

International Symposium on Maternal Health 2012

SYMPOSIUM PROCEEDINGS



FINDINGS ON HIGH-RISK
PREGNANCY, MATERNAL
MORTALITY, ABORTION, AND
MANAGEMENT OF FOETAL
ABNORMALITIES.

Promoting Excellence in Maternal Healthcare



CONTENTS

- 3 *Preface*
- 5 *The Gift of Time: Hospice Care For Terminally-ill Unborn Children And Their Families*
- 7 *Leading Cancer Expert Brings Good News: Research Shows Chemotherapy Generally Safe in Pregnancy*
- 9 *Improving Maternal Health In Low-Resource Countries*
- 11 *Education, Not Abortion, Key To Reducing Maternal Deaths, Major Chilean Study Finds.*
- 13 *What was Previously Untreatable is Now Treatable - Good News from the Frontier of High-Risk Obstetrics*
- 15 *Ireland is a Safe Place for Pregnant Women*
- 17 *Relative Safety Of Abortion Vs. Childbirth*
- 19 *The Importance Of Addressing Predictable Causes Of High-Risk Pregnancies*
- 21 *Conclusions*

International Symposium on Maternal Health

Promoting Excellence in Maternal Healthcare

Clarendon House
34 Clarendon Street
Dublin 2
info@symposiummaternalhealth.com
ph: +353 1 87 33819



Preface

PROF. EAMON O'DWYER

IRELAND

As medical practitioners, we strive to provide best-practice care to all women who may experience difficulties in their pregnancies. We wish to further develop the expanding practice of treating illness during pregnancy to allow for a healthy and happy gestational period for both mother and baby

To assist in achieving those aims, the *Committee for Excellence in Maternal Healthcare* held the 2012 International Symposium on Maternal Health in Dublin on September 8th.

We are delighted to report that it was a remarkably well-attended event, and that internationally-recognised experts in maternal healthcare made fascinating and informative presentations throughout the day.



Irish maternal healthcare practitioners were presented with a unique insight into some of the most exciting research and new developments in relation to the management of high-risk pregnancies, cancer in pregnancy, mental health, maternal mortality and striving for excellence in low-resource countries.

This report offers a summary of each presentation and highlights the key points made. It contains much good news for mothers and babies, particularly in the area of maternal safety, cancer in pregnancy, in utero surgery for affected foetuses, and the provision of perinatal hospice services.

I think we can be proud that Ireland has achieved an excellent record in caring for mothers and babies, and it is our hope that our endeavours can assist medical practitioners in the pursuit of excellence in maternal healthcare.

Yours sincerely,

Eamon O'Dwyer

Eamon O'Dwyer is one of Ireland's most distinguished medical professionals, and was Professor of Gynaecology & Obstetrics at NUI Galway for 35 years. A Fellow of the Royal Society of Medicine, London and a member of the Gynaecological visiting Society of Great Britain & Ireland as well as the Italian Gynaecological Society, he was Chairman of the Institute of Obstetricians and Gynaecologists, Chairman of the National Council for Postgraduate Medical and Dental training, and a member of the EEC Committee charged with harmonising medical training in the European Economic Community. He was also a founding member of the Irish Medical Council.

Professor O'Dwyer is Chairman of the Committee for Excellence in Maternal Healthcare.

The Gift of Time: Hospice Care For Terminally-ill Unborn Children And Their Families

DR. BYRON C. CALHOUN

USA

Better support services give parents 'the gift of time' with children who may not live for long after birth, says Dr. Byron C. Calhoun, a pioneer of the perinatal hospice concept.

Hospice care revolutionised the care of the dying by offering an holistic approach to the physical, emotional, and spiritual support for terminally ill patients and their families. It was a very positive advance in medical care. The provision of perinatal hospice services - offering the same support for unborn children with a terminal condition, and for their families - is also producing remarkably positive outcomes.

Dr. Calhoun outlined the perinatal hospice concept in a paper published in the *American Journal of Obstetrics and Gynaecology* in 2001.

He told the Symposium that in his obstetric practice he often diagnosed children who were able to benefit from amazing new in-utero treatments, but he also diagnosed pre-born children with serious malformations which cannot yet be treated. He realised that a dedicated service was needed for these children and for their families and went on to pioneer the 'perinatal hospice' concept.

Dr. Calhoun identified the failure in the system whereby the families of these children were left without appropriate support. There was typically a well-intentioned desire among medical professionals to avoid distress to the parents, he pointed out.

Dr. Calhoun and his co-authors posited that if proper care and support were offered, many people would choose to spend whatever time

they were given with their baby and carry the baby to birth. In one US study (Calhoun et al, 2006) 80 per cent of parents who were offered perinatal hospice support chose to accept it.

Perinatal hospice services empower families. The presence of a viable, compassionate, organized program gives the parents a place to live as parents and an opportunity to work through grief and dashed expectations.

The care of terminally-ill babies requires a team of professionals, since no single group of professionals will be able to meet all the needs of the grieving family of a terminally ill child. The central hospice team consists of the patient, her unborn child, her family, the physician or team of physicians providing specialist care, a social worker, and a nurse with training in bereavement issues. Generally, as the care evolves, neonatologists, anaesthesiologists, psychiatrists, psychologists, chaplains, a local priest/pastor, bereavement counsellors, labour nurses, sonographers, and neonatal nurses may be added or have their services utilised.

A 'Birth Plan' is often written to clarify the family's wishes. Many parents also fear their baby might feel pain. If they desire 'comfort measures' for their baby in the form of oxygen, feeding, medications, pain relief (if indicated) and wound dressings, parents are assured these will be provided. Flexibility in meeting the parents' needs, while also meeting treatment schedules, is critical to the management of these pregnancies.

