OM: The New Zealand College of Midwives (inc P O Box 21-106 Christchurch NEW ZEALAND



NEW ZEALAND COLLEGE OF MIDWIVES (INC)

# **NATIONAL NEWSLETTER**

NOVEMBER/DECEMBER 1992

Tribunal News

Frontline Report

VITAMIN K ISSUES

# **NEW ZEALAND COLLEGE OF MIDWIVES (INC) National Midwifery Resource Centre** 1st Floor 183 Manchester Street Christchurch Telephone 03-377-2732

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# **CONSUMER REPRESENTATIVES**

Rea Daellenbach Anne Woodley Debbie Stewart

**Maternity Action Alliance** Parents Centres (NZ) Home Birth Association

## **NEW ZEALAND COLLEGE OF MIDWIVES (INC)** MEMBERSHIP APPLICATION FORM

NEW	
RENEWAL	
CHANGE	

#### **REGIONAL INFORMATION**

Name			
Address —			
Telephone	— Home —	(0)	- Work
Workplace —			<u> </u>
Date of Birth —	ARE YOU CLAIM	ING MATERNITY BENE	FIT? YES/NO
TYPE OF MEMBERSHIP			
Full Membership (Waged) Full Membership (Unwaged) Full Membership (Students) Associates & Affiliates	\$120.00 \$ 40.00 \$ 40.00 \$ 25.00	} Includes } Indemnity } Insurance	

#### METHOD OF PAYMENT (Please tick your choice of payment)

Subscription payable to College Treasurer (cheque enclosed) Subscription from salary (please arrange with your pay office) Automatic Payment (contact Treasurer)

#### NATIONAL INFORMATION

Name		
Address		*
Telephone	Home	Work
Workplace		
Date of Birth		

#### TYPE OF MEMBERSHIP

Full Membership (Waged) Full Membership (Unwaged) Full Membership (Students) Associates & Affiliates

# ARE YOU:

Claiming Maternity Benefit? YES/NO A Member of NZNA? YES/NO A Member of NZNU? YES/NO

# METHOD OF PAYMENT (Please tick your choice of payment)

Subscription payable to College Treasurer (cheque enclosed) Subscription from salary (please arrange with your pay office) Automatic Payment (contact Treasurer)

PARASERETURNA (OUR COMPARIED CORMA (OCETHER WITH MONEY (IF APPLICABLE) TO YOUR LOCAL REGIONAL TREASURER.

# CONTENTS

**EDITORIAL** 

1. Editorial

Dear Members,

National Co-ordinator's

Forum

Welcome to the November/December issue of the National Newsletter. Our apologies to those who had hoped this newsletterwould be available to your region sooner. Hopefully regular deadlines will be mapped out for next year which will help you all with sending information you want to have considered for inclusion in the newsletter.

4. News & Views

Thank you to those who have contributed to this newsletter, especially John Birkbeck and his timely informtion on the Vit K issue.

Our Response to Frontline Programme

The Frontline programmes have done much to stir up unnecessary anxities in many and much work has been done by our National representatives to try to address the inaccuracies of the reporting in these programmes.

9. Ode to a Publication

To help them, could you document how your practice and the clients you deal with have been affected by these programmes and send these to Karen Guilliland at the Midwifery Resource Centre.

10. Be a Media Watchdog

Our representatives are also fighting a hard battle over the Tribunal and would appreciate your support in every way possible.

12. Advertisement

Enjoy your reading and may I take this opportunity to wish you all a very safe, peaceful and joyous Festive Season.

13. Vit K Issues

Karen Barnes

18. Articles of Interest

# DISCLAIMER

The articles and reports printed in this newsletter are the views of the authors and not necessarily those of the NZCOMI.

# NEXT NATIONAL COMMITTEE MEETING

Midwifery Resource Centre 1st Floor 183 Manchester Street Christchurch

Friday 11th & Saturday 12th December 1992

Commences 6.00pm Friday and 9.00am Saturday

## **MATERNITY BENEFITS TRIBUNAL**

-Karen Guilliland-

These last few weeks have been devoted to preparation for the Maternity Benefits Tribunal Hearing, on the 23-27th November.

It has been an interesting if rather frustrating experience with a very steep learning curve on how to understand the law (and lawyers!). The Medical Association has put up 12 witnesses (all but 1 are doctors - 7 from Auckland) and the Department of Health three.

The College witnesses are Alison Livingston (Accountant Auckland) Karen Connolly (Midwife Auckland) Carey Virtue (Midwife Wellington) Prue Hyman (Economist Victoria University Wellington) Bronwyn Pelvin (Midwife Nelson) and Sheilah O'Sullivan (Midwife Christchurch).

Our case is based on the following:

- Equity in service payments.
- 2] The role, responsibility and practice of the Midwife.
- 3] Accessibility and choice in maternity services for women.
- 4] The effectiveness of a Midwifery service.
- 5] The cost of setting up and maintaining a Midwifery service.

There have been nearly 200 public submissions so far, the vast majority supporting the above principles. Many of the submissions come from women who have used the Midwifery Service and want to see it survive.

I found those submissions very affirming and uplifting after the doctors submissions which in the main are negative and rely on emotional anecdote rather than rational debate. A few doctors had written supporting Midwives.

The most distressing submissions however were from the handful of Midwives denegrating their own profession and aligning themselves (oppressed group style) to the elitist doctors and consequently against women's choice.

I would draw these Midwives attention to our submissions made to the Tribunal.

"The hospital midwife's skills are unrecognised in their pay scale. They do enjoy the benefits of annual leave, study leave, planned time off and security of income which independent midwives do not. However their specialist skills remain undervalued. Rather than looking at the pay scale of Independent Midwifery Care as reviewable, this Tribunal could view the Maternity Benefit Schedule as the appropriate benchmark and recommend to the Minister an urgent review of hospital midwives salaries. If employed midwives could also provide continuity of care in a similar manner to independent midwives, all high risk women could also receive continuity of midwifery care. One of the major obstacles to this is the poor reward for the lifestyle required to provide continuity.

- 2 =

looked up. Remember that those who are registered for GST must have a "tax invoice" if the amount is over \$50.

For small items that are paid for with cash, such as stamps etc., cash a cheque for "Petty Cash" (\$30.00 should last a while) and keep this money separate from personal funds to use for these small items as they come up — when funds are spent simply cash another cheque. Any receipts for these items can also be attached to a page and also filed in cheque order number. You do not have to have a receipt for every item but for larger items it is desirable as it can prevent disputes with the Inland Revenue Department later.

