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Credidimus caritati
we have put our faith in love



**WOOMB International Ltd
continuing the work of
Drs John and Evelyn Billings
of bringing the
Billings Ovulation Method®
to the world.**

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WOOMB International continues the work of its founders by promoting the Billings Ovulation Method® and ensuring that wherever it is taught globally, it is the authentic Method without variation, and that only WOOMB International approved teaching and training materials are used. The Bulletin provides a medium for sharing articles and news from around the world. We welcome your annual subscription of AUD\$25 which will ensure its continuing production.

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In this Edition

Firstly, a big THANK YOU to all those people who have paid their Bulletin subscriptions. Since we sent out the reminder with the last issue we have received AUD\$600 from friends around the world. While this is a small amount in terms of the cost of the work of WOOMB International, you have no idea what a boost it gives us to know that people care about and value the work. God bless you all. It is not too late for others who may have been “meaning to do that” to send in their subscription.

In this edition we are happy to send you the last of the papers from the International Conference held in Benin earlier this year. Dr Caroline Terrenoir from France, whom you will remember was one of the recipients of the John and Evelyn Billings Award at the Conference, spoke on the topic *The benefits of the Billings Ovulation Method® for the diagnosis of diseases*. This, of course, is the other God-given use of the Method in addition to achieving or naturally postponing pregnancy. Dr Terrenoir is the President of Méthode Billings WOOMB and is a Consultant to the Directors of WOOMB International.

Our Question to Senior Teachers article on page 12 deals with the question of *How much information should be given at an Initial Instruction?* There is also news of two wonderful new videos, available on our YouTube channel, which deal with this topic.

In addition, on page 13 there is an article by our resident scientist, Gillian Barker, *Some clarifications on a recent journal article* which discusses the different markers of ovulation and reminds us of the pioneering work of Professor J B Brown which underpins everything that we know and teach.

On page 16 we pay tribute to the late, great, Emeritus Professor Erik Odeblad, another pioneering scientist who taught us so much of what we know. We remember Erik with warm affection and deep gratitude.

There is also information about a new online Advanced Training Program which has been a major undertaking for the Directors in recent months, a report of the WOOMB International Annual General Meeting where another Director was elected and two more recipients were awarded John and Evelyn Billings Awards. You can read the curriculum vitae for the new Director and the citations for the awards in this issue. As always there is brief news of the work of our Affiliates from around the world.

And so dear friends, in the words of St Teresa of Avila, remember that:

“Christ has no body now but yours. No hands, no feet on earth but yours. Yours are the eyes through which he looks compassion on this world. Yours are the feet with which he walks to do good. Yours are the hands through which he blesses all the world. Yours are the hands, yours are the feet, yours are the eyes, you are his body. Christ has no body now on earth but yours.”

Continue with your wonderful work, stay in touch and know that you are always in our thoughts and prayers as this extraordinary and difficult year draws to a close. May God continue to richly bless you all in 2021.



Teresa of Ávila

The benefits of the Billings Ovulation Method® for the diagnosis of diseases



Caroline Terrenoir, MD

President of the French association « Méthode Billings WOOMB »

This article is drawn from the lecture given at the Benin Conference in March 2020.

Summary

- Introduction
- Cycle abnormalities
- Diagnosis related to an ovulatory dysfunction
- Hypofertility
- Conclusion

Introduction

The woman who uses the Billings Ovulation Method® notes down each day the sensation she feels at the vulva and the visual observation of any discharge. These observations are key indicators of a woman's health. A normal ovulatory activity during the reproductive period of a woman's life can be considered as a sign of good health, as it implies a satisfactory activity of the endocrine and ovarian systems.

Any unusual observation regarding mucus, cycle length^{1,2}, abnormal bleeding, ... enables the woman to detect an irregularity in her health condition, which should be further investigated.

The accredited Billings Ovulation Method® teacher should not be involved in the diagnosis of medical issues but can advise a medical check-up. An experienced teacher of the Billings Ovulation Method® has highly developed skills in charting interpretation. By counseling women for a medical check-up, she has the right and is able to announce "that this chart is consistent with the signs of possible (PCOS)." Dr Evelyn Billings

A normal cycle shows menstruation followed by the Basic Infertile Pattern, then the fertile pattern which leads to Peak day, and ends with a normal-length luteal phase.

What defines a normal fertile cycle? A fertile phase with a clearly defined Peak, and a luteal phase lasting between 11 and 16 days. We will develop in this article what should alert the tutors and make them think "What is this chart telling me if the ovulatory pattern shows abnormalities?"

Identifying cycle abnormalities

Two years after menarche, the reproductive system is fully mature and ovulation occurs on a regular basis, in cycles lasting between 25 and 35 days. A cycle can be preoccupying if:

- It lasts less than 25 days
- or more than 35 days, which means a delayed ovulation or no ovulation at all
- the luteal phase is shortened, i.e. lasts less than 11 days.

About 4 years before the last menstruation (menopause), the ovaries functional capacity decreases, and the pre-menopause period begins. This phase is characterised by changes such as hot flashes, sleeping disorders, depressive symptoms and/or vaginal dryness.

Moving towards menopause, FSH hormone levels rise, and can be elevated at the beginning of the follicular phase (on Day 3). This ovarian stimulation caused by FSH increases oestrogen production, which makes the endometrium grow. This growth can be shown by heavy bleeding and irregular cycles³.

- 1) Cycles lengthened by a delayed ovulation can happen in the following situations :
 - Physiological cause: the first two years following menarche, breastfeeding, premenopausal phase, intensive sporting practice, stopping the use of hormonal contraceptives, ...
 - Pathological or abnormal condition which needs a close monitoring, such as stress, fatigue. The cycle needs to be analysed and complementary biological and ultrasound examinations can show a disease affecting the ovaries, the cervix, or the endocrine system.
- 2) Shortened luteal phase

The following chart shows the cycle of a woman treated by thyroid hormone. The shortened luteal phase leads to verifying TSH levels and adapting the thyroid hormone dosage if necessary.

Cycle abnormalities

Example of a short luteal phase which lasts less than 11 days: it can be the sign of a physiological cause, such as stress before ovulation, the first ovulations during breastfeeding or weaning, or a pathological condition, such as hormonal disorder, which should be investigated.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
						••																				
wet	wet	wet	wet	wet	dry spotting brown	damp creamy	damp	damp creamy	damp	damp clear	damp creamy thick	damp creamy	wet more milky	damp white strings	damp creamy clear	wet clear	slippery clear	X	1	2	3					
																			damp creamy yellow	damp creamy yellow	damp creamy thick	damp	damp	damp	damp	wet SF

- 3) Bleeding, except for physiological bleeding such as:
 - Menstruation (a drop in oestrogen and progesterone levels when conception did not take place)
 - Withdrawal bleeding (oestrogen drop)
 - Breakthrough bleeding (fast oestrogen rise)
 - Embryo implantation in the uterine wall (about 7 days after conception)
- should be investigated in order to find out the cause.
- Regular bleeding can be misinterpreted for regular ovulation, whereas the cycle analysis shows no ovulation⁴. Therefore, only the recurrence of ovulation shows good health, rather than regular bleeding⁵.
- Persistent irregularities, including amenorrhea, can be due to lifestyle, stress, or endocrinological, gynaecological, auto-immune, nutritional, genetic, iatrogenic disorders.
 - Facing these persistent irregularities, the tutor should recommend a medical check-up if the woman reports 2 unusual consecutive cycles, or 3 unusual cycles during a year.
 - The next part of this article outlines diseases which impact the cycle and the observations reported on the Billings chart.

