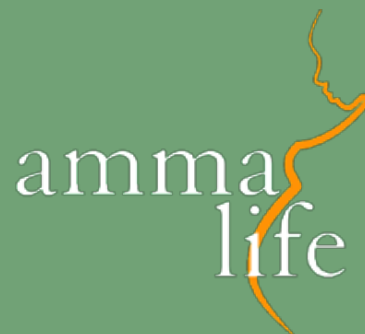


SAVING MOTHERS WORLDWIDE

@ 10 years in May 2017

amma
life





Ammalife

Academic Department

3rd Floor Birmingham Women's Hospital

Birmingham Women's and Children's NHS Foundation Trust

Mindelsohn Way

Edgbaston

Birmingham

B15 2TG

United Kingdom

Telephone: +44 (0) 121 627 2775

Email: info@ammalife.org

Registered Charity Number: 1120236

SAVING MOTHERS WORLDWIDE

@ 10 years in May 2017



Ammalife Tenth Anniversary Celebration Booklet

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Helen Williams, Maria Gee, Shakila Thangaratinam and Arri Coomarasamy

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Ammalife volunteers and (where indicated with *) Paolo Patruno
www.paolopatrunophoto.org



Dear Ammalife supporters,

As one of the founding patrons I would like to send my very best wishes to Ammalife on their tenth year celebrations. A lot of good work has been done by Ammalife in maternal health in the places where it is needed most. This is an area that is often neglected but requires concerted effort to address the challenges.

During my tenure as Secretary of State for International Development, as part of an international effort, we made commitments to cut the number of women and children dying during pregnancy and childbirth in some of the world's poorest countries. In this day and age it is indefensible that pregnancy and childbirth survival rates depend on where you live in the world, with those in low and lower-middle income countries experiencing the highest mortality and morbidity rates.

The good news is that we can make significant progress towards improving the situation. We know what we need to do and it is within our capability to do it. A combination of political will, medical advancements and technological breakthroughs is making a big difference. International agencies, governments and charities like Ammalife all have a role to play.

Please continue to support the invaluable work of Ammalife.

A handwritten signature in blue ink that reads "Andrew Mitchell". The signature is written in a cursive style with a long horizontal stroke at the end.

Rt Hon Andrew Mitchell



Dear Ammalife supporters,

It is an honour to be a patron of Ammalife and to support a team dedicated to saving mothers' lives.

Maternal death is directly linked to poverty, and represents terrible loss and suffering for families. This is an area in which I have focused my efforts during all my political life. It is no coincidence that the poorest parts of the world have the worst outcomes for mothers and children. Ammalife is focusing on subSaharan Africa, and particularly countries such as Malawi and Tanzania, where a great deal of practical work is being done to address the challenges through local solutions and local people.

The work of organisations such as Ammalife is crucial to saving lives of mothers and babies. Ammalife addresses the areas of maternal health where it can have the greatest impact, and then looks to work with local people to deliver local solutions. Ammalife works with partner organisations at the international, national and local levels.

Your support is crucial in helping Ammalife to save mothers' lives. Every little bit of help is appreciated. Whatever you can do to help this great cause, please do so.

Finally I would like to thank everyone at Ammalife for their great work during the last ten years. I would like to wish Ammalife the best in their celebrations. I look forward to the wonderful work being continued for many years to come.

A handwritten signature in blue ink that reads "Clare Short".

Rt Hon Clare Short



Welcome from our Chair of the Board of Trustees

Ammalife is a charity that focuses upon improving maternal health in low-resource settings. It undertakes research to establish effective solutions to widespread pregnancy complications, and then devises sustainable and appropriate means of delivering these solutions. It is a pleasure and privilege to chair the Board of Trustees, which comprises committed individuals who apply their knowledge and expertise to support clinicians and researchers.

This booklet summarises the work undertaken over the ten years of the charity and the positive impact that has been achieved. Small-scale projects have had far-reaching benefits and any supporter of Ammalife can be assured that our overhead costs are low since most work is undertaken on a voluntary basis to maximise direct spend in the field.

I trust you will enjoy learning about our work and I do hope that you consider supporting Ammalife in the future.

Catherine Griffiths
Chair of Ammalife Board of Trustees

Welcome from our Chair of the Executive Committee

Tragic events and circumstances generate an urge to help. However, what one can do may not be clear. Even if action is taken, there may be no confidence that benefit will flow from it.



Arri Coomarasamy perceived this dilemma at first hand in his home country of Sri Lanka when he helped ameliorate the effects of the Boxing Day tsunami in 2004. Then in 2007 he called together a number of people with clinical and academic skills to see if their abilities could help to reduce the risks of childbearing in many parts of the world. And so Ammalife was born.