During the year those of you who are registered for GST, will probably maintain a "cash book" so a record is kept of the GST component of expenses and receipts. Before giving your cash book to your accountant, at the end of the income year, make sure that this cash book is totalled and that the various categories totalled equal the "grand total." Then reconcile the balance as per your cash book to the balance on your bank statement by making adjustments for deposits not yet lodged or unpresented cheques.

As an alternative to maintaining a cash book simply provide your bank statements to your accountant. Check with your accountant first as it may speed processing of your accounts if next to each figure you write a description of what it was for e.g. private motor vehicle expenses.

Finally, talk with your accountant about the information he/she requires as the above is a general guideline only and individual accountant's have their preferences about how information is presented.

Gill Down

# S.J.DOWN CHARTERED ACCOUNTANT

386 Riccarton Road

P.O. Box 6155 Upper Riccarton CHRISTCHURCH Phone: (03) 343-3226 Fax: (03) 343-3316

#### MINIMISING YOUR ACCOUNTING FEES

Accountants, like most professionals, charge for their service based on time. The hourly rate for this time varies from accountant to accountant, but usually depends upon the complexity of the work undertaken. A "cheap" hourly rate does not mean that your total fee will also be cheap, as an inexperienced or "slow" accountant may take longer than the accountant with the "dear" rate. It is therefore probably best to select an accountant that has been recommended by someone already using them and who you are comfortable with — much the same way as people select their midwife! Note that, although there are other agencies who prepare tax returns, by law, only members of the N.Z. Society of Accountants can advertise as "accountants."

After you have selected your accountant, you can minimise the time spant in preparing your annual accounts (and therefore reduce the fee) by being well organised.

The following will help.

#### OUESTIONNAIRE

Most accountants will request that you complete a questionnaire - make sure that you fully answer all questions - it is best to put down too much than too little as queries take time - and cost you money!

#### 2. BANK ACCOUNT

It is not a requirement that a separate bank account for your business activities be kept, but it does reduce the amount of records. Although it is a "business" bank account you may still withdraw funds for private use. All business payments should be made from this account, including motor vehicle. However, make sure you clearly show if you put private funds into the bank account so that your accountant does not assume it is taxable income.

#### INCOME

Either bank all payments from the Health Department to this account - if required you can withdraw the funds immediately for private use. Banking means that all business receipts are recorded in one place or alternatively provide your accountant with all statements received from the Health Department.

#### 4. EXPENSES

Pay for everything by cheque. Write the cheque number on the account and file in cheque number order - a query from your accountant about a particular cheque can therefore be quickly

This is a transition time for the development and reshaping of the maternity service. It would be inappropriate to alter the Maternity Benefit Schedule so close to the change over to Regional Health Authorities. It would also halt the progress women, midwives and doctors have made to reducing unnecessary intervention and birth being seen as a primary health issue rather than a secondary care."

In contrast to the negatives however were some wonderful words of wisdom from an equally wonderful workforce of midwife practitioners. Their submissions were articulate, comprehensive and women centred. They covered the full range of age, experience and geography and gave credence to the College belief in a Midwifery profession which is philosophically driven and scientifically based. I cannot see how Tribunal members will not be positively influenced towards maintaining choice and accessibility of maternity services for women. However it remains to be seen and we await the outcome to be announced by Christmas.

# MATERNITY BENEFITS TRIBUNAL TERMS OF REFERENCE

The Tribunal is appointed in terms of Section III of the Social Security Act 1964 to:

- receive written and oral submissions from the New Zealand Medical Association, the New Zealand College of Midwives and the Department of Health.
- examine and consider the arguments presented
- receive and consider written submissions from other organisations and individuals
- reach conclusions on the merits of the arguments and provide the Minister of Health with recommendations

in respect of the amount and structure of the scale of fees payable as maternity benefits to medical practitioners and registered midwives under the Social Security Act 1964 (as amended by the Nurses Amendment Act 1990) and the effective date of any changes to that scale, with particular regard to:

- the need to ensure that every woman has access to a choice of publicly funded service which assist her to have a safe and successful outcome for her pregnancy
- the Government's desire to ensure that changes made to the amount and structure of the scale of fees are fair and equitable and take into account the need for fiscal restraint.
- the objectives and timetable of the health reforms noting that from 1 July 1993
  Regional Health Authorities will be responsible for purchasing Maternity Services.

#### TRIBUNAL NEWS

**ATTENTION** 

**ALL INDEPENDENT MIDWIVES** 

As you know, the Maternity Benefit Tribunal meets on the 23rd-27th November to hear and decide the scale of fees related to the Maternity Benefit Schedule.

The College of Midwives did not seek a Tribunal hearing, preferring a three way negotiation between ourselves, the Department of Health and the New Zealand Medical Association. As you are no doubt aware the NZMA refused to take part in any talks with us involved and called a Tribunal.

The Tribunal hearing is an expensive process and the College is not in a financial position to employ legal counsel so will be represented by Karen Guilliland and Steph Breen, National Secretary of the Nurses Union (and Midwife of 12 years experience!)

We are supported by a negotiating team - Carey Virtue (Wellington), Bronwyn Pelvin (Nelson and Karen Connelly (Auckland). All five of us have been elected to represent you by the Regional and National Committees.

It has become apparant that the \$5,000 budget for the hearing will soon be exhausted and this letter is an appeal for additional funds.

If you feel able to make a donation could you send it to:

Kathy Anderson Treasurer NZ College of Midwives P O Box 21-106 Christchurch

# **BIRTH NOTICES** (All Midwife Only Care of course)

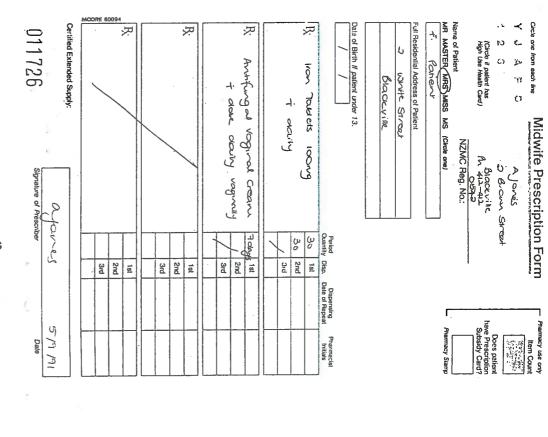
**CONGRATULATIONS** to ex-Chairpersons:

Julie Kinloch (Eastern/Central) and Ken on the birth of Emy - 6lbs 5ozs - at home 24/10/92.