Diagnosis of diseases causing cycle disorders

Hormonal troubles are the most frequent causes of ovulatory dysfunction, thus causing cycle disorders. Most women in this situation will need medical care. These troubles can result from:

- hypothalamus
- pituitary
- thyroid gland
- adrenal gland
- ovaries
- metabolism

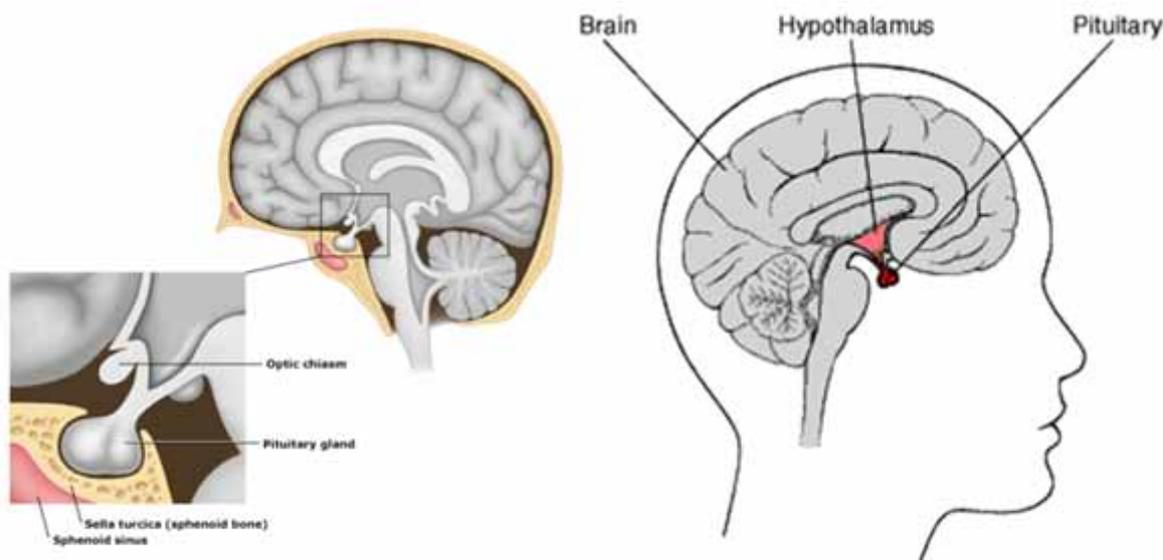


Diagram of the hypothalamus and pituitary gland (brain section)

11

In the above picture can be seen:

- The hypothalamus, a little sub-cortical structure located in the centre of our brain. This pea-sized area gathers the highest neuronal density of the brain. Its function is to control the autonomic nervous system and the endocrine system. It is an endocrine gland which regulates the pituitary's hormonal secretion. Together, they form the hypothalamic-pituitary axis and are linked by the pituitary stalk.

The central position of this axis inside the brain allows it to communicate very effectively with other body structures. The GnRH (Gonadotropin Releasing Hormone) neurons release GnRH in a pulsatile fashion, which stimulates the synthesis and release of the FSH and LH gonadotropin in the pituitary. This process is controlled by GnRH's frequency and oscillation amplitude, which are controlled by oestrogen and progesterone levels in the blood. Positive and negative feedback loops (depending on the blood hormone levels) regulate GnRH activity.

- The posterior pituitary which releases the antidiuretic hormone (ADH) and oxytocin.
- The anterior pituitary which releases the Adrenocorticotrophic hormone (ACTH), the Thyroid-stimulating hormone (TSH), the Luteinizing hormone (LH), the Follicle-Stimulating hormone (FSH), the Melanocyte-Stimulating hormone (MSH), the Growth hormone (GH), and Prolactin (PRL).

Diagnosis of diseases causing cycle disorders: the hypothalamus

Hypothalamic disorders can result in hypoestrogenism, with amenorrhea caused by anovulation. They can be caused by:

- Intensive sporting practice: high-level athletes can display symptoms of pituitary failure (recurring dry days and amenorrhea), due to a slowdown in GnRH pulsatility. A normal cyclic ovarian activity can resume in the 3 months following cessation of practice (cf. "Professor Brown's Continuum), or after having gained one or two kilograms.
- Nutritional imbalance. Ovarian hormones are steroids, as they are synthesised from cholesterol. A sufficient lipid intake is necessary (30% of calories for a sedentary woman, i.e. 70 grams/day). A minimal weight is also required to trigger puberty. An energetic and/or body fat deficiency entails a decrease in leptinemia and a slowdown in GnRH pulsatility. Weight loss can disturb the hypothalamic-pituitary axis and cause cycle disorders, such as a shortened luteal phase, a delayed ovulation, or hypofertility. In such cases, the BMI (Body Mass Index, normal weight between 18.5 and 25) should be calculated. Malnutrition caused by severe mental anorexia⁶ can block the whole reproductive system, because the body will prioritise vital functions over reproduction.
- Chronic stress (ongoing study on the lockdown effects on the reproductive cycle in European countries – Spain, France, UK, Ireland, Italy)
- Hypercortisolemia, as in chronic alcoholism for example, affects the hypothalamus with ACTH (Adrenocorticotrophic hormone) hypersecretion.

Diagnosis of diseases causing cycle disorders: the pituitary

- Prolactin adenomas are the most frequent pituitary tumors and are generally associated with hyperprolactinemia.
- Prolactin stimulates the breasts to produce milk. It is released in high quantity during pregnancy and breastfeeding, but is also normally secreted by both men and women. Hyperprolactinemia blocks fertility by suppressing FSH release.
- Hyperprolactinemia is a cause of menstrual irregularities (including amenorrhea), shortened or deficient luteal phases with pre-menstrual spotting, galactorrhea (lactation), menopausal symptoms, hyperandrogenism.
- Prolactin increases the production of auto-antibodies and auto-immunity. High prolactin is common in numerous auto-immune diseases, such as systemic lupus erythematosus, rheumatoid arthritis, Hashimoto's thyroiditis, or multiple sclerosis. Ovulatory dysfunction can thus be an early symptom of serious disease.

Hyperprolactinemia can be caused by pituitary tumors (usually a benign prolactin adenoma), hypothalamus disease, hypothyroidism, chronic kidney disease, drug therapy (namely anxiolytics, anti-depressants, and antihypertensive drugs), spinal cord injury, and stress.

It can cause headaches, mood swings, depression, and visual impairment.

Professor Pilar Vigil also reports clinical signs of hyperprolactinemia: higher allergy frequency, warts, and a higher inclination to infections⁷.

With a drug therapy (bromocriptine or cabergoline), prolactin levels can take some time to decrease. Secondary effects are nausea and dizziness. The BOM tutor should show support and encouragement.

Diagnosis of diseases causing cycle disorders: the thyroid gland

The thyroid regulates the basal metabolic rate, controls the appetite, regulates the energy use, influences protein, lipid and carbohydrate metabolism, regulates cardiac rhythm, stimulates body growth and bone development, controls muscles function and development, as well as reproduction and lactation.

It is controlled by the pituitary via the Thyroid-Stimulating Hormone (TSH). The hypothalamus controls the pituitary via the Thyrotropin-Releasing Hormone (TRH).

- Hypothyroidism is involved in about 2% of ovarian insufficiency. However, both hypothyroidism (often caused by Hashimoto's thyroiditis) and hyperthyroidism (Graves' disease in most cases) should be considered.
- Thyroid disorders can cause irregular cycles with extended mucus phases, a shortened or deficient luteal phase, hypomenorrhoea (limited menstrual flow), menorrhagia (heavy menstrual flow), withdrawal bleeding, spanomenorrhoea (spaced out cycles), or amenorrhea.

Menorrhagia⁸ is generally linked to hypothyroidism because free oestradiol levels increase and cause the endometrium to grow. Decrease in Sex Hormone-Binding Globulin (SHBG) levels provokes the free oestradiol rise. Hypothyroidism is also associated with high prolactin, which disturbs the ovulation process.

Hyperthyroidism increases SHBG levels, which cause oestrogens to drop and pituitary hormones to raise, disturbing once again the ovulation process.

Associated symptoms can be fatigue / hyperactivity – nervousness, cold sensation / hot sensation with sweating, weight gain / loss, constipation / diarrhoea, boosted appetite, exophthalmos.

Diagnosis of diseases causing cycle disorders: the adrenal glands

The adrenal glands help maintain blood pressure, body hydration, regulate proteins, carbon hydrates and lipids use, and maintain stable sodium levels in the body.

- Congenital adrenal hyperplasia is caused by genetic abnormalities causing deficient production of steroids. In most cases, cortisol is not correctly synthesised, thus boosting ACTH production by the anterior pituitary, and resulting in hyperandrogenism. Outcomes are menstrual insufficiency, anovulation and infertility⁹.

Example of chart (adrenal disorder)

This woman had high pre-ovulatory progesterone levels. The assessment revealed adrenal hyperplasia. The corticosteroid treatment could lower progesterone and the couple could conceive.

PCOS chart, with larger mucus phases without a Peak. Example of a PCOS Chart:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
[Red background]					[Red background]																															
wet	wet	wet	wet	wet	dry spotting	damp yellow	1	2	3	wet smear creamy	wet smear creamy	1	2	3	dry smear	damp smear	damp sticky	damp creamy	damp creamy	wet slimy	1	2	3	dry smear	dry smear	dry smear	dry smear									

- PCOS diagnosis is based on 2 out of 3 of the following criteria (Rotterdam definition):
 - Cycle disorders
 - Clinical or biological hyperandrogenism (acne, hirsutism, obesity)
 - Ovary ultrasound showing polycystic ovaries and/or increased ovaries volume.