Instruction is given in anticipatory grief as well as ways to relate to other family members and to friends. Gentle sharing of the realistic outcome of the pregnancy is balanced with the hope for simplified



dreams for their baby. Memories built around the child are important in the grieving process. Frequent ultrasounds of their baby are provided and other family members, particularly grandparents and siblings, are invited to attend and to see the baby. The family is allowed to spend maximum time with their child, and the time allows parents to contribute something special to their child's life.

Hospice care does not cease with the death of the child. Grief counselling continues throughout the postpartum time frame.

Dr. Calhoun also advised that major investment is not required to establish or maintain perinatal hospice services. 'All the typical hospital needs is a few extra rooms for these families', he said.

150 pioneering hospitals, hospices, and clinics in the U.S. and around the world are now providing perinatal hospice/palliative care for families whose babies will die before or shortly after birth.

CONCLUSIONS

- **Perinatal hospice services allow parents to have the gift of time with their children.**

- **The good news is that centres offering this specialist care can be inserted into most major hospitals at minimum cost.**

- **Research published in the *Journal of Reproductive Medicine* showed that up to 80% of parents chose the supportive services of Perinatal Hospice when it was offered.**

Dr. Byron C. Calhoun is a specialist in the management of high-risk obstetrics and the medical complications of pregnancy, who has managed thousands of high-risk pregnancies. He is Professor & Vice Chair in the Department of Obstetrics & Gynaecology in the University of Charleston, West Virginia. His practice and clinical research is concentrated on pregnancies complicated by maternal and/or foetal disease, and he is a specialist in maternal-foetal medicine.

Dr. Calhoun is also an original author of the perinatal hospice concept, which provides multidisciplinary care to families with a fatal prenatal diagnosis.

Leading Cancer Expert Brings Good News: Research Shows Chemotherapy Generally Safe in Pregnancy

DR. FRÉDÉRIC AMANT

BELGIUM

Dr. Frédéric Amant, described by the prestigious medical journal, *The Lancet* as 'leading the agenda on cancer in pregnancy', has been to the forefront in ground-breaking research, which gathered new data on treating cancer in pregnancy. His research showed conclusively that positive outcomes are readily attainable for both mother and baby.

Significantly, Dr Amant concluded that "in the case of cancer complicating pregnancy, termination of pregnancy does not improve maternal prognosis". He also explained "fear of chemotherapy is not an indication to terminate pregnancy and not a reason to delay maternal treatment for cancer".

Yearly, more than 5 million children are born in Europe. It is estimated that between 2,500-5,000 of these pregnancies are complicated by cancer. It is a ratio that is increasing as the

age profile of pregnancy increases. Dr. Amant is the principal investigator of an international study on cancer in pregnancy (www.cancerinpregnancy.org), and lead author of the recent series on malignancy in pregnancy published in *The Lancet* and *Lancet Oncology*, which presented new evidence on the treatment of cancer during pregnancy. He hopes to establish a research centre in Ireland as part of a Europe-wide collaboration.

Dr. Amant and his pioneering team have monitored pregnancies where all types of cancer have occurred. They found that pregnancy does not need to alter cancer treatment, and cancer treatment does not need to alter maternal care. A central message of Dr. Amant's research is that there is not a conflict between the needs of the mother and child in high-risk pregnancies.

One of the major enquiries of his research was to ascertain what effect treatment has on the unborn



child. The findings showed that there are precautions to be taken with some courses of cancer treatment, but they are manageable precautions.

Dr. Amant's research showed that in long term studies, children did not suffer from their mother's maternal cancer treatment. They were found to have normal development, IQ, hearing, heart function and general health. The only factor which had any adjusting effect on this ratio was the date of delivery, which showed the normal complications and defects associated with premature birth. Crucially, this research also showed that neither mother nor baby benefitted from early delivery as part of the plan of treatment.

His conclusion was that there was no need to delay chemotherapy administration, or to induce preterm delivery to avoid harm to the foetus.

He added that the decision to administer chemotherapy should follow the same guidelines as for non-pregnant patients. In practice, it is possible to administer chemotherapy from 14 weeks gestational age onwards with specific attention to prenatal care.

Dr. Amant also said that pregnancy can mask many of the symptoms of breast cancer, leading on occasion to a later diagnosis, a concern highlighted by other researchers and medical practitioners in *The Lancet* series.

CONCLUSIONS

The implications of Professor Amant's research are tremendously reassuring:

- **He confirms that cancer treatment for a pregnant woman does not require abortion, confirming that 'in the case of cancer complicating pregnancy, termination of pregnancy does not improve maternal prognosis'. All treatment, including surgery, can be given to a pregnant woman.**
- **Secondly, his work establishes that chemotherapy should not be delayed unnecessarily due to pregnancy. His research shows that normal outcomes are most likely for the foetus following the administration of chemotherapy.**
- **And thirdly, his research establishes there should be less premature delivery of unborn children. This is all good news for mothers and their babies.**



Dr. Amant with Dr. Seán Ó Domhnaill

Dr. Frédéric Amant is a leading specialist in gynaecological oncology, Professor in the Department of Obstetrics and Gynaecology at the University of Leuven, Belgium, and a specialist in Gynaecologic Oncology in UZ Gasthuisberg.

Dr. Amant is the principal investigator of an international study on cancer in pregnancy (www.cancerinpregnancy.org). He is also Chair of the Taskforce of the European Society of Gynaecologic Oncology on cancer in pregnancy.

Improving Maternal Health In Low-Resource Countries

DR. JEAN KAGIA

KENYA

There are 'three delays' that contribute to maternal mortality in Kenya according to Dr. Jean Kagia, but each delay is caused by many factors, and all factors must be addressed by strategies to improve maternal healthcare.

