anxious, or they may be under considerable persuasion to adopt an alternative method. Many of the arguments they will hear are of the "everyone knows" variety, such as "everyone knows that the rhythm method doesn't work." Questions and objections need patience and understanding. The secretions produced by love-making are altogether different from the cervical mucus and the idea that the two may be confused springs from prior misunderstanding of the significance of the mucus. Pathological discharges resulting from vaginal infection are

altogether different, often being offensive and associated with soreness and irritation. Even if it were difficult to eliminate such a discharge quickly by appropriate treatment, the presence of the discharge does not prevent the women recognizing the presence of the physiological symptom by the changes it produces in the discharge.

The instruction will have made it clear that the practical application of the mucus symptom is to avoid all but the dry days before ovulation, and that from the fourth day past the peak symptom the remaining days of the cycle are safe. The explanation of the mucus should have made clear the rule that all sexual contact is to be avoided during the presence of the mucus, until the appropriate time after ovulation, and that this instruction is not simply given to avoid the possibility that intimate embracing may cause the couple "to go too far."

Sometimes a woman is unwilling to learn the method and manufactures difficulties, admitting freely that if she is uncertain of any infertile days her husband will make no request for intercourse, and that this is what she wants. In other cases the woman will not admit, even to herself, that aversion to sex is the origin of her complaint of difficulties in learning the method.

At the individual interview, when the daily record of the cycle is examined, attention is paid particularly to the peak symptom, the woman's decision being verified by the arrival of the menstrual period approximately two weeks later. Next, the number of days in succession on which mucus is recorded fore the peak symptom is examin and if these are very few in num the woman is questioned close and given further instruction re ding the positive sensation of dry s as the indication that no mucus pre- sent. In practice, the record dry- ness proves able to be truste both as to the accuracy of the w ian's observations and the indica n of infertility.

In long cycles it will be oted that "patches of mucus" occu hree or more days in succession, well as isolated mucus days. The ame basic rule is followed, that o dry days are used before ovulati and all intimate sexual contact is a ided on other days. Until the wom has demonstrated her ability t rec- ognize the peak symptom, e is advised to treat the "patch of mucus" as possibly indicat e of ovulation, not resuming sexu con- tact until the 4th day after ards, and continuing to use only t dry days.

In short cycles, and particularly if the period is prolonged, the mucus may have begun before the period is finished. With experience a woman can usually discern the presence of the mucus even though some slight menstrual loss is continuing. Until she has had the experience of keeping a daily record for a few cycles, it is wise to count to the fourth day past obvious mucus not separated from the period by dry days in case an ovulatory mucus pattern has been concealed by the period.

These practical details are, to a woman, merely matters of common sense.

It will be found that a number of couples, because of previous successful experience or previous teaching, and a number of teachers only feel secure if they use the temperature method, or the rhythm method, or temperature and rhythm combined in addition to observation of the mucus symptom. Though not ideal there is no great harm in this, provided that the observation of the mucus symptom is recognized as an independent method, to be recorded separately. The deficiencies of the other methods should be explained and in particular the woman should be warned that she will need to learn to interpret her mucus symptom ahead of the menopause, since at that time it alone will give her security.

It should be made clear in the teaching that if rhythm method calculations and/or temperature records are to be used at all, they are allowed to assist the woman to learn the ovulation method properly, with the explicit intention of discontinuing these less reliable techniques as soon as possible.

Like-to-Like Formula

We have formed the opinion that the "like-to-like" formula should be further developed by instructing groups of women who are willing to undertake the teaching of others within their own localities. Large centers have serious defects, particularly the lack of continuing personal supervision, and fulfill their best function by providing training programs for other teachers and expert consultative services for special problems, as well as research. There is the danger in these larger centers of the personnel becoming preoccupied with the prevention of pregnancy, to the neglect of more important marital problems among many of their clients. Sympathy, understanding and love are the essential virtues and talents necessary for successful counseling, and they can be found in abundance among the women of every community.