A biological check-up can show abnormalities in FSH, LH, testosterone, prolactin, lipids, insulin levels (50 to 60% of cases), and blood glucose levels.

Professor Pilar Vigil states that 86% of women facing menstrual irregularities are affected by endocrine disruption, the most common disorder being hyperandrogenism (80% of cases)¹². It is important to point out that 80% of these women¹³ display insulin resistance or impaired insulin sensitivity (too high insulin levels), when tested for glucose tolerance.

- Management of PCOS consists of a healthy lifestyle with a balanced diet (increased fruits and vegetables intake, low glycemic index food), physical exercise and a medical treatment (Metformine). This will help the woman to resume fertile cycles, and the couple to achieve pregnancy if desired.

Diagnosis of diseases causing cycle disorders: the ovary – 2 – POF

- Premature Ovarian Failure (POF) affects about 10% of women before 40 years-old. This disease is rarely diagnosed at an early stage as it often starts as a hidden ovarian insufficiency.
- The three main factors are auto-immune, genetic and iatrogenic. The affected women produce too little oestrogens and androgens¹⁴. This premature oestrogenic deficiency can be identified by a dry pattern.
- An oestrogens and/or androgens treatment helps temper the mood, decreases the risk of cardiovascular disease, osteoporosis and other complications.

Diagnosis of diseases causing cycle disorders: the ovary – 3 – after hormonal contraception

- After the stop of hormonal contraceptives, cycle duration is variable, likely because the hypothalamic-pituitary-ovarian axis is stabilising after having being shut down during contraception. Furthermore, cervical mucus is of lesser quality for at least six months after stopping the pill¹⁵.
- Cycle disorders can happen during the first two years of being off hormonal contraception, sometimes even longer.

Diagnosis of diseases causing cycle disorders: the ovary – 4 - cyst

The next chart shows an ovulatory dysfunction, mucus phases interrupted by bleeding, and a long and irregular cycle. Tests have revealed an ovarian cyst which has been surgically removed, thus allowing the body to resume normal cycles.

The surgical removal took place at the end of line 2. After that, a progressive recovery process can be observed, with a Peak on line 4.

Diagnosis of diseases causing cycle disorders: miscellaneous

- D vitamin shortage causes androgen levels to rise and oestrogen levels to decrease¹⁶. Obese women display a lack of D vitamin because this vitamin is locked down inside adipose tissue.
- Endometriosis: it is an abnormal growth of the uterine lining outside the uterus, on the Fallopian tubes, the ovaries, the pelvic cavity, the urinary tract or the bowel. Surgery or a hormonal treatment can address this condition if it is diagnosed early enough.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
sticky cloudy crusty	dry	dry	sticky cloudy crusty	sticky cloudy crusty	wet SF	sticky cloudy crusty	sticky cloudy crusty	wet SF	wet	wet	wet	wet	sticky spotted	wet	wet SF	sticky spotted	sticky spotted	slippery wet spotted	sticky spotted	slippery spotted	slippery spotted	most spotted	sticky spotted	sticky spotted	sticky spotted	sticky spotted	sticky spotted	wet SF	wet	wet	wet	wet	wet	sticky spotted	wet strings pink SF	
wet spotted	wet spotted	sticky spotted	wet SF	dry	dry	dry	wet SF	dry	sticky cloudy crusty	sticky cloudy crusty	sticky cloudy crusty	wet SF	sticky cloudy crusty	wet	wet	wet	wet	sticky spotted	sticky spotted	wet SF	dry	wet SF	sticky cloudy crusty	wet egg white	damp clear	wet	wet clear strings SF	dry	dry	dry	dry	dry	dry	sticky spotted		
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sticky spotted	dry	dry	dry	dry	dry	dry	sticky cloudy crusty	sticky cloudy crusty	sticky cloudy crusty	sticky cloudy crusty	sticky cloudy crusty	damp white strings	damp white strings	damp white strings	damp white strings	sticky cloudy crusty	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	damp
wet clear	slippery strings SF	slippery clear strings	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery	slippery

Endometriosis causes bleeding which cannot be drained off, resulting in inflammation and pain, sometimes adhesions in the Fallopian tubes and “chocolate” cysts in the ovaries. Symptoms can be painful menstruation, painful sexual intercourse, menorrhagia, hypofertility (30 to 40% of cases), luteal-phase or fertile-phase spotting, cramps during the menstrual period associated with nausea and diarrhea.

The drug therapy consists of pain medication and hormones to block the ovulation and the endometrium growth. Laparoscopy or laparotomy are performed to treat the adhesions and remove the cysts. Hysterectomy is the last resort (surgical uterus removal).

Diagnosis of diseases causing cycle disorders: cervix cancer

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
heavy	heavy	mod slim	slight spots	slight spots	moist	moist	moist slippery	wet slippery	wet slippery	wet slippery	wet slippery	wet slippery	wet slippery	slippery	dryish	clear and opaque slippery plug	clear and opaque slippery stretchy	clear and opaque slippery	clear and opaque slippery	clear and opaque slippery	slight slippery	dryish	dryish	dryish	very dry	very dry	dry slight slippery clear yellow stretchy	dryish moist	dryish moist	dryish moist	dryish moist	dryish moist	wet			

This chart shows the observations of a 33-year-old woman, user of the Billings Ovulation Method®, who noticed unusual presence of mucus after what seemed to be the Peak day. Examinations revealed a cervical cancer, which was local and could thus be treated at an early stage.

Hypofertility

- Female fertility reaches a peak between 20 and 30 years old, then decreases significantly from 35 years old onwards. One out of two 40-year old women is not fertile anymore.
- Knowing one’s own fertility (recognising the Peak day and applying the rules leading to conception), as well as the support provided by an accredited tutor, are essential to achieve pregnancy in case of hypofertility. Italian and Australian studies, published respectively in 2015 and 2019, confirmed the importance of this knowledge, resulting in a 62 to 70% success rate^{17, 18}.
- If a couple is still hypofertile after 3 or 4 cycles of unsuccessfully achieving pregnancy while applying the rules of the Billings Ovulation Method®, a gynaecological check-up is necessary.
- The tutor can ask: the age of the couple? their conception and pregnancy history? Previous pregnancies / alive children delivered? If the woman had a baby, is she still breastfeeding? Has she taken hormonal contraception? If so, how long and since when did she stop? Any ISTs? Did the woman have abdominal surgery? Did she have any particular disease? What is the couple’s occupation? Any complementary treatments / examinations? Family medical history: Diabetes – Heart disease – Hypertension – Pregnancies / miscarriages in close family? Treatments, alcohol, tobacco, drug abuse, herbal medicine ?

How can the tutor help the couple: Intercourse during optimal fertility period? Intercourse frequency / rareness? Encouragement and empathy. Discuss stress / lifestyle changes, including diet and physical activity.

Tobacco decreases woman's fertility by about 30%. It increases the negative effect of age by disturbing the cycle and deteriorating the tubes and the cervix.

Alcohol can induce irregular or anovulatory cycles (action on hypothalamus).

Cannabis increases the risk of ovarian cyst. THC (Tetra-Hydro-Cannabinol, cannabis' main active molecule) acts as a powerful endocrine disruptor on estrogen, which interferes with the cycle and causes ovulation disorders.

10 to 15% of couples experience fertility disorders. Learning the Billings Ovulation Method® allows them to identify cycle abnormalities, such as abnormal cycle duration, bleeding, shortened luteal phase. Ovulatory dysfunction is the most frequently diagnosed disorder in hypofertile couples (37%). Menopause main symptoms should be looked for in any woman desiring pregnancy. The growing age of women is the main cause of infertility in Europe, where the mean age for a first pregnancy has increased over time.

Other possible causes are: Cervix lesion? Did the woman have cervix surgery – Cone biopsy, loop electrosurgical excision procedure, laser treatment – Ovulatory dysfunction?

Discuss the need for complementary examinations. A medical check-up and follow-up can be advised, with a blood test to measure levels of oestrogen, progesterone, FSH and LH, prolactin, testosterone, thyroid hormones, blood sugar with a glucose-tolerance test, D vitamin.

Conclusion

As Evelyn and John Billings said, "Personal understanding of fertility and infertility is an important knowledge that should be available to every woman.

A woman who knows her own mucus patterns will be able to identify numerous gynecological disorders."