Dr Kagia, who was awarded by the Kenya Obstetrical and Gynaecological Society in 2011 for her contribution to improving women's health, identified those delays as:

- Delay in deciding to go for care - due to ignorance, cultural practices, religious beliefs, and lack of empowerment and other factors
- Delay in reaching care - due to poverty, poor infrastructure and other factors
- Delay in receiving care - due to low resources; both human and material.

She pointed out that only 53% of pregnant women in Kenya attend Ante Natal Clinics at least 4 times - the optimal number of visits required for safe delivery. Furthermore, only 44% of pregnancies were delivered by a skilled birth assistant. Maternal mortality is currently 488 per 100,000 live births - almost 90 times that of Ireland.

Addressing the International Symposium on Maternal Health, the Nairobi-based obstetrician and gynaecologist shared Kenya's experience and strategy as an example of how developing countries with low resources can improve their maternal health care.

The challenges facing low resource countries include inadequate budgetary allocation, inadequate human resources, poor healthcare management systems, poverty and lack of education, no social security or health insurance, and cultural and religious barriers. Other difficulties she listed also included droughts,



Dr. Kagia with Kasiva Mbithi of the Kenyan Embassy to Ireland at the Symposium.

political instability, and corruption, while she noted it was imperative to increase food security and the provision of clean water.

Dr. Kagia said that female empowerment was key to overcoming those challenges, as was building strong communities. 'Even though Kenya is very patriarchal, it is women who drive the economy,' she said, 'so if their health care is terrible, the economy will also suffer'.

She is a big supporter of community based micro-financing which she says empowers mothers to have more control over the household budget; just one of the types of small changes she says are making a huge difference in Kenya.

Another - and one that is attainable considering low resources - is a grassroots strategy to tackle attitudes; changing cultural practices by including husbands in maternal health centre visits for example.

Kenya's current maternal healthcare strategy also centres on increasing the integration of the health network. Bringing the service within reach of isolated communities by increasing the localised primary network does not have a serious cost implication, and encourages community health care which improves public health with 'low-tech, cost-effective' measures.

One initiative Dr. Kagia has undertaken is to make maternal shelters, dubbed Kiotas (or nests), available for women in crisis - an initiative Dr. Kagia hopes to make available in all 47 counties in Kenya.

CONCLUSIONS

- **In order to improve maternal healthcare in low resource countries, a multifaceted approach was required.**
- **A system which was 'equitable, efficient and delivered effective service' was achievable, with low-tech, cost-effective measures.**
- **Dr. Kagia reminded the Symposium of Nelson Mandela's maxim: 'It always feels impossible until it's done.'**

Dr. Jean Kagia is one of Kenya's best-known Obstetrician-Gynaecologists and has worked in Nairobi for almost 30 years, where she also acts as Trustee for the Kenya Medical Women's Association. She has led private and public initiatives in improving maternal outcomes and last year was awarded by the Kenya Obstetrical and Gynaecological Society for her contribution to improving women's health.



Education, Not Abortion, Key To Reducing Maternal Deaths, Major Chilean Study Finds

PROF. ELARD KOCH

CHILE

A major scientific analysis using 50 years of maternal mortality data from Chile has found that the most important factor in reducing maternal mortality is the educational level of women.

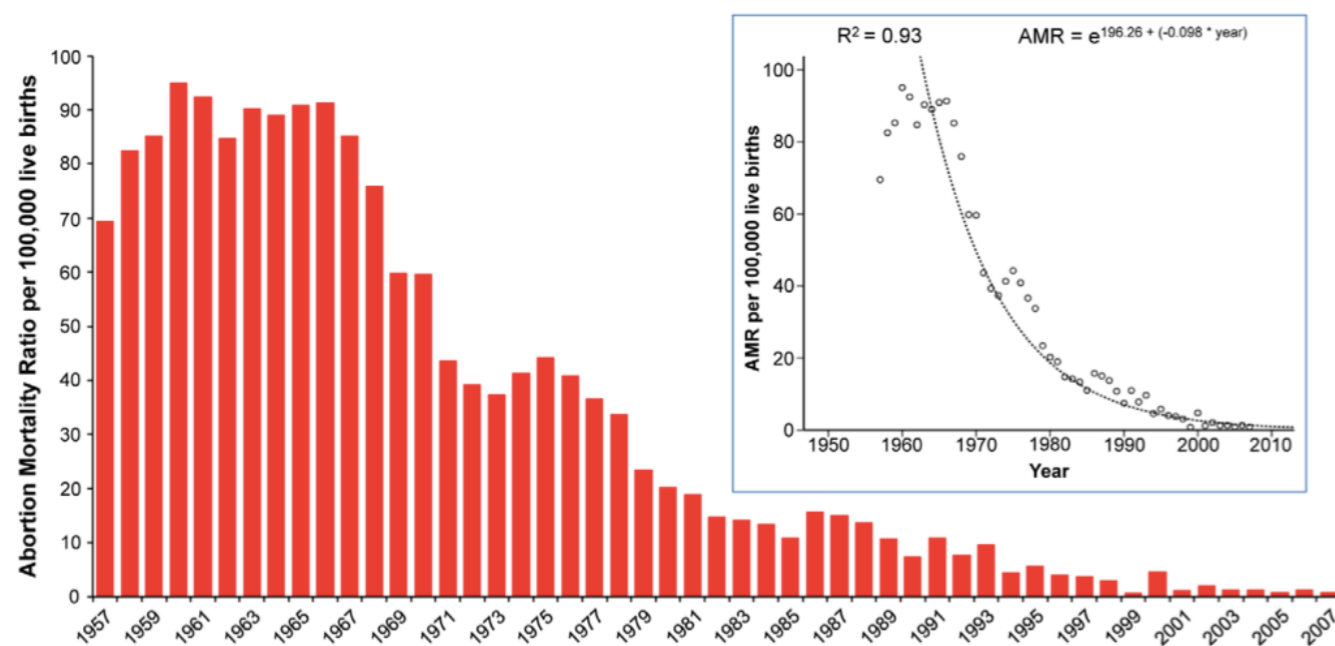
Prof. Elard Koch, a molecular epidemiologist and lead author of the study, said that educating women enhanced their ability to access existing health care resources, and since those resources included skilled attendants for childbirth, that directly led to a reduction of maternal deaths during pregnancy and childbirth. It was crucial, he told the Symposium, that research verified the actual determinants to improve maternal health.