Anne O'Connor (Canty/west Coast) and Paul on the birth of Brigid - 7lbs 9ozs - at home 14/11/92

Lynley McFarlane (Northland) and David on the birth of Fiona - 4000gms 5/02/92.

Obviously chairing a NZCOM Region is a fertile occupation. Take note present encumbents!



National use (adult) 7.50 7.50

It is emphasised that medicines obtained on a H570 are for personal administration to a patient, or for emergency use until a patient can obtain a supply on a prescription.

Medicines obtained on H570 are not to be issued to patients to enable them to avoid paying the appropriate prescription fee.

#### CONTROLLED DRUGS

Midwives may prescribe Pethidine for patients in their care.

Prescriptions for Pethidine must be written on the triplicate Controlled Drug Prescription Form (572), available from your local Area Health Board.

Prescriptions for Pethidine must be written entirely in the prescriber's handwriting, and must have the words "For midwifery use only" written on the prescription.

All three copies of the form must be given to the dispensing pharmacist.

A Controlled Drug prescription is valid for seven days from the date on which it is written.

It is recommended that quantities are written in words and figures, to minimise the opportunity for forgery

"2 (two) ampoules"

#### PREVENTING MISUSE OF YOUR PRESCRIPTION FORMS

All prescription forms (standard, PSO and Controlled Drug) are valuable documents.

Stamp your forms with your name and address when you receive them. This identifies the forms as yours, and makes it more difficult for a forger to use them.

Store your prescription forms carefully - lock them away when not in use.

# Our Response To Frontline Programme

BROADCASTING STANDARDS AUTHORITY P O Box 9213 WELLINGTON

Copy to: TVNZ
Frontline

The New Zealand College of Midwives would like to lodge a complaint against TVNZ's unbalanced reporting on childbirth on its Frontline programme, Sunday 11th October 6.30pm.

#### Our concerns are as follows:

(1) The bias throughout the programme towards the Medical view of birth as being the only one with credibility is unacceptable and misinformed. The movement towards demedicalisation of birth is a worldwide one and has the support of the Women's Health Movement, the Midwifery and Medical professions. International research gives ample evidence for the viewpoint that intervention carry risks with it also. Midwives, doctors and health authorities continually struggle to provide a balance between doing too little and doing too much. There is enormous controversy between the interventionist and non interventionist views. In spite of the evidence to the contrary many practitioners continue to intervene unnecessarily and place both the mother and baby at risk by doing so. There is an extreme vested interest amongst some members of the medical profession, drug and medical supply companies to maintain the interventionist model yet the programme completely ignored balanced discussion about these aspects of childbirth. The consequence of this programme is to inflame and terrify women about their ability to trust their chosen practitioner.

The College has been inundated with calls from women all convinced medical/midwifery science can save their babies from brain damage. In giving this false impression to the public, TVNZ abused its position of power within the community. Neither doctors nor midwives can guarantee a perfect outcome. Contrary to the interviewed parents opinion there is absolutely no evidence to support the use of episiotomy as a method of preventing brain damage. It is unacceptable journalism not to have researched this story to a standard which reports facts accurately.

(2) The College of Midwives was not asked for their view, neither was the Nursing Council of New Zealand. As the two bodies which promote and set standards for Midwifery practice, it is unacceptable investigative journalism not to have the opinion of these bodies recorded. This is even more unacceptable when both the College of GPs and the Medical Council were interviewed. It indicates a bias against both the Midwifery and Nursing professions. Both these professions exist in their own right and have distinct and separate body of knowledge to doctors. Rob Harley would appear to believe that approval, or disapproval by doctors is all that is required to provide a story.

- (3) The statement that Nursing Council is "nurses reviewing nurses" was also allowed to go unchallenged. There are 12 council members, two of whom are doctors (one of whom is an Obstetrician) and a health care manager presently on Nursing Council. In fact the Preliminary Proceedings Committee who initially investigate complaints made to Council and did so in this case, consists of two nurses and a doctor (the obstetrician). The Medical Council on the other hand has no other related professions represented and consists of four doctors. Why did Rob Harley view this as a committee to be respected while ignoring the findings of the Nursing Council's Committee?
- (4) The failure to report accurately Sian Burgess' involvement was another instance of reporter bias. Nowhere was it stated that this incident took place <u>prior</u> to the law change which gave midwives independence. The doctor was always responsible for this family's wellbeing. The manner in which Harley reported was defarmatory to Mrs Burgess and, by association, the Midwifery profession.

Harley failed to report that Mrs Burgess' practice in this instance had been reviewed by:

- 1] Domiciliary Standards Review Committee Membership GP, Principle Public Health Nurse, 2 practising midwives and 4consumers).
- 2] National Women's Hospital Perinatal Morbidity Review.
- 3] Area Health Board investigation.
- 4] Nursing Council of New Zealand's Preliminary Proceedings Committee not once, but twice.

Not one of these reviews indicated Mrs Burgess as incompetent or culpable.

The Area Health Board assumed responsibility for the delays following transfer to hospital - Mrs Burgess was not responsible once she had transferred her care to the hospital. The Perinatal Review was unable to apportion blame to Mrs Burgess when they were also unable to agree on the significance of meconium stained liquor. Waitakere Hospital, an AAHB hospital without fetal monitoring equipment where Mrs Burgess worked part-time, did not have a policy of transfer in those cases.

The issue of meconium stained liquor is complex and of unproven significance. TVNZ's reporting gave no indication of this but mislead women into thinking that if intervention takes place, the baby would be normal. This is not so and is irresponsible reporting. Current research indicates cerebral palsy (brain damage) is almost always associated with the ante natal period, not birth.

Taking these two cases in isolation from all births is misrepresenting the incidence of unexpected outcome. Perinatal morbidity, even with controlled population samples is far greater in the big hospital setting than any other birth environment yet Frontline's programme suggests the opposite. In spite of spiralling intervention rates (caesarian section, forceps) in New Zealand, the perinatal mortality rates have remained constant over the last 20 years. Evidence of obstetrics lack of ability to control life and death.

Provide the patient's date of birth if he/she is a neonate. This allows the dispensing pharmacist to double-check the medicine dose prescribed.

5. Enter the details of the medicine you wish to prescribe, beginning alongside the symbol Rx (see example, Fig 1).

Be sure to include:

the name of the medicine
the form of the medicine (e.g. tablets, capsules, vaginal cream)
the strength of the medicine (e.g. 100mg tablets)
the dose to be taken (e.g. one tablet)
the frequency of dose (e.g. daily)
the route of administration (e.g. orally, vaginally)

Enter the total amount of medicine to be dispensed in the column headed "period quantity".