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New WOOMB approved Charting App

The Directors are pleased to announce that after a lengthy trial of a new charting App in Mexico, the Directors have had an extensive demonstration of this App - BillingsAPP and have given it approval to be used as an authentic way to keep a Billings Ovulation Method® chart.

This App has been developed by a Billings Ovulation Method® teacher couple from Mexico and is now available for release. It is currently available in Spanish and English and is soon to be released in French. This App has two versions - the free version allows the woman to keep her chart and send messages to her teacher via email and PDF charts, however the more preferred version is the Premium version which for a fee, allows the teacher to have access to the chart on a daily basis and messages between the couple and teacher are through the BillingsAPP.

If your organization is interested in making this BillingsAPP available to the couples you teach, please make contact with Adrian Perez on adrian@appliedprogramming.io to discuss making it available in your country through the App Store and Play Store.

The Directors have also had discussions with a team consisting of two of our Affiliates - Colombia and Uruguay who are also developing an App as well as platforms to assist in administration and gathering of data for research. We were very impressed and encouraged them to continue with their work.

Currently there are three electronic charting systems which are approved to chart the authentic Billings Ovulation Method®. We encourage you to promote them to your couples.

www.fertilitypointpoint.com



www.nfpcharting.com



BillingsApp



Question to Senior Teachers

How much information should I give at an Initial Instruction for the Billings Ovulation Method®?

Dr Lyn Billings often told us “Keep it Simple”. Keep her words in mind when you are doing an Initial Instruction.

The Initial Instruction is the same for every woman or couple you teach. It is important to go through the 4 phases of a ‘normal’ average length cycle – menstruation – the BIP (early infertile phase) – the fertile phase and the Peak (here you should mention the life of the ovum) – and the luteal phase. The Slide Rule is the perfect tool for this as you can also indicate that the luteal phase is the regular part of the cycle and it is the time before ovulation which can shorten or lengthen. Briefly explain male fertility and the life of the sperm during the various phases of the cycle. This teaches the couple about their combined fertility. Explain how the words from her chart correspond to the response of her cervix to her hormone levels, which will enable her to understand her fertility or infertility on a daily basis.

With this basic information, the couple should then be taught the four Rules of the Method, and the reasons for them, giving particular emphasis on the way the couple currently want to use it – to achieve or avoid pregnancy. Again, the Slide Rule is perfect for this. Dr Lyn Billings always emphasised that a couple should be taught all the Rules at this Initial Instruction...you may never have the opportunity to see this couple again.

What she needs to know is how to keep a daily record. Ask her to use her own words to describe sensation and visual observations, keeping her descriptions short, and using the same words for observations which are the same. Emphasise the primary importance of sensation over visual observations and confirm that it is never necessary to use her fingers to ‘find’ or touch any mucus. Explain why we ask them to abstain from intercourse for the first two weeks and always organise a follow-up interview. Do not put too much emphasis on the words she will use to describe her observations. It is when she comes back for her chart review that you will discuss with her the words she is using and if necessary, help her to choose appropriate words she considers best describes her own observations.

Explain that this follow-up visit will be the time when her unique fertility symptoms and patterns will be interpreted with your help and they will then be able to apply the Rules either to achieve or avoid pregnancy. Her own chart will become the tool you will use to help them in their individual situation, regardless of the stage of the Continuum she is currently experiencing.

Keep it simple – teach her the phases of the cycle, the patterns of fertility – unchanging pattern indicates infertility and changing, developing pattern is a recognition of potential fertility. If she is wishing to achieve a pregnancy make sure she understands the significance of the slippery sensation and although you ask them to abstain for the first two weeks of charting, if she does feel slippery over this time, it would be a good time to have intercourse – for this woman it may be a rare event!

From the perspective of the Teacher, when you first work with the couple you will take details on a History Card of the couples’ fertility health and her life stage. This will give you some clues as to what her chart may reveal. Although your ongoing teaching should relate to each woman’s individual circumstance, every Initial Instruction should explain all the events of a normal average length cycle and all the Rules of the Method.

Remember she doesn’t need an explanation of breastfeeding charts if this is not her current situation; if she is 25 she does not need to know about pre-menopause.

Remember to Teach with Love.

Valuable resources: two new YouTube clips on this topic:

BOM Initial Instruction How-To: <https://youtu.be/w8f0PFSLM8c>

BOM Initial Instruction Demonstration: https://youtu.be/vo_yJk27Gtk



Some Clarifications on a recent journal article



Gillian Barker

With many of our Billings Ovulation Method® teachers and doctors expanding their knowledge by attending different courses and reading journal articles some questions have been sent to the Senior Teacher for clarification. The most common is regarding the day of ovulation in relationship to the Peak with the greatest number of queries wondering if the Peak Rule needs to be revised.

John Billings was first to use the words The Peak based on the Billings Ovulation Method® criteria, however even though all NFP methods use the word “peak”, the definitions for a peak are all different.

In the Bulletin, Vol 46, No 2, July 2019, on page 15 Questions to Senior Teachers discussed the evolution of the language surrounding the definition of the Peak according to the Billings Ovulation Method®. With the now clear understanding of the role of the different types of mucus, the function of the Pockets of Shaw and the ovarian hormones we know all of the criteria for a Peak must be present to identify ovulation.

The Billings Ovulation Method® user is taught the importance of the sensation at the vulva and knows that the following **3 criteria must be present** before a Peak is marked on the chart:

1. Changing developing pattern of variable length
2. Leading to slippery sensation
3. Followed by a distinct change to no longer lubricative

Not only is there variation in the definition of peak in different NFP methods, but the way the day of ovulation is established can differ between research methods. Some researchers use regular ultrasound to define the day of ovulation. Some use LH, others use oestradiol, or one of its metabolites, as a predictor of ovulation. Progesterone or urinary pregnanediol levels are also reported in some papers as a confirmation of ovulation. Then there are papers that use a combination of any of the above. Depending upon which method the researcher has used to determine the day of ovulation many authors report the day of ovulation ± 1 day or even more.

With all of these variations, how can we be sure that the post ovulatory infertile phase as defined by the Billings Ovulation Method® and that being reported by the scientists align?

First of all, we need to look at the intent of the paper, the hypothesis and then the conclusion. Is the hypothesis proved or disproved? Some papers do not propose to prove or disprove the validity of any form of Natural Family Planning; during the discussion they may look at certain aspects of different methods, but we should only be concerned about the conclusion. What have they proven?

A paper by LF Blackwell et alⁱ has caused great concern for some of our teachers and the doctors we work with. The paper starts with a short summary of the paper.

The study question: Do the basal body temperature (BBT) shift and the cervical mucus markers for the beginning of the post-ovulatory infertile period (POIP) of a menstrual cycle agree with the corresponding urinary pregnanediol glucuronide (PdG) threshold value?

Summary answer: Perfect agreement between the cervical mucus markers and BBT shift and the hormonal definition of the start of post-ovulatory infertility occurred for only 7–17% of the cycles.

The main results and the role of chance: The BBT and cervical mucus markers differed significantly in their identification of the beginning of the POIP when compared with the PdG excretion rate of 7.0 mmol/24 h. The observation that the BBT shift day and the mucus peak day could be identified even though the PdG excretion rates were still at baseline levels in some cycles could lead to an unexpected pregnancy for women using these natural family planning (NFP) indicators.

Unexpected pregnancy? Yes, you did just read that! This is like fingernails being dragged on a chalk board to any Natural Family Planning teacher or user! We know there is no method of family planning for the avoidance of pregnancy that is 100%, however this puts our Method into question when we read or hear something like this. Let us look a little closer at the study before we think about changing Rules.

First of all, look at the hypothesis or in this case the Study Question. This one is questioning if the post ovulatory infertile period for BBT shift, cervical mucus markers and the ovarian hormone pregnanediol glucuronide align, i.e. the phase of the cycle covered by the Billings Ovulation Method® Peak Rule. The shift in the BBT, the changes in cervical mucus and the reactivation of the Pockets of Shaw are all produced by the rise in progesterone following ovulation. Urinary pregnanediol glucuronide is the main metabolite of progesterone.

Some things arising from the summary need to be discussed. Firstly, how the beginning of the POIP was defined:

1. the first day that the PdG excretion rate equalled or exceeded a threshold value of 7.0 mmol/24 h (Blackwell et al., 2013);

The threshold value for PdG was established by the statistical analysis of ovulatory menstrual cycles containing serial pregnanediol data. Extensive studies using the Ovarian Monitor validated this threshold and was published in 1991ⁱⁱ. The successful use of the Ovarian Monitor proved this value to be correct.