Prof. Koch pointed out that following the prohibition of abortion in Chile in 1989, the numbers of maternal deaths continued to decline. Contrary to widely-held assumptions, making abortion illegal in Chile did not result

in an increase in maternal mortality. In fact, after abortion was made illegal, the number of maternal deaths continued to decrease from 41.3 to 12.7 per 100,000 live births (69.2% reduction).

His team's research, entitled 'Women's Education Level, Maternal Health Facilities, Abortion Legislation and Maternal Deaths: a Natural Experiment in Chile from 1957 to 2007' was conducted on behalf of the Chilean Maternal Mortality Research Initiative (CMMRI) and was published in the May 4 2012 issue of PLoS ONE.

Using 50 years of reliable, comprehensive official data from Chile's National Institute of Statistics the study is the first in-depth analysis of a large time series, year by year, of maternal deaths and their determinants, including years of education, per capita income, total fertility rate, birth order, clean water supply, sanitation, and childbirth delivery by skilled attendants, and analysing the effect of historical educational and maternal health policies.



Maternal Mortality Rates, Chile, 1957-2007



Prof. Elard Koch

As Dr. Koch explained: 'In this sense, it is a unique natural experiment conducted in a developing country.'

During the fifty-year period under study, the overall maternal mortality rate dramatically declined by 93.8%, from 270.7 to 18.2 deaths per 100,000 live births, making Chile a leader in maternal healthcare outcomes in the Americas.

'During 2008, the overall maternal mortality rate declined again, to 16.5 per 100,000 live births, positioning Chile as the country with the second lowest ratio in the American continent after Canada, with at least two points lower than the United States,' said Dr. Koch.

His research showed that the most important factor in reducing maternal mortality was the educational level of women - and that this increased the effect of all other factors. For every additional year of maternal education there was a corresponding decrease in the maternal mortality rate of 29.3 per 100,000 live births.

Dr. Koch told the Symposium that the 'synergistic effect' of the following factors had reduced maternal mortality,

1. Increased level of female education

2. Complementary nutrition programs
3. Universal access to maternal prenatal, perinatal and postnatal health services.
4. Development of emergency obstetric units and specialised care for complex high-risk cases (pivotal during the slow phase of reduction)
5. Sanitary development, including access to clean water and sewerage systems.

'Definitively, the legal status of abortion is unrelated to overall maternal mortality rates,' he added. The principle of double effect was recognised in Chile, where, much as in Ireland, ectopic pregnancy and other exceptional conditions where medical interventions are necessary to save the life of the mother are considered a medical ethics decision and not a legal issue.

CONCLUSIONS

- A major scientific analysis using 50 years of maternal mortality data from Chile has found that the most important factor in reducing maternal mortality is the educational level of women.
- The authors also found that making abortion illegal in Chile did not result in an increase in maternal mortality. In fact, after abortion was made illegal, the number of maternal deaths continued to decrease from 41.3 to 12.7 per 100,000 live births (69.2% reduction).

Dr. Elard Koch is a molecular epidemiologist and researcher at the Department of Family Medicine in the University of Chile. He is Associate Professor and Director of Research for the Institute of Molecular Epidemiology, Centre of Embryonic Medicine and Maternal Health at the Universidad Católica de la Santísima Concepción, in Santiago, Chile. He was awarded the 'Academic Excellence Medal on Research' for three consecutive years (2008, 2009 and 2010) from the University of Chile.

What was Previously Untreatable is Now Treatable - Good News from the Frontier of High-Risk Obstetrics

DR. BYRON C. CALHOUN

USA

Dr. Byron C. Calhoun, a foremost authority on the management of high-risk pregnancy, told the International Symposium on Maternal Health that exciting new developments in maternal and foetal care means that 'what was previously untreatable is now treatable'.

Dr. Calhoun, a specialist in the management of high-risk obstetrics and the medical complications of pregnancy, has managed thousands of high risk pregnancies, and is a specialist practitioner of in-utero therapy, having operated on thousands of unborn children.

Previously untreatable medical and surgical problems are now being dealt with through

“A range of previously lethal malformations were now treatable prior to birth, including rare conditions such as Neural Tube Defects, Twin to Twin transfusion, and even Hypoplastic Left Heart Syndrome.”

the administration of medications directly to the unborn, or by new intra-uterine surgical procedures, Dr. Calhoun told a rapt audience at the Symposium. He said that a range of previously lethal malformations were now treatable prior to birth, including rare conditions such as Neural Tube Defects, Twin to Twin transfusion, and even Hypoplastic Left Heart Syndrome.

He listed more than eleven conditions

previously considered untreatable and described how surgical techniques have been developed so that all of these conditions can be treated with a reasonable degree of success. In the past, these conditions were invariably fatal to the baby in the longer term, when the child was still young. Today they pose a manageable challenge to the skilled materno-foetal surgeon.