Midwives may prescribe medicine for a period not exceeding three months (Drug Tariff Section 20), and you may specify the number of times you require the medicine to be dispensed within that period. The example in Fig 1 requests one month's supply of iron tablets, to be dispensed twice.

Rule a line through unused sections of the prescription form as shown (Fig 1). This prevents unauthorised additions to your prescription.

6. Sign and date the prescription.

A prescription presented for dispensing more than three months from the date on which it was written must be paid for in full by the patient (Drug Tariff 21(e)).

#### PRACTITIONER'S SUPPLY ORDERS

Midwives may order items required for their personal administration to patients on a Practitioner's Supply Order form (H570). You may obtain copies of this form from your local Area Health Board.

There is a limited list of items and the maximum quantities allowable that are available in this way

e.g. Inj Phytomenadione - 5 ampoules;

Ini Oxytocin - 5 ampoules

## WRITING PRESCRIPTIONS - A GUIDE FOR MIDWIVES

Isobel Smith
Professional Advisor Therapeutics
Department of Health

Since March 1990 midwives have been able to prescribe medicines necessary for "ante natal, intra partum and post natal care" (Medicines Regulations 39(6).

A prescription is an instruction from the prescriber, to the dispensing pharmacist. To ensure accurate and safe dispensing, prescriptions must be complete, clearly written and comply with legislative requirements.

What follows are guidelines for midwives to use when prescribing medicines for patients in their care.

#### WRITING A PRESCRIPTION

- Use the standard Midwifery prescription form wherever possible. This
  form encourages a clear layout, and prompts you to provide all the
  information required by the pharmacist. In addition, when completed
  correctly it reduces the opportunity for forgery.
- Begin by circling the appropriate patient code (e.g. A1). (Patients in Groups 1 and 2 should have Community Service cards that confirm their group. Holders of a High Use Health Card must also be able to produce this. All other patients are in Group Three.)

The patient code indicates the prescription charge to be paid by the patient for each item (see Table 1).

3. Enter your name, street address and registration number in the space to the right of the patient codes. A small rubber stamp showing this information will do this neatly, or you may choose to hand-write these details. You may wish to include a contact telephone number as well.

Note: A Post Box number is not a street address and is insufficient in this context.

It is important that this information is provided - not only is it required by law (Medicines Regulations 41), it enables the dispensing pharmacist to contact you with any queries.

 Enter the patient's name and address in the spaces provided. Again, a Post Box address is insufficient - a street address allows the patient to be identified more easily. All of the above information could have been easily illicited if the story had been sufficiently researched and the reporter prepared to take an objective role. A balanced programme would have gone a long way to ease women's minds about the process of birth.

The College of Midwives would be pleased to take part in a follow up programme looking at the successes of women giving birth as one way of redressing the balance and hope to receive the Broadcasting Authority's support for such an idea

Yours sincerely,

Sally Pairman PRESIDENT

# Midwifery item 'lacking'

TV Guide, October 23, 1992

As a recently retired medical practitioner active in obstetrics throughout my practice years, I must comment on the Frontline programme on midwifery. (Television One October 11): It concentrated upon the pitiful state of a braindamaged child born by caesarian section in hospital, imputing blame to earlier midwifery. There was no reasonable discussion in the documentary concerning the general background of risk factors which would have brought out that brain damage is a perenial problem in every country in the world, irrespective of the level of care. It is an open secret that specialist obstetrics is in deep trouble, almost priced off the market in the United States for instance, by the high cost of obstetrical insurance (against the doctor being sued). The other basic fact offsetting this is that birth is a natural phenomenon, not a medical emergency automatically calling for intervention. The reason for the tension is growing awareness that harm from inappropriate and unnecessary intervention (soaring rates of operative delivery, the breaking of the mother-infant bonding process, the vanishment of breast feeding and straight our physical injury), has come to exceed that which would occur if it were all left to nature. It is surely up to television now to recognise that it has provided means for a sectional attack upon the nation's midwives, and so afford them a right of reply.

DR STEPHEN W. TAYLOR (Taupiri)

# Specialist operated without consent

NZ Herald 17 November 1992

#### By KAREN HOLDOM health reporter

A specialist who without consent sterilised one woman and removed another's appendix has been fined \$700 and censured.

The specialist, an obstetrician and refused public hospital treatment to a patient suffering from late pregnancy toxaemia because he did not get on with her general practitioner.

The Medical Practitioners Disciplinary Committee has found the doctor guilty of professional misconduct over the three separate incl-

In sentencing him the committee ordered that for the next three years of practice he must personally obtain written consent for every operation he carries out.

The order, the committee reported in the latest New Zealand Medical Journal, was "both for his" interests and for that of the public."

He was ordered to pay \$10,000 in

The convener of the Federation of Women's Health Councils, Judi Strid, said yesterday that the women practised had been concerned about him for years.

There had been long delays before the matter had even been dealt with by the committee.

Lynda Williams, the co-ordinator of the Fertility Action group, degynaecologist, is also said to have scribed the penalty yesterday as "totally inadequate."

> The maximum fine the Medical Practitioners Disciplinary commit-Medical Practitioners Act 1968.

> The committee last month expressed embarrassment at the small called on the Government to increase the maximum fine to \$10,000 in new legislation expected to be introduced to Parliament before the end of the year.

The committee reported that in July 1990 the specialist performed a tient and at the same time did tuballigation.

"This was against the patient's wishes and for which there was no consent.

he believed that he had conditional

in the district where the doctor consent if he found it necessary to do the operation.

> The committee acknowledged that there might have been a misunderstanding, but said there was no room for misunderslanding by the surgeon in "mallers of this gravity."

> In another case, in 1989, the specialist removed the patient's appendix at the same time as performing a hysterectomy.

This was again against the patee can impose is \$1000, set in the tient's wishes and without her con-

In the third case, in July 1990, the specialist was telephoned by a genfines it imposed on doctors. It has eral practitioner about a patient with pre-eclampsa - late pregnancy loxaemia

The GP asked for the patient to be admitted to the public hospital in which the specialist worked.

The specialist refused to admit the patient to the hospital despite caesarian section on a married pa- being told that it was an emergency and that another specialist had recommended hospital admission.