2. the evening of the day of the BBT rise (Gross, 1987) plus 2 days (BBT +2);

The BBT shift day is the first day of three consecutive readings with the third highest being 0.2°C above the preceding six lower readings. However, for the purpose of this article I am not going to discuss the BBT further.

3. the day of the mucus peak (Martinez et al., 1995) plus 4 days (M +4).

This paper defines "the self-observed peak day for the cervical mucus" as being "the last day in a menstrual cycle of mucus that has the characteristics of being clear or transparent, stretchy, wet and slippery or lubricative." The author reported "Each subject's estimates of the beginning of the POIP were checked by the principal investigators". It is important to note that not one of the principal investigators are or were part of the Billings Ovulation Method® organisation.

Some women included in the study were "using a variant of the Ovulation Method" with a similar definition for peak mucus as the overall study. It is unknown if all 3 criteria for a Peak were present in determining the reported mucus peak, but it can be assumed from the information above that the 3 criteria were not considered part of the definition of a peak in this study.

Look at the results in Table 1, pg 449, LF Blackwell et alⁱ, comparing the start of the POIP relative to the PdG threshold day for the fertile period, the percentages for mucus peak +4 are:

Later than PdG	73/90 (81.1%)
Same day as PdG	8/90 (8.9%)
Earlier than PdG	9/90 (10%)

This means that 81% of women in this study using cervical mucus markers reached their POIP later than the PdG reached the threshold or the POIP; in 9% of women in this study both the cervical mucus marker method and the PdG threshold reached the POIP on the same day and in 10% the cervical mucus marker reached the POIP earlier than the PdG threshold.

The Billings Ovulation Method® teacher and user understand that ovulation can occur on the day of the Peak, or day 1 past the Peak, or in a lesser number of cycles day 2 past the Peak. There is no way of knowing from the mucus symptom alone on which day ovulation occurs in any given cycle. The changes in the PdG levels are directly related to the luteinisation of the follicle and the formation of the corpus luteum as a result of the LH surge and ovulation respectively. The day of ovulation can be calculated by the fall in oestrogen levels and the beginning of the rise in PdG levels. It is therefore understandable that the start of POIP according to the PdG may be earlier than Mucus peak +4.

However, the reverse is of concern for NFP. Or is it? Do we need to consider changing the Peak Rule based on this study's findings that 10% of the women studied marked a Peak too early?

What was the intent of this paper? *Do the basal body temperature (BBT) shift and the cervical mucus markers for the beginning of the post-ovulatory infertile period (POIP) of a menstrual cycle agree with the corresponding urinary pregnanediol glucuronide (PdG) threshold value?*

The paper is relating the beginning of post ovulatory infertile days to the pregnanediol glucuronide results. All methods of NFP need to consider the day that ovulation occurs in relation to the start of the POIP, ensuring intercourse would not result in a pregnancy, i.e. what day did ovulation occur and when will the ovum no longer be viable?

Professor Brown's patient explanation of the Variants of the Cycle has helped us understand that not all follicular activity ends in ovulation. His careful examination of Billings Ovulation Method® charts with corresponding ovarian hormone profiles showed that when the Peak was correctly identified it was always associated with ovulation at that time. This is why the Billings Ovulation Method® has such stringent criteria for the recognition of the Peak.

In a paper by Professor Brownⁱⁱⁱ, he states "... the study has shown that the Billings Ovulation Method® correctly identifies fertility and infertility in all stages of the continuum, the infertile types being recognized by absence of the characteristic mucus symptoms of the fertile ovulatory cycle."

What are the *characteristic mucus symptoms of the fertile ovulatory cycle*? Changing developing pattern, of variable length, leading to slippery sensation, followed by a distinct change to no longer lubricative or as John Billings so aptly named it a Peak.

This study has not compared the authentic Billings Ovulation Method® with the pregnanediol glucuronide, but I have. In 1987 I taught the first person outside the laboratory to use Professor Brown's Ovarian Monitor. I have looked at countless charts and ovarian hormones, correlating the two and I have never encountered a situation where the Rules of the Billings Ovulation Method® were compromised. It is through my work with Professor Brown that I was led to the Billings Ovulation Method®. The science showed me the integrity of the Method. The Method showed me the philosophy of life, love and marriage.

This is not a criticism of Blackwell et al. We understand the difficulty involved in gathering data for research, in writing the paper and then getting the paper published. It would be very difficult to then compare every cervical mucus method in such a paper. So, when we read a paper or hear a presentation we need to know "Are they talking about the Billings Ovulation Method?" before we think about the impact this may have on the Method.

So, do we need to change the definition of the Peak or alter the Peak Rule? Absolutely not!

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On 3 October 2020 Pope Francis released his latest Encyclical *Fratelli Tutti* On Fraternity and Social Friendship in which he urges us to embrace all people of good will, "with a love that transcends the barriers of geography and distance...the essence of a fraternal openness that allows us to acknowledge, appreciate and love each person, regardless of physical proximity, regardless of where he or she was born or lives."

The full encyclical can be read at: http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20201003_enciclica-fratelli-tutti.html

Lord, Father of our human family, you created all human beings equal in dignity:
pour forth into our hearts a fraternal spirit and inspire in us a dream of renewed encounter,
dialogue, justice and peace.

Move us to create healthier societies and a more dignified world,
a world without hunger, poverty, violence and war.

May our hearts be open to all the peoples and nations of the earth.
May we recognize the goodness and beauty that you have sown in each of us,
and thus forge bonds of unity, common projects, and shared dreams. Amen.

Remembering Erik Odeblad



Erik Odeblad MD PhD, Emeritus Professor of Medical Biophysics, University of Umeå, Sweden, was born on January 31, 1922 in Kristinehamn, Sweden. He studied medicine at Karolinska Institute in Stockholm and was licensed as a physician on February 6, 1952. He achieved the qualification of M.D. on April 21, 1952 at the Karolinska Institute and became Associate Professor in Medical Isotope Research there in 1952. In 1953 Erik was awarded a Rockefeller Foundation Fellowship at the University of California, Berkeley and Stanford.

He did his internship and residency in Obstetrics and Gynecology at the Sabbatsberg Hospital, Karolinska Institute from 1954 – 1961, was Research Fellow of the Swedish Medical Research Council at the same department between 1961 and 1966, achieved a Ph.D. in Physics at the University of Uppsala on April 22, 1966. Erik Odeblad was appointed Professor of Medical Biophysics at the new University of Umeå on July 1, 1966. He retired from this position on June 30, 1988 when the department was restructured, and he was named Emeritus Professor. Erik married Anne-Marie, a nurse in the unit of Transfusion medicine at the University Hospital in Umeå, in 1952 and they had four children and ten grandchildren. Erik Odeblad died on October 17, 2019.

Before the age of 30 Erik began publishing and, from 1951 to 1964, he co-authored 98 articles on autoradiographic studies of various biological and histological processes and effects. Those papers have been cited 623 times. As early as 1952 he was publishing on observations of the cyclic phases of the ovaries and vagina in mice, the development of the mammary glands and the effects of oestradiol in puberty and in pregnancy, and the effect of oestrogen and progesterone on the endometrium in the uterus of rabbits.

In 1955 he published the first of another sixty plus papers on his pioneering work in the field of magnetic resonance imaging of various human tissues and structures – the initial work was on cartilage. In 2012 he was recognised for his lifetime's work in this field with the European Magnetic Resonance Award. That first paper, entitled *Some Preliminary Observations on the Proton Magnetic Resonance in Biological Samples* published in *Acta Radiologica* (Stockholm), proved him to be the pioneer of this field. It has been cited 94 times.

Erik Odeblad's first published mention of cervical mucus was in 1958 with the publication in *Acta Radiologica*, of *Studies on the penetration of radioactive ions through human cervical mucus*. However, his seminal work *The Discovery of Different Types of Cervical Mucus and the Billings Ovulation Method*, published by the Ovulation Method Research & Reference Centre of Australia in the *Bulletin of the Natural Family Planning Council of Victoria* Vol 21 No 3, September 1994, has been cited 50 times in scientific peer reviewed articles and countless times by advocates and teachers of natural family planning and particularly of the Billings Ovulation Method®.

He went on to publish more than twenty articles in the *Bulletin*, notably *Investigations on the physiological basis for fertility awareness*, in Vol 29 No 1, March 2002.

Erik's work on cervical mucus and fertility was also published in the *International Review of Natural Family Planning* Vol VI, No 1, 1983, in *Acta Obstetrica et Gynecologica Scandinavica* 1958, and in the *Journal of the Irish College of Physicians and Surgeons* 1997 (26)1.