Dr. Calhoun said that unborn babies have an amazing capacity to heal after surgery, and gave the example of treatment for a Sacrococcygeal Teratoma - a massive tumor which is sometimes bigger than the child and is extremely dangerous to both mother and child. Dr. Calhoun has performed the procedure where they remove the child from the uterus at 23/24 weeks and simply cut the tumor away and then place the child back in the womb. If the tumor is not malignant the problem is solved, and the amazing thing is that there will be almost no scarring for the unborn child. The capacity for recovery of the child is impressive, said Dr. Calhoun.

He added that instrumentation which allows access to the womb had, in many cases, eliminated the need for open surgery. Where a child had a ruptured diaphragm (hernia) a plug would now be placed in the unborn child's throat. The child's lungs would not be able to expel fluids and would expand and push the hernia out. Then, in time, the hernia heals and the plug can be removed.

Dr. Calhoun also discussed new treatments for Twin to Twin Transfusion Syndrome (TTTS) where one twin is claiming the blood supply of the other, inhibiting his/her growth. Traditionally this would have resulted in the death of the weaker twin, but a new laser procedure can cut the crossover of blood by congealing the shared blood vessels between the two children.



Dr Calhoun speaking during a Question and Answer Panel Session at the Symposium

Another successful treatment described was for Severe Combined Immunodeficiency Syndrome and involved the injection of stem cells from the child's mother into the baby in utero, while the use of a newly developed catheter was successful in treating unborn children with previously-fatal bladder outlet obstructions.

There was good news for mothers too as Dr. Calhoun established that in all pregnancies a mother and her child's interests are never divergent. He looked at the major complications arising for women in pregnancy and noted that an interdisciplinary approach was crucial to best serving both patients.

Discussing Pulmonary Hypertension, a rare but potentially fatal condition, Dr. Calhoun said that survival rates had greatly improved with better therapies. He confirmed that terminating the pregnancy did not help the outcome with this condition since pregnancy did not exacerbate pulmonary hypertension.

Dr. Calhoun pointed out that with all high-risk pregnancies what was required was excellent evaluation, interdisciplinary consultation and continued monitoring. He said that abortion did not improve the outcome for mothers and was not necessary in the management of high-risk pregnancies.

Dr. Calhoun's very comprehensive presentation,

describing as it did the major materno-foetal emergencies encountered in modern-day obstetric practice, was very reassuring to all who are concerned with the well-being of the two patients encountered every time an expectant mother enters a maternity hospital.

CONCLUSIONS

- **Advances in treatment mean that what was not previously treatable is now treatable.**
- **A whole new area of ground-breaking in-utero therapy now exists.**
- **Termination of pregnancy does not improve outcomes in high-risk pregnancies**
- **Providing excellent multidisciplinary care is key.**

Dr. Byron C. Calhoun is a specialist in the management of high-risk obstetrics and the medical complications of pregnancy, who has managed thousands of high-risk pregnancies.

For more information see page 3.

Ireland is a Safe Place for Pregnant Women

DR. JOHN MONAGHAN

IRELAND

With over 250 years' experience in improving maternal healthcare, Ireland's experience can benefit other countries, Irish consultant obstetrician Dr. John Monaghan told the Symposium.

As an illustrative example, Dr. Monaghan outlined the results of a co-operative venture between Omdurman hospital in Sudan and health professionals from UCC and the Cork University Maternity Hospital.

Sudan has a very poor maternal mortality rate of 750 deaths per 100,000 births, and Omdurman Maternity Hospital is the largest maternity hospital in Sudan with 25,000 annual deliveries.

In a successful collaboration, known as the COPP, equipment and expertise were sent to the hospital. Cork's investment of €165,000 (which was matched by an equivalent amount from Sudan) saw an improve-

ment in the care provided by the hospital, and a drop in the number of maternal deaths recorded in the hospital from 32 in 2001 to 7 in 2007. The four factors which contributed most to the improvement in maternal mortality were:

- Using Magnesium Sulphate to treat hypertension
- Improved hygiene and use of antibiotics
- Providing a small laboratory to provide for safer blood transfusion
- Using Misoprostal to treat post-partum haemorrhage.

The outcomes of the collaboration were published in the *British Journal of Obstetrics and Gynaecology* in 2011.

Ireland currently ranks amongst the best in the world for maternal mortality, Dr. Monaghan said, and the past 30 years have seen the number of maternal deaths in this country decrease steadily as maternal healthcare improved in Ireland. The indications are that Ireland is a safe place for expectant mothers and their babies.



Young doctors at the Kings Inns



Dr. John Monaghan

He also pointed out a possible reason why an inconsistent standard in maternal healthcare is not confined to countries with poor resources. A study published in the *Lancet* on 31st March of this year by researcher Susan Bewley, a consultant obstetrician, suggested that the number of maternal deaths had doubled in the London area between 2005 and 2011. She also observed that maternal mortality had risen in Austria, Canada, Denmark, the Netherlands, Norway and the USA. Dr. Monaghan posited that one explanation for the difference in the maternal mortality rates of the United Kingdom and Ireland might be recruitment to the speciality of obstetrics and gynaecology.

According to a 2007 report from the Royal College of Obstetricians and Gynaecologists (RCOG) in the UK, for example, recruitment of UK to the specialty had "fallen to dangerously low levels". One reason, it would seem, is that students are opting out of the field because of the mandatory modules on abortion. Dr. Monaghan referred to an article quoting a RCOG

spokeswoman who said: 'You get no thanks for performing abortions ...who admits to friends at a dinner party that they are an abortionist? It is not a sexy area - it is a bog standard area of women's care.' The spokeswoman added that there was an increasing number of young doctors who are not participating in the [abortion] training.