The committee accepted that "underlying tensions" between the specialist and GP might have been a The specialist told the committee reason for the specialist's unhelpful

#### 17 November

The Editor NZ Herald P O Box 12 Auckland

Sir:

Isn't it interesting that a specialist obstetrician can refuse admission to a woman with an emergency condition and have the Medical Practitioners Disciplinary Committee excuse his "unhelpful attitude" because of 'underlying tension' between him and the GP?

Yet in a previous case the Medical Practitioners Disciplinary Committee expressed 'grave concern' about differing interpretation of views between GP and midwife, which undermined the care of a woman and her baby. It drew the matter to the attention of the Minister of Health, calling for national protocols to define responsibilities of medical practitioners and midwives.

Obviously the differing views between GP and midwife is seen as far more serious than the obstetrician's deliberate refusal to admit the emergency case to hospital because his views differed from those of the GP.

Rather than protocols to place independent midwives back under medical control, this case clearly demonstrates the crying need for a Health Commissioner who could introduce some justice and sanity into the disciplinary processes of the entire health system.

Joan Donley 3 Hendon Ave. Mt Albert

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One of our major agenices for baby and nursery scales is Tanita Corporation of Japan. There are two models currently available, both digital.

Model 1 is TI-1580, portable, battery operated (battery lasts approximately one year) with a unique lock-in weight and flash display. Its capacity is up to 20kg in divisions of 20am.

Model 2 is TI-1581, a baby/nursery scale. This scale is preferred and selected by the majority of New Zealand and Australian Hospital Boards. It is similar to the smaller model but has some extra unique features including the auto lock-in display. It is battery operated or main power supplied. It also has an auto shut-off after non use of 20 minutes. Its capacity is 10kg by 10gm increments. It has a large LCD display for easy reading.

If you require any further information please do not he sitate to

contact your nearest Wedderburn Scales branch (check your Yellow Pages for address and telephone number).



Model TI-1581



# Breastfeeding Abstracts

A Newsletter for Health Professionals

Published quarterly by La Leche League International

# Human Milk Banking: Is It Still Needed in the 1990s?

Human milk banking is defined as the expression, collection, screening, processing, storing, and distribution of voluntarily donated human milk that is dispensed by prescription to recipients who are not the biological offspring of the donor mother. The storing, testing, and handling of a mother's milk for her own infant, especially the milk collected by the mother of a premature or hospitalized infant, is not considered milk banking.

In countries with a stated national health policy for women and children, the goal is reduced infant morbidity and mortality. Increasing the incidence and duration of breastfeeding has a high priority in these countries, and many are now starting human milk banks so that as many children as possible will begin feedings with breast milk even if the mother's own milk is unavailable. In the United States, the lack of a cohesive and consistent national health policy that stresses the importance of breastfeeding and breast milk is a major factor influencing milk banking.

Over the last decade the number of milk banks and usage of donor milk has declined dramatically in the U.S. and Canada. The first decline came with the development of special high calorie artificial feeding products (AFPs) for premature infants and a series of papers that showed slower growth rates for infants fed banked human milk, or their own mother's milk, as opposed to the AFPs. Lucas reviewed the limitations of these short-term physiological studies of feeding and growth in premature infants in

Close on the heels of the development of these special AFPs came the AIDS epidemic with its implications for breast milk transmission. At that time, most milk banks in the U.S. did not pasteurize their milk. Hysteria about transmission led to parents not wanting to have their infants fed donor milk and a reluctance on the part of physicians to prescribe it. In the 1970s between 20 and 25 milk banks were found in the U.S. alone. In 1992 there are 8 left in the U.S. and only 1 is still in operation in Canada. All of these milk banks currently pasteurize their milk in accordance with recommendations from the U.S. Food and Drug Administration and the Center for Disease Control.

These milk banks serve a small population for whom breast milk feedings are a matter of survival. Although the number of premature infants served has dropped, the number of AFP intolerant infants and children served has increased. Whether this is due to an actual increase in the incidence of feeding intolerance due to increased and indiscriminant use of AFPs or to the increased availablity of donor milk as fewer premature infants are served is unclear, although it may be a combination of both. Most recently, with Lucas's continued research delineating the benefits of human milk feedings for the premature infant 23

some milk banks are again experiencing an increase in demand for donor milk in premature nurseries.

Is human milk banking still needed in the 1990s? The answer is an emphatic "yes." Is it needed in the U.S. as much as it is needed in emerging countries where rates of infection are higher? Again, the answer is "yes." Banked milk can be used for nutritional, immunological, and therapeutic reasons, many of which are the same irrespective of the country. For example, donor milk is currently being used successfully in the U.S. to provide nutrition for failure-to-thrive infants. In 1991 the New Mexico WIC Program sent out requests to several milk banks for bids to supply donor milk to a failure-to-thrive and AFP-intolerant infant. A year later, the infant is gaining weight and developing normally on banked milk. When used for postsurgical nutrition, banked milk allows full feedings to be established faster and with less metabolic stress. 45 Because of its easily digestible nature and greater bioavailability of nutrients, donor breast milk has also been used successfully in cases of short gut syndrome where intestinal transit time is considerably diminished.

As medicinal therapy, banked milk has been used to treat diseases such as pneumonia, sepsis, infantile botulism, ulcerative colitis, gastroenteritis, intractable diarrhea, and hemorrhagic conjunctivitis. Because of its ideal amino acid composition donor milk can often be the best feeding solution for infants with inborn errors of metabolism, such as maple sugar urine disease. And banked human milk has been used successfully to treat infants and children with immunodeficiency diseases. In IgA deficient children, 1-2 ounces of donor milk 4 times a day supplies enough IgA for a child to be immunologically competent. 10

There are still unexplored uses of donor milk: as nutrition in burn cases, for prevention of coeliac disease and Crohn's disease, as nutrition and immunotherapy in HIV-infected infants, as therapy in some adult conditions, and as fortification material for preterm feedings. Further research is needed, as is an economical way to separate and use human milk components, not only for research purposes but in practice as well. Yes, milk banking definitely is needed in the 1990s, and banked milk should be used at a higher level of usage than is currently seen.

Lois D.W. Amold, MPH, IBCLC **Executive Director** Human Milk Banking Association of North America, Inc. West Hartford CT 06137-0464 USA

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#### ODE TO A PUBLICATION

- Chrissy Fallow -**BFHB Sub-Committee** 

O spare some of your pity For the Breastfeeding Handbook subcommittee Weekends, mornings, PMs and into the night We attended, amended and defended breastfeeding With "The End" nearly always in sight.