In addition, he spoke at conferences in eighteen different countries from 1967 to 1996 - from Melbourne to Madrid, from Rome to Rio de Janeiro, in Europe, on the Sub-continent, in Japan and South America he shared his knowledge generously and was always happy to answer questions and collaborate on research.

Erik Odeblad came to Sydney in 1977 as a visiting lecturer at a veterinary conference where he spoke on his research into the mucus discharge during oestrus, the results of which were useful to vets involved in artificial insemination of livestock. Following his presentation to the conference, he was approached by Dr Kevin Hume of Sydney, a General Practitioner who had become interested in the work of the Drs Billings in Melbourne. Dr Hume suggested to Professor Odeblad that his work might explain, in part, the cyclic discharge that women were charting when using the Ovulation Method.

Professor Odeblad subsequently met the Billings and Professor James Brown and thus developed a collaboration that continued throughout their lives.

In December 2001, just a month before his eightieth birthday, Erik described his ongoing work on cervical mucus as follows:

In 1959 I published a study in which a molecular model for the sperm conductive mucus was presented.

In a discussion to that paper I proposed for the first time that the cervical mucus contained different types of secretions coming from different crypts, a rather temeritous suggestion at that time.

A method was now developed to obtain and analyse mucus produced in single crypts without contamination from other crypts in the cervix.

This work resulted in my Ph.D, thesis in physics, paper no 212, in 1966. The same year I moved to Umeå in North Sweden and became the first professor in Medical Biophysics at the new university of Umeå. I could now continue and expand my research in the cervix and its secretions.

In 1969 two types of mucus could be identified and characterised They were called type E (estrogen-stimulated) and type G (gestagen-stimulated). About the same time the first therapeutic application was developed, the microsurgical operations on diseased cervical crypts, published 1971. Continued studies indicated that the type E mucus was in fact composed of two types, now called L and S of which only type S propagates sperm, while L mucus attracted malformed and slow-swimming sperm, published in three papers, in the years 1977 – 78.

The most important practical application of these new results was to explain the fertile and infertile periods in women using Natural Family Planning (NFP), and also help to extend the use of NFP to groups with difficulties in using NFP such as post-pill women, and in various diseases. The 'build-up' of the fertile period could now be explained on the basis of the L + S mucus model.

In the meantime, the G mucus was subdivided into two types, called G- and G+ (before and after ovulation, respectively), and a variety of the L mucus coming from the transformation zone on the portio was identified (Lt).

The microsurgical treatment of diseased crypts was also successively developed, especially to help women with difficulties to conceive. This approach very often involved microsurgical intervention in the uppermost part of the cervix, and as a result of these attempts a previously unknown secretion called mucus type P was discovered and identified in 1991. The letter P alliterates to "peak", the day of peak fertility, which is usually the last day of the mucus symptom in NFP.

The microsurgical procedures and the P mucus are described in some detail in the teacher training manual used in the university course for NFP teachers at Umeå University, but presently available only in Swedish. This teacher training manual also shows proton NMR spectra of the mucins from G, L, S and P mucus as well as proton NMR relaxation spectra, and the crystallisation patterns.

All this information together strongly supports the hypothesis that the four mucus types do not arise from various degrees of dilution or concentration of one type of mucin, but that there are four different mucins produced by different areas of secretion in the cervix. We also know that these different secretory units respond differently to hormonal stimulation. G units (crypts) respond to progesterone and other gestagens, L units to increasing estrogen levels, S to maximum estrogen levels and P to decreasing estrogen levels. These different responses are probably due to different receptor properties. There is also strong evidence that noradrenaline promotes the secretion of S and P mucus and may in part inhibit the L mucus secretion while the G secretion is not affected.

One fundamental question is the sub-microscopic structures of the G, L, S and P mucins. Chemical and microbiological studies seem to be important to clarify this question, and, especially, studies with transmission and scanning electron microscopy are supposed to have very great value in this respect. Collaboration was therefore established with Helvia Temprano and Mikaela Menarguez, both in Spain.

A significant methodological advance was made some years ago when special cotton swabs were designed for obtaining very thin spread-out specimens of cervical mucus. The thinking behind the design was to use

as little cotton as possible to minimise the absorption of water (and dissolved substances) and to restrain the cotton material in thin rings, so that the cells which happen to be localised between these rings do not receive any mechanical damage. The method, published in 1996, made it possible to identify and study in detail the secretory processes and cell morphology of cervical secretory cells.

Such a study was published in 1997, together with its historical background of mucus investigation. In this report cells of the various mucus types S, L, G, P2 and P6, and also the Z cells were studied. The P6 cells were especially an object for investigating the biosynthesis and release of mucus and cell sequences rest – biosynthesis – release – rest were identified. The Z cells turned out to be especially interesting.

They seem to release the small “granules” which have been described earlier in the literature and seem to contain mucolytic enzyme activity, which slowly breaks down all mucus types and, in that way, may have a regulatory function of mucus activity, perhaps important in sperm migration and selection.

Cells are regularly exfoliated together with the mucus in all the secreting structures in the cervix, however as experience indicates, the cells present in the P6 type mucus are most easy to recognise and study.

The reason for this is that the mucus, recently secreted from the P6 cells, shows a very typical triangular pattern in the well spread-out, thin, dried and unstained specimens. The studies were reported in papers and have been continued during the last 4 – 5 years, in part together with dra Helvia Temprano in la Coruña, Spain and dra Mikaela Menarguez in Murcia, Spain. These studies have also been put in relation to recent advances in cell and molecular biology in order to try to understand more about the physiological processes occurring in the P6 mucus in the cervix.

In the cervical smears obtained with the spread-out technique using these specially designed cotton swabs it has been possible to identify mucus “units” emanating from single P6 crypts, count the number of exfoliated cells and classify them according to their secretory states and states of degeneration (apoptosis, necrosis, etc).

The P6 cells producing the typical triangular patterns are called the Pt cells. As already mentioned, they are seen in various states of mucus biosynthesis and release. It seems that in any of these secretory states the Pt cells can be subjected to apoptosis, and less commonly, to necrosis. The Pt mucus itself can be detached from the cells and confluence to larger mucus masses. Probably the mucus undergoes post-secretory changes so that it loses its capacity to form regular crystallisation and more irregular patterns are formed and finally disappear.

Also, pieces of mucus, still retaining their regular triangular patterns can occur and adhere to other cells such as lymphocytes and leucocytes and even to sperm cells, and, in case vaginal epithelial cells can contaminate the samples, also to vaginal cells. All these adherence phenomena may be due to interaction between Pt mucus and the membrane glycoproteins of other cells. The adhesion to sperm cells may be of importance for sperm selection and in certain cases of infertility, but much more future studies are required to elucidate these questions.

We have also found that there exist Pt mucus of different varieties. Besides the normal P6 form we have with certainty identified one with four-fold symmetry, P4 and there may be at least two other forms. They are all less common than the ordinary P6. We do not yet know how these varieties develop. They may occur due to some kind of mutation or alternative transcription (isoforms), depend on single nucleotid polymorphism (SNP) or other factors in the transcription or translation.

There may also occur factors in the vesicular traffic in the cell which may favour one or the other of different variants of the synthesised mucus. Further research may throw more light on the cellular events involved in mucus production and biological properties. We also know that lymphocytes, leucocytes and macrophages are present in the crypt mucus, their role will also be studied in ongoing studies.

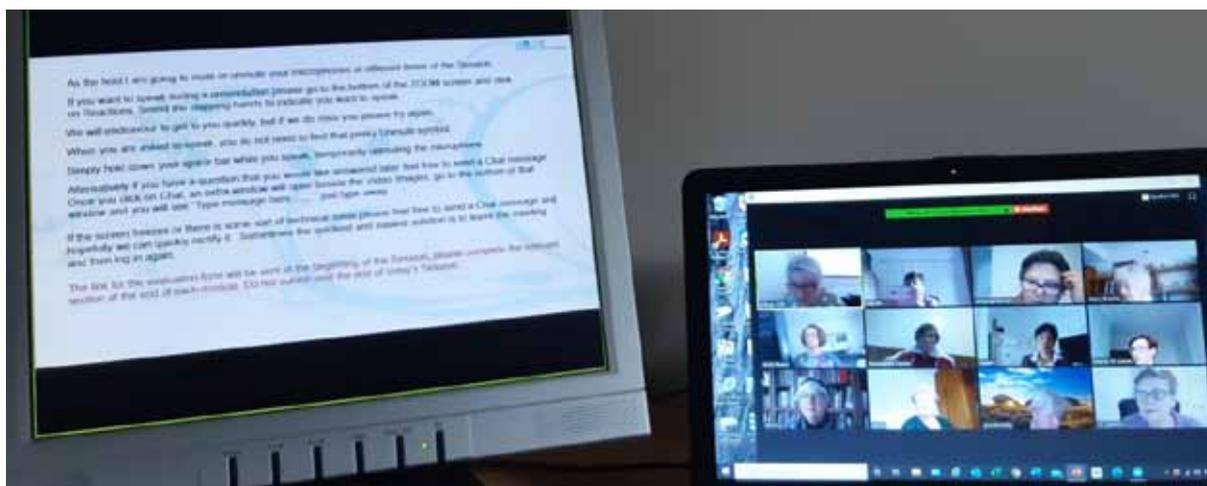
Emeritus Professor Erik Odeblad was to continue working for another 15 years before he finally began to slow down, though he was still reported to be shovelling snow from the path at the front of his house in the years before his death at the age of 97.