In Australia advice about the natural methods of family planning is now available in the larger cities and towns. In our own city of Melbourne, there are central and suburban clinics, some of them sponsored by the local suburban councils, with help from the State Health Department. At St. Vincent's Hospital in Melbourne, there has been established a clinic which will be a training center in which the instruction of clients and the training of teachers will be almost entirely conducted by women. This is the organization that we recommend, so that there is in every suburb of every town, and in every village, a group of women who understand the ovulation method, who are able to teach it competently, who are able to impart confidence to the women they are teaching, who are motivated to help women to make a success of the method, and who are friendly and compassionate in their personalities.

This organization of teaching does not by any means exclude the participation of the husbands. Their cooperation is essential and can be confidently anticipated as soon as

the husband understands what is required of him and sees how readily his wife grasps the essentials of the method. It is important for the teacher to avoid a nearsighted obsession about preventing pregnancy and to recognize that where cooperation is lacking between the husband and wife, a more important problem exists, one which will cause continuing unhappiness and perhaps eventually the breakdown of the marriage, unless it is solved.

During the past year we have had the experience of participation, in teaching the ovulation method, in the combined activities of a birth control clinic in one of the general hospitals. The facilities are so arranged that whatever method is chosen by the individual women, all attend together and come into contact with the same ancillary staff. This practical experience has made it clear that the teaching of natural methods must be completely separated from all other contraceptive clinics. For one or two cycles, while learning the natural method, the woman may be in a state of anxiety and lacking in confidence. At that time she is susceptible to persuasion to abandon the method, even when this persuasion comes from uninformed sources.

A number of women who are taught the mucus symptom adequately along with the temperature method will spontaneously give up taking their temperature after a few cycles, and many more will do so with the least encouragement. They find themselves soon able to predict with certainty the rise of temperature that denotes the luteal phase of a few days beforehand. If a ub-stantial number of the clien of any center where the mucus np-tom and the temperature m iod are being taught together d not themselves suggest that the ier-mometer is unnecessary, it c be concluded that the teaching the mucus symptom is inadequat

The mental attitude of ima ing that multiple indications of ula-tion provide greater security han the mucus symptom alone con un-icates the teacher's lack of nfi-dence and encourages the ents to equate the indication which de-pendable with those which a not. We have observed a number o reg-nancies which occurred bec se a premature or non-specific e of temperature was regarded the marker of ovulation to be sted and a day was used for inter urse despite a clear warning fro the mucus. If an attempt is mad o in-sist on both indications the one remains committed to failure provide a solution in all those cum-stances where the temperature method provides little infor ation or none at all.

It is not very uncommon for those women who ovulate only a few times each year to exhibit a delayed rise of temperature following ovulation, so that the small fraction of the cycle which would have been provided for them by the temperature method is further reduced to perhaps only two or three days.

Our experience has now shown that the ovulation method is applicable in all circumstances, while the practical rules have been verified by the appropriate scientific investigations.[1] Women of low intelligence, women without education and women living in poverty have all been able to apply the method successfully. It provides for those circumstances where temperature/rhythm is inapplicable, and that is why it should not be tied to any combined method involving use of the thermometer. Thus, it provides information about the preovulatory phase of cycles however long, and is therefore about to be used successfully during breast feeding, through the menopausal years and by those women who ovulate very infrequently.[2] The method is now being taught in Central America, Tonga, Fiji, the Gilbert and Ellice Islands, India and elsewhere; a report of the success which has followed the introduction of the method into Tonga from July, 1970, is being prepared for publication.[3]

The dissemination of the correct instruction is an enterprise which will depend for its success on the acceptance of this task by groups of women in every community. A well-informed doctor can be of great assistance in treating abnormalities, such as pathological vaginal discharges, and by dealing with other problems which seem to be creating difficulties. Ultimately the natural method will triumph, but individual effort will determine whether this occurs sooner, or not until later, with the achievement of much good delayed.

REFERENCES

1. Billings, E.L., Billings, J.J., Brown, J.B., and Burger, H.G., "Symptoms and Hormonal Changes Accompanying Ovulation," *Lancet*, 1:282-84, 1972.

2. Billings, J.J., *The Ovulation Method*, 1st U.S. ed. Borromeo Guild, Los Angeles, Calif., 1972.

3. Weissmann, Anne, Sr. M. Cosmas, Foliaki, L., Billings, E.L. and Billings, J.J., *Natural Family Planning in a Pacific Island Community: A Trial of the Ovulation Method in Tonga* (to be published).