We conferred, concurred, deferred and referred Considering Regional feedback reports We then adjusted some of our thoughts We opposed, supposed, proposed and composed

(Grammar, spelling and semantics are such

Between faxing, phone calls and photographs Sometimes only a little got done.

Now, without deadlines to meet And some time to sleep and eat Maybe we'll share relief and elation At the Handbook's final publication We hope you'll find it valuable reading As you "Protect, Promote and Support" breastfeeding.

Order your copy of the New Zealand College of Midwives **Breastfeeding Handbook** 



112 pages with diagrams and photographs

The New Zealand College of Midwives is proud to present this Breastfeeding Handbook. Incorporating WHO and UNICEF global strategies it has been written to inform all those who work within maternal and infant services, so that they can empower breastfeeding women.

This handbook is tangible evidence of the continuing partnership between NZ women and their midwives.

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### NOTES FOR PURCHASING OF BREAST FEEDING HANDBOOK

- [a] We need to receive your money for a copy first before despatching your order, unless you make a bulk order.
- [b] A bulk order (6+) attracts a discount on the postage and packaging cost.
- [c] If you receive a copy of the B/F Handbook at Conference please return it to the Midwifery Resource Centre with a SAE for a new copy. You will then receive a corrected copy as we would be reluctant to have any uncorrected copies left in circulation.

ISSN 0896-4572

# BE A MEDIA WATCH DOG

By courtesy of the NZ Counil of Women



- THE BROADCASTING STANDARDS AUTHORITY (BSA) approves Broadcasting Codes, considers and allocates freetime for party political broadcasts before an election.
- THE ADVERTISING STANDARDS COMPALINTS BOARD (ASCB) considers all complaints about advertising.
- THE PRESS COUNCIL consider all complaints about articles in the print media.
- TVNZ (TV1 & TV2) is a State Owned Enterprise (SOE) with interested in South Pacific Pictures etc.
- TV3 is an independent TV network.

RADIO NZ (RNZ) is an SOE operating a commercial radio network, as well as National Radio and Concert FM which are funded from the Broadcasting Fee.

INDEPENDENT BROADCASTERS ASSOCIATION (IBA) consists of Broadcasters operating in private radio.

#### **INFORMAL COMPLAINTS PROCEDURES**

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Your nearest TVNZ will receive phone calls until 11pm. All complaints are logged and circulated to all departments. Or write to the Chief Executive.

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Radio

Phone or write to the Station Manager.

**Printed Media** 

Write to the Editor involved.

#### FORMAL COMPLAINTS PROCEDURES

Formal complaints about television and radio programmes should go to the Chief Executive of the broadcaster concerned. They must be lodged within 20 working days, be in writing, give date, time and details, state it is a formal complaint and give the reasons why you consider the programme has breached a standard or code.

The Health Reforms Newsletter

# Midwives deliver on cost-efficiency

our Wellington midwives aim to show that raising the quality of maternity and birth services to mothers can also improve the cost-efficiency of those services.

The Domino midwives group will trial bulk funding to provide comprehensive maternity service to approximately 180 women over the next year.

At the moment, each of the midwives works on a fee-for-service basis. During the trial, all government subsidies. likely to be paid to the midwives over the period will be given to the group as a bulk amount.

The Domino midwives (domiciliary midwives in and out of hospital), work from the philosophy that birth is a normal process, not a medical event.

"We work with a woman through the process - it's continuous, from antenatal classes and coffee mornings through labour and birth to postnatal care - all with one practitioner," says Marion Lovell. one of the Domino midwives.

This project is one of ten primary care initiatives funded by the Health Reforms Directorate to look at innovative approaches to delivering health care services.

"Under the current system, a woman gets the same overall maternity services from a series of different practitioners. The process is broken up into bits that are delivered by different kinds of practitioners, in many instances doubling up

"Where a woman goes to a GP, the GP can refer the woman to a midwife and then both midwife and GP can claim from the maternity benefit."



Bahy Emilie Marschner practices her smile at a Domino coffee morning as her mother, Tessa, and midwife, Jane Midwood, give encouragement.

Independent midwives taking responsibility for the birth process are looking to data from this trial project to demonstrate the cost-efficiency and quality of their services, says Ms Lovell.

Continuity of care is the key to both with one practitioner responsible for the whole process, more expensive medical intervention and long hospital stays are less likely, say Domino midwives.

They anticipate that, by moving to bulk-funding for their group, the quality of their service, resulting in better cost-efficiency, will leave money freed up to put into additional services for

Planning for the bulk funding trial has also taken account of births needing medical intervention.

"Although most women should be able to receive all their maternity care from a midwife, there is a percentage of

cases for which the midwife will need to arrange medical assistance," says Ms Lovell.

"At the moment we are still looking at the percentage. We have tried to predict how often secondary services will be needed and have that catered for in the bulk-funding grant.

"One of the main results of this trial project will be the collection of comprehensive data that identifies the true costs of maternity services where a woman is working with a midwife," she says.

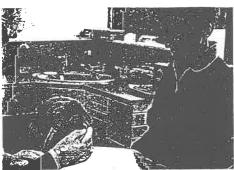
Quality of service remains the central issue for Domino midwives though.

"At the moment, maternity services are funded without any demands for quality assurance." says Ms Lovell.

"Our group will be looking at indicators like intervention rates and client satisfaction surveys to build a service that is better for both mothers and babies."

# ARTICLES OF INTEREST

# Laughing gas no joke for women wanting children



Nitrous oxide reduces women workers' fertility

#### BY CHARLENE LAINO

Women working in dental surgeries appear to have lower fertility because of their exposure to laughing gas.

sions for removing excess gas, women workers are significantly less fertile than lower male fertility as well. women not exposed to the

sucked out, female workers miscarriage and birth defects in a recently conducted study show no reduction in fertility, reported researchers from the National Institute of assistants and 80,000 dental Environmental Health Sci- hygienists in the US as well as ences in North Carolina.

health specialist Ross Health and Human Services. Myerson said it is reasonable to conclude that female den- cent of these women work tists may also be at risk.

Patients who receive nitrous oxide as an anaesthetic. however, do not appear to be at any increased risk since fices. they are only occasionally exposed to the gas, said investigator Andrew Rowland.

But women who use laughing gas as a recreational drug to produce a feeling of euphoria "may be at even a exposure to N.O at work. higher risk than the dental

assistants because they probably use the drug regularly," said Dr Rowland.