In response, Dr. Monaghan showed, some commentators sought to abolish or seriously restrict the right to conscientious objection. He pointed to a paper by Julie Cantor published in the *New England Journal of Medicine* which argued that physicians had an 'obligation to choose specialties which were not moral minefields for them'. This, Dr. Monaghan said, contradicted the lessons of history which emphasised the importance of medical ethics and the right of physicians to abide by their conscience while delivering excellent care to patients.

CONCLUSIONS

- **With over 250 years' experience in improving maternal healthcare, Ireland's experience can benefit other countries.**
- **We are now one of the safest countries in the world for a woman to be pregnant.**
- **Other western countries, including the UK, are seeing a rise in maternal mortality, and Dr. Monaghan posited that recruitment to the field of Obstetrics and Gynaecology may be a contributing factor.**

Dr. John Monaghan graduated from Trinity College Dublin as a doctor in 1976 and since then has dedicated most of his working life to improving maternal healthcare. A consultant in Portiuncula Hospital, Ballinasloe, Co. Galway, he has practised obstetrics and gynaecology for over 30 years in Ireland, the UK, and Nigeria.

Relative Safety of Abortion vs. Childbirth

DR. PRISCILLA K. COLEMAN

USA

Women who feel coerced into undergoing abortions are at risk of suffering subsequent mental health problems, while an abundance of studies show that abortion significantly increases the risk of depression and suicidal thoughts and behaviour.

These were some of the findings discussed at the International Symposium on Maternal health by Professor Patricia Coleman, one of the foremost researchers in mental health implications of reproductive outcomes.

Professor Coleman has accumulated a vast quantity of research comparing outcome measures for women who have induced abortions and women who give birth. Her presentation at the Symposium, then, looked at the characteristics and situations that put women at the most risk for mental health problems following abortion, and the common negative post-abortion mental health responses.

In her “Woman at Risk” study, she searched the major medical databases for articles published between 1972 and 2011 that identify factors that increase a woman’s risk of post abortion mental health problems. Over 400 potentially relevant studies were identified. 258 articles were closely examined for relevancy, while 119 original studies were summarized and evaluated.

Some of the risk factors identified were:

- The pregnant mothers are pressured or coerced by others to abort.
- The pregnant woman was ambivalent about abortion, experienced decision difficulty and/or had a high degree of decisional distress
- She had pre-abortion mental health or psychiatric problems
- The pregnant woman was an adolescent or young adult.

Many of the risk factors are interconnected. For example, a woman who feels attached to her baby and desires to continue the pregnancy may also be pressured from her partner to abort if the relationship



is unstable, leading to feelings of ambivalence and stress surrounding the decision. If she suffers from low self-esteem and has trouble articulating her feelings, she may be particularly prone to yielding to the pressure.

Professor Coleman further examined the frequency of the risk factors, and found that 44% of women have some doubts about their decision to abort upon confirmation of pregnancy.

International studies have established a raft of psychological risks associated with abortion including depression, anxiety, suicidality, and substance abuse. Dr. Coleman illustrated that there were higher rates for these symptoms across the board when comparing women who have aborted unexpected pregnancies with those who have not.

In Norway, women who had had an abortion were nearly three times more likely to report significant depression, nearly three times as likely to abuse alcohol, 5 times as likely to become dependant on nicotine, nearly four times as likely to abuse marijuana, and 8 times as likely to abuse other illegal drugs, according to a study of over 700 respondents. A Chinese study from 2012 found that women with a history of induced abortion were 49% more likely

to experience depression compared to women who had not experienced an abortion after controls for maternal education, income, place of residence, and BMI were applied. There were no differences between women with and without a history of spontaneous abortion.

Data on pregnancy and mental health has greatly improved in the last ten years as researchers have tightened controls, used larger samples, and monitored subjects over longer periods, Professor Coleman reported.

A raft of studies back up the assertion that abortion puts mental health at risk, and on the other side of the spectrum there is evidence that motherhood has a positive effect on mental health. This is true regardless of whether the pregnancy was ‘planned’ or not. A British study found that 87% of women who had planned their pregnancy, and 78% of women who hadn’t, reported feeling ‘pleased or overjoyed’ just prior to delivery.

Professor Coleman pointed out that research had also shown pregnancy to be protective against suicide, while other studies showed that postpartum mothers produce hormones that improve mental health and a sense of connectedness and empathy.

CONCLUSIONS

- **Women who feel coerced into undergoing abortion are at risk of suffering subsequent mental health problems.**
- **Studies show that women who abort have a significantly increased risk of experiencing any mental health problem.**
- **Research also shows that pregnancy is protective against suicide.**

Dr. Priscilla K. Coleman is a Professor of Human Development and Family Studies at Bowling Green State University in Ohio. She has published more peer-reviewed articles on the mental health implications of reproductive outcomes than any other researcher in the world, is currently on the editorial boards for five international psychology and medical journals.



Dr. Coleman with her husband Bryan at the Symposium

The Importance Of Addressing Predictable Causes Of High-Risk Pregnancies

DR. MONIQUE V. CHIREAU

USA

Despite 130 years of research, the causes of pre-eclampsia (severe high blood pressure) in pregnancy remain unknown, and, while the condition is now manageable, a major study has found that there is still no clinically useful screening test to predict it arising.

Dr. Monique Chireau of Duke University, whose research has focused on the management of high-risk pregnancies, told the International Symposium on Maternal Health that further research was required in the field to enable better outcomes for patients.

She commended Ireland's maternal health care practitioners for ensuring that Ireland has consistently been shown to have one of the lowest maternal mortality rates in the world, describing the low rates of maternal deaths as "quite remarkable".