WOOMB International news

1. Advanced Teacher Training Online Course

COVID 19 and the restrictions on travel have been the inspiration for two of the WOOMB Directors to develop and present an Advanced Teacher Training Course which overcomes these restrictions. One of the obvious benefits has been that it also overcomes geographical limitations – the one remaining difficulty is the varying world time zones.

This Course has been developed for the upskilling of accredited teachers and will be an ideal way to ensure that teachers meet re-accreditation requirements. The first of these six session courses was offered to Australian teachers in August with a second course currently being offered over October and November to Teacher Trainers from the Americas - a truly international event – two trainers from Australia working with participants from USA, Canada, Brazil, Mexico, Argentina, Colombia, Costa Rica and Spain.



Australian course above, Americas course below



Keeping numbers of participants restricted to 12 screens has proved to be an ideal number to ensure the interactive Teacher Training Program is dynamic and effective. Three hours once a week has been allocated for the presentations, each participant having previously agreed to make themselves available for each of these sessions and to complete a short mock Case Study between sessions. A Curriculum is being written to accompany the Course and will be available to Affiliates under licence from WOOMB International Ltd. The evaluations have been very positive and it is hoped that trainers will be able to offer this course to all accredited teachers over time.

2. Annual General Meeting of Members of WOOMB International

The WOOMB International AGM was held on Friday, 6th November 2020. The Chair, Marian Corkill, tabled the Annual Report in which she noted the highlights of the year had been the success of the WOOMB International Conference and Teacher Training Programs held in Cotonou, Benin in March 2020 and the extraordinary efforts of Billings Ovulation

Method® teachers around the world during this extremely difficult year of the COVID 19 pandemic. The Directors were delighted to welcome Guatemala, Portugal and Panama to the team of WOOMB Affiliated organizations in 2019/20. Guatemala came as a result of the outreach by WOOMB Mexico, Portugal the result of outreach and collaboration between Spain and Brazil whilst Panama was the result of outreach by WOOMB Costa Rica. Costa Rica has also recently offered a Teacher Training Program in the Dominican Republic and we pray that this will also result in Affiliation.

It is particularly encouraging to see the wonderful and innovative use that has been made of email, ZOOM and other media platforms to facilitate teaching and training of teachers. The Directors and Associate Directors have also made use of these options to keep in regular contact and remain involved in discussion and decision making throughout the year.

During this reporting period WOOMB has accredited new teachers for Nigeria and Russia. WOOMB only offers accreditation to those trainees who do not have an affiliated organisation within their own country. We are delighted that there are more trainees from Nigeria and Russia very close to accreditation so look forward to applications for Affiliation from these countries in the near future.

September 2020 was the time of the three-year re-affiliation process for all WOOMB affiliates and also the time for all Directors, Associate Directors, Consultants and Language Liaison Persons to recommit to another three years with WOOMB International. We are pleased to share with our Bulletin readers some of the highlights from reports received of the work that has been going on around the world over the past three years.

The Directors were delighted to welcome Bernadette Davies, elected as a new Director of WOOMB International Ltd, and look forward to benefitting from her wisdom. The Directors also warmly acknowledged the long service of Patrick Kennealy who had announced his retirement as Company Secretary and Public Officer, positions he has held since the formation of WOOMB International Ltd.

Following the business of the meeting the Directors surprised Patrick Kennealy and Joan Clements by awarding them both John and Evelyn Billings Awards for Outstanding Service. Both Patrick and Joan were overwhelmed and very moved to be so recognised.



Patrick and his wife, Marilyn



Joan and her husband, Stephen

Curriculum Vitae – BERNADETTE DAVIES B.App.Sc (physiotherapy)

Bernadette, a trained physiotherapist, is currently the Coordinator of the Billings Ovulation Method® Teacher Training Correspondence Course (TTCC). She has been an accredited teacher with OMR&RCA Ltd – the Australian Affiliate, since 1990 and has been a member of the Education Committee since 2015.

Bernadette was originally trained in the Billings Ovulation Method® through the Correspondence Course and has been tutor in this course since 2003. She has been involved in the training of teachers in Australia – her home State, South Australia, and at International Conferences in Melbourne and Sydney as well as in Hong Kong, Vietnam and Malaysia.

In 2014 Bernadette was part of a team that set up the Fertility Fundamentals Clinic, the first Australian natural fertility clinic that incorporated fertility education and medical treatment as an alternative to IVF. In 2008 she was trained by the RACGP to be an Education Activity Representative for OMR&RCA QI&CPD activities as part of their Accredited Provider Status.

Bernadette is married to Malcolm and they have 5 children and 2 grandchildren.



Citations for John and Evelyn Billings Awards to Joan Clements and Patrick Kennealy

On the occasion of the 2020 Annual General Meeting of WOOMB International Ltd, the Directors are delighted to announce the granting of the John and Evelyn Billings Award to two very worthy recipients.

In choosing recipients for the John and Evelyn Billings Award, the Directors acknowledge those who, by their actions, have shown they have the passion to be active participants in the spread of the authentic Billings Ovulation Method® to every woman on earth. In pursuing this passion there will always be setbacks and a worthy recipient is someone who does not let setbacks stop them from continuing to spread the “good news” of the Billings Ovulation Method®

Joan Clements

The Directors of WOOMB International Ltd wish to acknowledge and thank Joan Clements for the contribution she continues to make for the Billings Ovulation Method® and take pleasure in awarding to her the John and Evelyn Billings Award.

The most difficult thing to do when talking about Joan, is keeping things short! Joan’s contribution to the organisation, teaching and promotion of the Billings Ovulation Method® covered many areas- Joan was an Accredited Teacher of the Method; a member of the Education Committee of OMR&RCA; Manager of the Billings Family Life Office in Melbourne; Delegate to the National Natural Family Planning Board in Canberra; Graduate from the John Paul II Institute for Marriage and Family; one of the four founding Directors of WOOMB International and its first Chair of the Board.

Joan travelled internationally to train teachers in the Billings Ovulation Method®, visiting Malaysia, Singapore, New Zealand, China, and finally Vietnam. Here, Joan along with another accredited teacher, Gillian Barker, conducted many Billings Teacher Training Courses over a period of 3 years. This program was an outstanding success leaving the country with hundreds of accredited teachers spreading the beauty and benefits of the Method to couples throughout Vietnam.

A highlight of Joan’s career with the Billings organisation must have been as our representative at the Synod on the Family with the Bishops in Rome. Joan gave an intervention and brief statement on how the Billings Ovulation Method® could solve many problems that had been discussed on this occasion. For her input at this event, Pope Francis awarded Joan the Cross pro Ecclesia et Pontifice, which was presented to her by Archbishop Denis Hart.

Joan has been our Webmaster for many years and also the Editor of the Bulletin – a role given to her personally by Dr John Billings. We are delighted that Joan remains the Editor of our wonderful magazine – the Bulletin.

Joan has been a beautiful gift to all of us and we wish her and Steve many happy years ahead as they travel around Australia with their caravan, visiting family and friends and enjoying their retirement years to the full. We take pleasure in awarding to her the John and Evelyn Billings Award.

Patrick Kennealy

We acknowledge Patrick Kennealy for his tireless voluntary contribution to the Billings organisations over many decades of an already very busy life. The time has come for him to retire and as he leaves, he takes with him our grateful thanks.

Patrick has been actively involved with the management of the financial and legal requirements for both the Australian Affiliate of WOOMB International, OMR&RCA, and for WOOMB International Ltd, acting as Company Secretary and Treasurer. His role has covered a half-century of selfless dedication. He worked closely with Dr John Billings in the management of all WOOMB finances and the incorporation of WOOMB International Ltd in Australia. During the 1990s, the AusAID funding of the work in China and their reporting requirements was an additional task that Pat readily accepted. We know how much John and Lyn depended on Pat’s knowledge and integrity to support the work they knew was their mission to the world.