In a commentary published with the report in the New England Journal of Medicine Dr Patricia Baird of the Uni-Where there are no provi- versity of British Columbia points out that previous studies indicate that N<sub>2</sub>O may

And previous studies suggest that prolonged exposure But if the excess gas is to low levels of N,O causes in the offspring of exposed

There are 175,000 dental 15,000 female dentists, ac-Washington occupational cording to the Department of

> It is estimated that 33 per where nitrous oxide is used, and that there is no gas removal equipment in more than 20 per cent of these of-

> The researchers asked 418 former dental assistants who had become pregnant within the preceding four years how long it took them to conceive. They also were asked about

Women not exposed to N.O.

in six months, compared with women working in offices 32 months for women who with scavenging systems, we worked five or more hours a are concerned that there are week with nitrous oxide.

where gas was removed or who were exposed for less US dental surgeries using nithan five hours a week trous oxide come near recshowed no decreased fertil- ommended safety levels.

ister excess nitrous oxide.

the patient's nose, since the cording to the chairman of mouth is open for action. A the American Society of vacuum tube attached to the Anaesthesiologists' commitmask discharges outside the tee on occupational health. office. But gas exhaled from Dr William Arnold. the patient's mouth remains Gas-re-moval systems are

And Dr Rowland found that erating rooms. poorly maintained.

"While our study found no MedALERT

became pregnant on average apparent increased risk in offices in which there would Those working in surgeries be a problem." he said.

Dr Baird observed that few

-A current British study But even surgeries with gas- seems to indicate that female removal equipment may reg- anaesthesiologists are not at the same increased risk as In a surgery, a mask is over female dental assistants, ac-

in the room, said Dr Baird, almost always present in opthe systems are sometimes For a summary of the editorial in MEJM see this issue of

This research has major implications for Midwives in delivery suites who are often exposed daily and for long periods to N2O with no gas reversal equipment. If you have any comments or information please write to the Midwifery Resource Centre.

This article is taken from the NZ Doctor of Nov 5th 1992

The Broadcaster must respond within 60 working days. If you are UNHAPPY with the response you have 20 days within which to take it to the BSA giving reasons and forwarding copies of all correspondence.

#### **PRESS COUNCIL**

If you are not satisfied with any reply received regarding printed media write to the Press Council with copies of the article and any correspondence.

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Write to the ASCB giving date, time and reasons. For the print media enclose a copy of the advertisement. They will make relevant contacts and decide if it contravenes a code. You will be advised how to proceed.

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Press Council - The Secretary P O Box 1066 Wellington (04) 473-5220

The Broadcasting Codes and Advertising Codes of Practice are available at some libraries or from the BSA for \$15. Specific advertising codes can be obtained separately from the ASCB.



#### **BAY OF ISLANDS HEALTH SERVICES**

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BAY OF ISLANDS HEALTH SERVICES require a Midwife/Manager for the Maternity Annex at Bay of Islands Hospital. This unit provides a range of maternity services from ante-natal, birthing and post-natal care through hospital staff and independent practitioners. The Midwife/Manager is charged with the co-ordination and operation of this service to meet the needs of women and their families in the Bay of Islands area.

Qualifications: RGN or RCOMPN or RGON with RM post basic qualifications and experience in management preferred.

Full job description and person specifications along with application forms are available

from:- James Green

Area Nurse Manager Bay of Islands Hospital P O Box 290, Kawakawa

Closing date - 24 December 1992

# Appendix to John Birkbeck's letter of 16/11/92

Table 4 Vitamin K Content of Ordinary Foods*	of Ordinary	Foods*		
		2	(µg per 100 g)	
Foods	< 10		50-100	^ 100
Dairy and protein				
	×			
Cheese		×		
Butter		×		
Skeletal meats	×		4	
Beef liver		•	×	
Other liver		< ≻		
Cereals and cereal products		,		
Whole com	×			
Com oil		×		
Oats	:	×		
Whole wheat	< >			
Vegetables	1			
Potatoes	×			12
Carrots	×			
Tomatoes	×	<		
Peas		×		
Cabbage			×	
Cauliflower			×	
Broccoli				×
Spinach				×
Lettuce				<b>×</b>
Brussel sprouts				×
Fruits				
Oranges	×			
Peaches	×			
Applesauce	<b>:</b> ×			
Dananas	>			
Beverages		<		
Collect		>		:
				,
wauter consucered in assigning vitamin is, coment was taken from Kets. 09, (4-7), 81, 82.  Many of the values in Ref. 98 are from unpublished sources, or may be from Dam and Gla-	m unpublishe	od sources, or n	nay be from Dam and Gla-	1 and Gla-
	pranculation III	a manual nov	cically ocilled.	

- plasma vitamin K and PIVKA-II in the neonate. J Pediat Gastroenterol Nutr 1990; 11:32-36.
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recommend that route. It should be noted that vitamin K administration by whatever route will not eliminate late bleeding, which can be associated with hepatic disease especially alpha-1 antitrypsin deficiency. Ongoing studies of vitamin K action show its effects to be much more complex than formerly thought, and a K-dependant protein, protein C, has recently been shown to act as an anticoagulant [12].

One other relevant issue is the question of whether oral vitamin K may be carcinogenic [13]. Retrospective studies by Goldin/et al [14] suggested that children who in 1970 had had intramuscular [but not oral] vitamin K at birth were much more likely to develop cancer [mainly leukaemia] than those who had not. A subsequent case-control study had shown the same outcome. The results were interpreted that intramuscular vitamin K raised the risk of all childhood cancers from 1 in 500 to 1 in 200. This would mean a much higher number of cancers associated with this treatment than cases of haemorrhage prevented: in the UK 400-2000 cancers per year compared to 70 cases of haemorrhagic diease without the injection. McNinch [2] has even raised the question as to whether the low vitamin K status seen at birth might carry some biological advantage. Plasma levels of K achieved after intramuscular injection are indeed extremely high. Golding expressed a personal preference for oral vitamin K. Ultimately we may choose, for women proposing to breastfeed, administration of oral vitamin K prior to delivery, plus early and enthusiastic feeding in the newborn period. Artificial constraints on the frequency and duration of breastfeeding in hospital still occur, and must be eliminated.

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# VITAMIN K ISSUES

Nutrition and Health Education Systems c/o Box 45 027, Auckland 8 GST Number 29 250 626

John Birkbeck
MB, CnB, FRCPC, MNZIFST
Consultant

Tel 09 837 5830 or 025 972 249 Fax 09 837 5446

16 November 1992

Ms Karen Guilliland NZ College of Midwives, Christchurch

Dear Ms Guilliland,

Regarding the vitamin K issuue; I hope that we may get some discussion at the AGM of the Paediatric Society in another week's time on this matter. It would be helpful if we could reconcile the presently disparate opinions of the "Auckland group" versus "the rest". Making it entirely the responsibility of the parents to make the choice is not acceptable to me: almost all parents want an informed opinion by their caregiver about the preferred option. Probable availability of a Mixed Micelle oral preparation in 1993 will help, but there is still a need for research as to why the problem occurs in the first place.