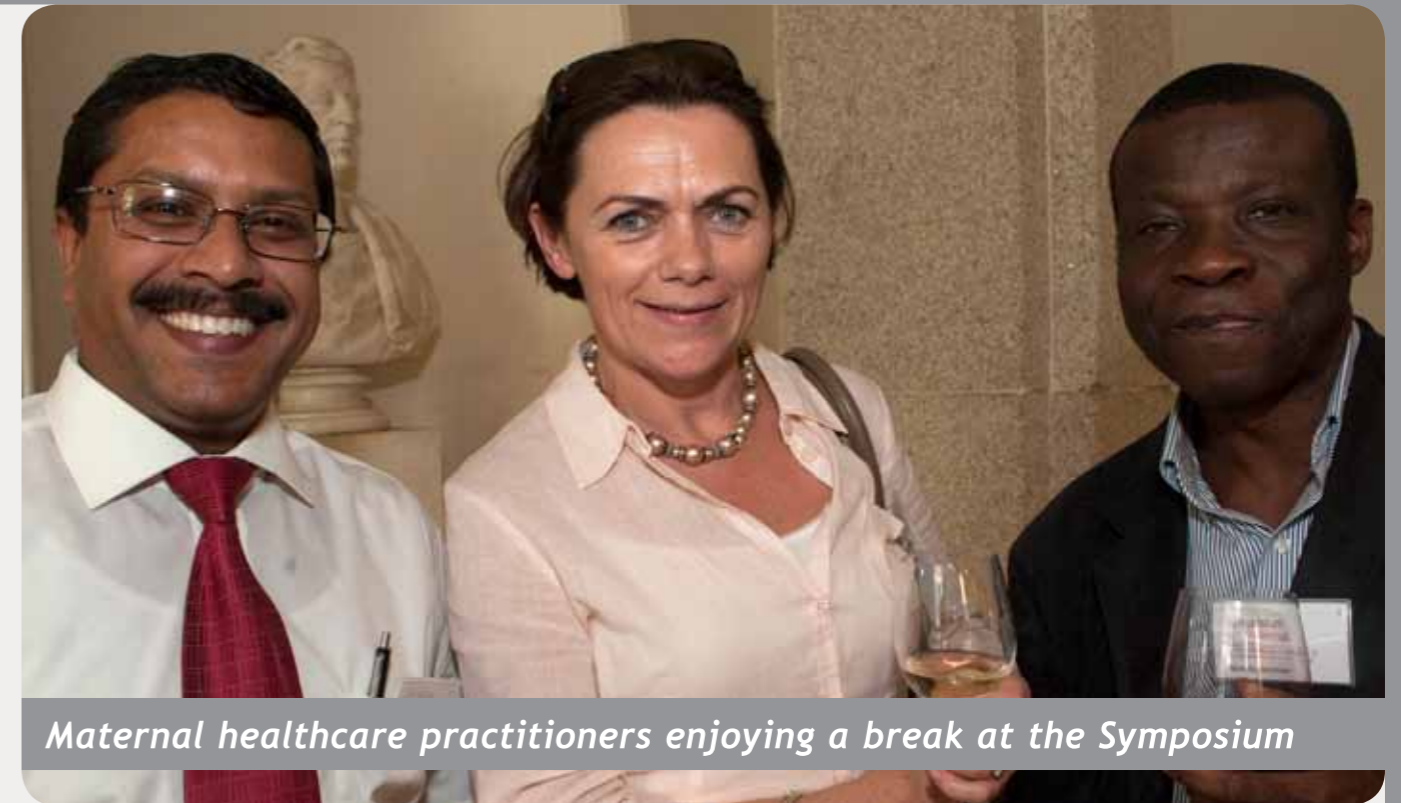
Dr. Chireau pointed out that addressing predictable causes of high-risk pregnancy

where intervention is possible was especially important, as it would help reduce maternal, foetal and neonatal mortality and morbidity.

She commended Ireland's maternal health care practitioners for ensuring low rates of maternal deaths.

The goal of prenatal care is 'the birth of a healthy baby with minimal risk to the mother,' she said, and advised that the cornerstones of care included identification of the potentially high-risk patient, ongoing evaluation of mother and baby and anticipation of potential problems before they occur, and intervention to address problems as needed.

Dr. Chireau also stressed the importance of communication with and education of patients. She has recently co-authored research on pre-eclampsia and stroke risks during and after pregnancy, and has proposed a multidisciplinary approach to correctly diagnose them and best prevent their deleterious outcomes.



Maternal healthcare practitioners enjoying a break at the Symposium

She also dealt with the diagnosis and management of ectopic pregnancy, which is the cause of the highest mortality rate in the first trimester in the United States, although this declined markedly in recent times because of a combination of ultrasound improvements and better diagnosis criteria.

However, even with the use of these diagnostic tools, 40% of women with ectopic pregnancies are not diagnosed at the time of their first emergency department visit, Dr. Chireau revealed. Treatments differ based on case history and type and Dr. Chireau's research has provided better guidelines on appropriate treatments. A more frequently occurring type of ectopic pregnancy, for instance, is caesarean section scar pregnancy, and she has also published research in this area.

Dr. Chireau also said that she believed that it was not true to say that managing high-risk pregnancy involved a conflict between the needs of the mother and the child, but that, rather, it 'comes down to understanding the particular circumstances of that pregnancy and dealing with it in a scientific and rational way.'

In recognising a complementary duty to mother and child Dr. Chireau espoused a methodological approach, informed by the dictat 'first, do no harm', to lead practitioners towards excellence in maternal healthcare.

CONCLUSIONS

- Further research is required for a better understanding and more reliable diagnosis of pre-eclampsia in pregnancy.
- Managing high-risk pregnancy does not involve a conflict between the needs of the mother and the child, but rather it comes down to understanding the particular circumstances of that pregnancy and dealing with it in a scientific and rational way.