Patrick has always been generous with his time and his expertise and his retirement from these roles leaves a huge gap in both organisations. We know he has not been alone in his involvement: Patrick and his wife Marilyn, an Accredited Teacher of the Billings Ovulation Method®, are both part of the fabric of the Billings family here in Australia and we have been enriched from knowing them.

With our gratitude, we have pleasure in awarding Patrick the John and Evelyn Billings Award for his role in spreading the good news of the Billings Ovulation Method®.

News Around the World

Billings Europe:

On Sunday 8 November, a WhatsApp group meeting was held for representatives of Billings organisations from around Europe. The meeting was a great success; 30 participants attended: France, England, Scotland, Ireland, Italy, Croatia, Slovakia, Hungary, Germany, Belarus, Russia, Romania and Spain. Those who did not attend have requested the information to begin their procedures for the activation of the app in their country. The meeting discussed news since the last meeting and the new BillingsApp. New developments included initial involvement from Poland and the Accreditation of Svetlana Makrova from Russia. There was discussion of the new BillingsApp and a report on the new Hungarian website, also the good news that the Spanish College Ethics committee has given approval for a study on Stress Cycles associated with the Pandemic - recruitment for the study can now go ahead.



Affiliates are encouraged to let clients/ couples know the resources that are available, so they can choose which best meets their needs. The representatives from so many countries are enjoying the opportunity to come together as an umbrella group to discuss items of interest to them all. The next meeting of Billings Europe will be held in mid-March 2021.

Indonesia:

Being a nation of many islands presents its own problems, but the team at PUSIMOB have conducted teaching and training and had meetings in person and via ZOOM as well as giving lectures to midwifery and nursing students. All Parishes in Indonesia are required to offer the Billings Ovulation Method™ which is wonderful but a huge undertaking for our teachers.

Croatia:

Since the very successful International Conference in 2016, the work in Croatia has gone from strength to strength. They are teaching and training teachers, working with university students in a training course as well as working with teens and adolescents through TeenSTAR. Billings Ovulation Method® has been offered to couples in marriage preparation courses, medicine and theology students, pro-life activists, deacons and priests. Marija Ćurlin participates as a member of the Marriage and Family Council of Croatian Bishops Conference in a project of advancement of marriage preparation courses.

Egypt:

Activities include, regular marriage preparation programs, teaching Billings Method™ & Bioethics (twelve/year) covering 5 Archdioceses in 8 governorates. Tailored course for adolescent and youth and special sessions for Priest and religious.

Peru:

Highlights have been participating in the International Conference in Costa Rica in 2018 and developing a training course in Bolivia.

Benin:

Since the International Conference in March, have been working particularly with couples having difficulty conceiving and with students in colleges.

Scotland:

Provides information on the Billings Ovulation Method® to women and couples throughout Scotland and gives fertility

awareness presentations in more than half of the dioceses in Scotland's Marriage Preparation Courses.

Hungary:

Have organized "Life for Lives" pro-life conferences and Billings Ovulation Method® teacher training courses.

Spain:

Have maintained a presence in the international groups Billings Europe and WOOMB Latinoamerica, and are currently consolidating their internal structure.

Colombia:

Have set up an organizational structure and standardized protocols for teaching, certification of teachers and re-accreditation. Implemented a system of record keeping, accounting system and structured their communications system. In addition they have been working on software design for daily observation recording and administration.

Philippines:

Busy running teacher training courses and also establishing a centre in Baguio run by 20 accredited volunteer teachers who have been undergoing training over the past three years.

Sweden:

Have conducted basic training courses and workshops and prepared and printed the booklet "Handbok i Billingsmetoden®" 2019 (Teaching the Billings Ovulation Method Part 1).

Mexico:

Activities have included: holding a Billings National Congress each year, with an average attendance of 300 people, and teacher refresher workshops, given by Senior Teachers. Authorized the use of the BillingsApp and have legalized the registered trademark "WOOMB México®", released the association's website: www.woombmexico.com and established a presence on Twitter, Instagram and Facebook to promote webinars, and events of the BOM in Mexico.

Ireland:

Many teachers attended an Extension Training Course in November 2017, presented by two WOOMB Directors. Each year seminars were presented and promotional stands at Pregnancy and Baby Fairs organised.

Romania:

Have given presentations on fertility and the Billings Method to 231 engaged couples and worked with students aged 14 - 20, presenting topics such as the virtue of chastity, the choice of abstinence and the importance of gradual preparation for family life. 235 female students have been introduced to the cycle of fertility and infertility and how to track and recognize their own cycle according to the Billings Ovulation Method®. In Rome in November 2018, on the 50th Anniversary of Humanae Vitae, three of our teacher trainers attended a congress with the Italian Billings teachers followed by 3 days of a refresher course.

Costa Rica:

Organization of the WOOMB International Conference in 2018, preparation of a monthly bulletin, virtual teaching to couples and training of teachers (basic & upskilling TTP and Extension TTP) and promotion of the Method in pre-marital catechesis.

Canada:

The team in Alberta have continued to have great success training new teachers through webinars. Their newsletter is now produced in French and English and Quebec Billings group are now able to train their own teachers independently in French. Natural family planning presentations are mandatory at pre-marriage courses in Vancouver Diocese (128 couples given Billings Method presentation).

Ecuador:

Promotes the method through conferences in parishes, pre-marital courses and radio interviews. We work with a gynaecologist, who is a certified teacher, when a woman shows an irregularity in her chart and seek to have her fertility restored.

Vietnam:

Over the past three years, WOOMB VN has been able to spread the BOM to 18,952 people who want to live their lives fully, especially adolescents.

Argentina:

As a result of a large group attending the International Conference and training in Costa Rica an Education Committee was established and they are working to accredit more teachers. We joined the monthly prayer circle initiative. We have developed a new logo and have conducted 3 webinars with other WOOMB Affiliates.

Guatemala:

We are working on training teachers with the help of the Family Pastoral Support of the Episcopal Conference of Guatemala. We have participated in virtual courses and in meetings of WOOMB Latinoamerica.

USA:

Appointed a Director of Development & Strategic Planning who has conducted webinars for national and international seminars and addressed the Unexplained Infertility Summit. They have had some fundraising success which has enabled additional training for healthcare professionals. A webinar series for medical practitioners and quarterly webinars for teachers and a series of Billings Fellowship Hours via ZOOM has allowed teachers to remain connected.

Pakistan:

Have trained teachers and worked with parishes, couples, youth, medical and para-medical staff and seminarians and worked with the Government sector.

Trinidad and Tobago:

Continue to teach in person and online, now also involved in marriage education programs and, since the pandemic, have begun offering webinars which have attracted more clients. Have given presentations at health fairs, churches and antenatal clinics.

New Zealand:

Highlight has been video-conference study group to support trainees working through the correspondence course towards accreditation. The pandemic has had the advantage of making many people more comfortable working online.

France:

Made improvements to the organisation to be more professional and attractive to couples and created a communication team to promote the organisation. Offering support to African countries where French is spoken and translating authentic materials.

Brazil:

Have held #1 and #2 National Congress of Billings Ovulation Method®, conducted a webinar for more than 500 teachers and also a Teachers Training Course on-line.

Uruguay:

Been involved with the Costa Rica Conference and on-line Medicine for Fertility Course with Dr Juan Stecher of Chile. Worked with Colombia and Chile on a mobile application that resulted in a prototype. Offering teaching, training and health professional sessions.

Slovakia:

Have offered training sessions for teachers and estimate they have taught been 200-5—couples in the past 3 years.

Singapore:

Meet regularly for meetings, retreats, day of recollection, social family outings and tie in with other like-minded couple/family programs. They do introduction talks as well.

Hong Kong:

Caritas Family Service has imbedded the Billings Ovulation Method® talk in the pre-marital service. In addition Caritas "Love and Chastity" Comprehensive sex education project has developed different themes on puberty and fertility awareness based on Billings knowledge.

Australia:

The highlight since the last Affiliation has been the National Teacher Training Program in 2019. This was a 4 day program attended by many Australian teachers as well as a small number from New Zealand.

Portugal:

Was affiliated in 2020 following Teacher Training Courses and mentoring by the joint venture of Spain and Brazil.

Chile:

Participated in the organisation of an online course and promotion of the Billings Ovulation Method® in universities.

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