I am concerned that I am getting requests for information about "good food sources of vitamin K" for pregnant women, although there is no evidence to suggest that maternal vitamin K intake in general [rather than a substantial boost near delivery] has any effect on the status of the infant. It may do: there is no information of which I am aware on this point. It is thus inappropriate to boost the hopes of a mother by implying that this makes oral prophylaxis totally secure, although in general terms consuming such foods can only be beneficial. For your interest I append a copy of a useful guide in the matter. The source is :Suttie, JW: in: Machlin, LJ (ed): Handbook of vitamins, 2nd ed, 1991. Ch 4.

Sincerely,

John Birkbeck

# Nutrition and Health Education Systems

c/o Box 45 027, Auckland 8 GST Number 29 250 626

> Iohn Birkbeck MB, ChB, FRCPC, MNZIFST

Tel 09 837 5830 or 025 972 249 Fax 09 837 5446

The Editor, National Newsletter, NZ College of Midwives Inc, Christchurch.

15 October 1992

Dear Editor,

In your most recent Newsletter there is a quantity of material about the administration of vitamin K to newborns. The issue is indeed a contentious one, which may in part be remedied if current testing of a new oral preparation by Roche in Europe proves satisfactory, perhaps next year. In the meantime, the intramuscular preparation has been given, without apparent harm, to many infants in for example the UK. Indeed the control series in Golding's study had such management. I am enclosing some additional documentation on the topic, which may be of interest. I expect the matter to be discussed at the forthcoming Paediatric Annual Conference in Auckland.

While I have long argued [see the Society's position paper on the subject a few years back] that the human newborn cannot have been designed to bleed to death from the cord stump or minor trauma, and hence we are missing something, there is absolutely no evidence at present that the mother's consumption of vitamin K in pregnancy has any bearing on the matter. It is then misleading to imply as in your quote on page 23, that including "good sources" of vitamin K during pregnancy might obviate the need to give the infant any prophylaxis. We simply do not know this, and it is not "obvious", since many lipids do not pass readily across the placenta. Further, the low clotting factor levels in many newborns are not wholly vitamin K-dependant, and seem to reflect insufficient liver function as well.

The best sources are reported to be: broccoli, spinach, lettuce and brussels sprouts, with good sources beef liver, cauliflower and broccoli. Soybeans were not mentioned in this authoritative review [by Suttie in Handbook of the Vitamins, 2nd ed, 1990]. It should be remembered that intestinal bacteria also make vitamin K which is almost certainly absorbed: in the human adult perhaps as much as 50% of the blood vitamin K is of bacterial origin. It may be that changing bacterial populations in the colon, resulting from dietary composition, may affect this synthesis.

In summary, there is a great deal to learn about the sources of vitamin K in humans, especially in pregnancy, before we become dogmatic with advice.

Yours sincerely,

John Birkbeck, MB, ChB, FRCPC, MNZIFST Chairman, Nutrition Committee, NZ Paediatric Society.

In 1988 the Nutrition Committee of the NZ Paediatric Society published a paper on Vitamin K prophylaxis in the newborn [1]. On the basis of the evidence then in the literature, the administration of oral vitamin K was recommended for healthy, term newborns. This was particularly supported by a paper of McNinch and Tripp [2] which indicated effectiveness in a series of 25000 newborns. In a letter, Priestley [3] in the same journal noted a case of late haemorrhage at 7 weeks in an infant who had received oral vitamin K, and

raised questions about the safety of that route of administration.

In a subsequent study of solely breastfed infants by Hathaway et al in Thailand [4], using either 2 or 5 mg orally, or 1 mg intramuscularly at birth, blood measurements at one months of age measured plasma vitamin K1 and noncarboxylated prothrombin [NCP] levels. 64 infants were studied. 21 given 2mg K orally had a wide spread of both blood indices, which were not significantly improved with 5mg K orally. Intramuscular vitamin K gave only slightly higher blood K values at one month, and the range of NCP was similar. While blood K levels were on average much lower in 10 infants not receiving any vitamin K, some had higher K levels than those receiving intramuscular K, and had lower NCP values. It appeared that none of the infants developed clinical problems, although some had blood values which were indicated such a risk.

Further evidence came from Denmark [5], in which 1mg oral vitamin K was compared to the same dose intramuscularly in 300 infants. Blood studies were performed at 72 hours postnatally, and these showed thatno significant difference in levels of K-dependant coagulation factors, nor PIVKA-II [acorboxyprothrombin] between the groups. No bleeding was observed up to 5

days, the time of discharge.

However as has been noted by von Kries [6], the important issue is to prevent haemorrhagic disease, not alter biochemical indices. Overall, the evidence reported in this paper suggests that while oral vitamin K probably is effective against early-onset haemorrhagic disease, it is not adeugte to protect all infants

against late-onset disease at say 4-6 weeks of age.

Shinzawa et al. [7] showed that oral administration of 4mg of K at the age of 5 days produced extremely variable plasma levels associated with corresponding inverse levels of PIVKA-II. Variable absorption thus may be an important factor. Two studies have suggested that in unsupplemented, breastfed infants, levels of PIVKA-II are closely inversely related to the total volume of breast milk consumed during the first few days, notwithstanding its well-known low content [1-2ng phylloquinone/ml, one-half to one-third that in cow's milk].

At present then we must be concerned that oral administration with currently available formulations of vitamin K cannot be relied upon to protect all healthy term infants from late haemorrhage. The effect of repeated oral dosage cannot be sufficiently evaluated, because of concern about compliance after discharge from supervised care. In a recent paper, von Kries [8] has recommended the use of parenteral vitamin 1mg at birth until further evidence

is to hand.

Motohara et al [9, 10] have shown that oral administration of 20mg of phylloquinone given 7-10 days prior to delivery produced infants with much higher blood K levels at 5 days, none with PIVKA-II detectable, and much higher breast-milk levels at 5 days than in control studies. This is despite previous evidence that vitamin K is poorly transferred through the placenta [11]. It may be that subsequent work, perhaps using maternal K administration and/or micellar forms of the vitamin which are better absorbed, may permit us to abandon intramuscular administration. At present, it is advisable to