Dr. Monique V. Chireau is Assistant Professor in the Division of Clinical and Epidemiological Research in the Department of Obstetrics and Gynaecology at Duke University Medical Center in Durham, North Carolina. She is also a staff gynaecologist at the Durham Veterans Administration Medical Center, and is a graduate of Harvard University and Brown Medical School.

Her research interests have focused on the management of high-risk pregnancies and include: the molecular biology of adverse pregnancy outcomes, epidemiology of adverse pregnancy outcomes, racial disparities in women's health, and health services research (outcomes and quality) in women's health.



Dr. Chireau with Dr. Kagia

Symposium 2012: Conclusions

PROF. EAMON O'DWYER

"During my 35 years as Professor of Gynaecology and Obstetrics at University College, Galway, I delivered over 9000 children in Galway. From my experience, I believe I am entitled to say that there are no circumstances where the life of the mother may only be saved through the deliberate, intentional destruction of her unborn child in the womb.

At the same time, I fully support the statement from the Medical Council - of which I was a founding member - which said that to withhold necessary treatment from a woman because of pregnancy is unethical as well as professional misconduct, even though such treatment might lead to the death of her unborn child."

DR. BYRON C. CALHOUN ON HOSPICE CARE FOR TERMINALLY-ILL CHILDREN

- Perinatal hospice services allow parents to have the gift of time with their children.
- The good news is that centres offering this specialist care can be inserted into most major hospitals at minimum cost.
- Research published in the Journal of Reproductive Medicine showed that up to 80% of parents chose the supportive services of Perinatal Hospice when it was offered.

DR. FRÉDÉRIC AMANT NEW RESEARCH ON CANCER IN PREGNANCY

- He confirms that cancer treatment for a pregnant woman does not require abortion, stating that 'in the case of cancer complicating pregnancy, termination of pregnancy does not improve maternal prognosis'. All treatment, including surgery, can be given to a pregnant woman.
- Secondly, his work establishes that chemotherapy should not be delayed unnecessarily due to pregnancy. His research shows that normal outcomes are most likely for the foetus following the administration of chemotherapy.
- Thirdly, his research establishes there should be less premature delivery of unborn children. This is all good news for mothers and their babies.

DR. JEAN KAGIA ON MATERNAL HEALTH CARE IN LOW RESOURCE COUNTRIES

- In order to improve maternal healthcare in low resource countries, a multifaceted approach was required.
- A system which was 'equitable, efficient and delivered effective service' was achievable, with low-tech, cost-effective measures.
- Dr. Kagia reminded the Symposium of Nelson Mandela's maxim: 'It always feels impossible until it's done.'

PRO. ELARD KOCH FACTORS IN REDUCING MATERNAL MORTALITY

- A major scientific analysis using 50 years of maternal mortality data from Chile has found that the most important factor in reducing maternal mortality is the educational level of women.
- The authors also found that making abortion illegal in Chile did not result in an increase in maternal mortality. In fact, after abortion was made illegal, the number of maternal deaths continued to decrease from 41.3 to 12.7 per 100,000 live births (69.2% reduction).



DR. BYRON C. CALHOUN GOOD NEWS FROM THE FIELD HIGH-RISK OBSTETRICS

- Advances in treatment mean that what was not previously treatable is now treatable.
- A whole new area of ground-breaking in-utero therapy now exists.
- Termination of pregnancy does not improve outcomes in high-risk pregnancies
- Providing excellent multidisciplinary care is key.

DR. JOHN MONAGHAN IRELAND - A SAFE PLACE TO BE PREGNANT

- With over 250 years' experience in improving maternal healthcare, Ireland's experience can benefit other countries.
- We are now one of the safest countries in the world for a woman to be pregnant.
- Other western countries, including the UK, are seeing a rise in maternal mortality and Dr. Monaghan posited that recruitment to the field of Obstetrics and Gynaecology may be a contributing factor.

DR. PRISCILLA K. COLEMAN RELATIVE SAFETY OF ABORTION VS. CHILDBIRTH

- Women who feel coerced into undergoing abortion are at risk of suffering subsequent mental health problems.
- Studies show that women who abort have a significantly increased risk of experiencing any mental health problem.
- Research also shows that pregnancy is protective against suicide.

DR. MONIQUE V. CHIREAU PREDICTABLE CAUSES OF HIGH-RISK PREGNANCIES

- Further research is required for a better understanding and more reliable diagnosis of pre-eclampsia in pregnancy.
- Managing high-risk pregnancy does not involve a conflict between the needs of the mother and the child, but rather it comes down to understanding the particular circumstances of that pregnancy and dealing with it in a scientific and rational way.

POST SYMPOSIUM REPORT 2012

www.symposiummaternalhealth.com

About the Organisers

The Symposium is organised by the **Committee for Excellence in Maternal Healthcare**. The Committee is composed of physicians and other practitioners who are committed to achieving excellence in maternal healthcare, and is chaired by Professor Eamon O'Dwyer.

We seek to promote best-practice care for all women who may experience difficulties in their pregnancies, and wish to further expand the practice of treating illness during pregnancy to allow for a healthy and happy gestational period for both mother and baby.

Join our online community:

www.symposiummaternalhealth.com

facebook.com/InternationalSymposiumOnMaternalHealth

twitter.com/SMaternalHealth

View Symposium Presentations at www.youtube.com/SymMaternalHealth

International Symposium on Maternal Health

Promoting Excellence in Maternal Healthcare

Clarendon House

34 Clarendon Street

Dublin 2

info@symposiummaternalhealth.com

ph: +353 1 87 33819