I was lucky enough to be at that first Ammalife meeting. I felt a relief at being able to contribute to the fight against maternal health inequalities and injustice.

In my own clinical practice, I saw the benefits of basing treatment on evidence produced by asking the right questions. I saw, too, how service improvements can come from monitoring care and from team-working. Thus, Ammalife's aims of robust research into effective interventions, and capacity-building through investment in change-makers, were particularly attractive to me and remain so.

This booklet will document the activities of Ammalife and the people involved. I have been lucky enough to facilitate these efforts through the workings of the Executive Board and I wish to take this opportunity to thank the members who have participated over the last ten years. The results will speak for themselves.

Professor Harry Gee, MD, FRCOG
Chair of the Ammalife Executive Board

CONTENTS

Ammalife... The Beginning 10

Ammalife Research Guiding Practice 14

- 1 Can Clinical Officers Do A Doctor's Job? 16
- 2 Do Traditional Birth Attendants Have A Role In Maternity Care? 18
- 3 Can Community Mobilisation Save Lives? 20
- 4 What Are The Barriers To Emergency Transport In Pregnancy? 23
- 5 What Is The Best Medication To Prevent Bleeding From Childbirth? 25
- 6 What Is The Best Medication To Treat Bleeding From Childbirth? 28
- 7 How Can We Stop Mothers Dying From Sepsis? 29
- 8 How Can We Improve Healthcare Working? 32
- 9 Is Symphysiotomy An Option In Obstructed Labour? 34
- 10 What Is The State Of Anaesthetic Care In Poor Countries? 36
- 11 What Research Is Being Done In Poor Countries? 39
- 12 Who Will Disseminate Research Findings? 41

Ammalife Projects And Partnerships Making A Difference 43

- 13 Life-saving Journeys For Pregnant Mothers In Pakistan 45
- 14 Refurbishment at the Queen Elizabeth Hospital, Malawi 48
- 15 Vital Supplies Across The Oceans 50
- 16 Medical Textbooks 53
- 17 Toilet Tissue: On A Roll 54
- 18 Advocacy Work 56

Ammalife Investing In Change-Makers	59
19 Amie Wilson	61
20 Stanley Daudi	63
21 Alex Sembo	64
22 Yolam Kameme	66
23 Soha Sobhy	67
24 Abi Merriel	68
25 GLOW Conference 2013	69
26 MAOCO: Malawi Association of Obstetric Clinical Officers	71

Working With Ammalife	72
Why Support Ammalife?	74
How To Support Us?	77

Trustees	81
Partners And Sponsors	82
Executive Board Members	82

We support midwives and other healthcare workers in low-resources setting such as Malawi



AMMALIFE... THE BEGINNING

It is a small village clinic in Malawi. It is night and a young mother, Wema, is in labour. There is an old midwife on duty and with her gentle help, a baby girl is born. There is relief and joy. But now there is a large pool of blood visible on the sheets. It gets bigger and bigger. It does not stop and Wema becomes unresponsive. The midwife tries everything she knows. There is no doctor to call, no medicines to stop the bleeding, and no ambulance to take her to the hospital. Wema slips away and dies from the bleeding. This is postpartum haemorrhage. It is the number one killer of young healthy unsuspecting mothers in Africa.

Here is the issue: postpartum haemorrhage is treatable. Here in Birmingham, we will not let a mother die of postpartum haemorrhage.

The story of this young Malawian mother is not unique. Every two minutes of every day, a mother dies from a treatable childbirth complication. Thousands of mothers are struggling for their lives as you read this booklet... they are mothers with names, many have young children, and they have hopes and dreams like you and me. They will leave this world abruptly today.

*A group of doctors, midwives, and other committed individuals came together in a small seminar room in the basement of Birmingham Women's Hospital in 2007, determined to make a difference. We wanted to find ways to stop mothers dying in poor countries. We realised we needed to organise ourselves effectively, and out of the discussions, the charity Ammalife was born. The word **amma** means mother in many poor countries, and so the suggestion from Dr Dukaydah van der Berg to call the charity **Ammalife** was warmly endorsed by everybody else in the group. The charity was registered*

with the Charity Commission, and we became operational on 25th July 2007, without fuss or fanfare.

To save the lives of mothers, we need to find out what works. It is important that we do not waste the limited resources of poor countries on interventions and policies that do not work. Thus, our original plan was to focus on just one area: identify credible evidence on how to stop mothers dying, synthesise it into easily digestible reports, and communicate it to those who could implement it on the ground.

A great deal of scientific rigour is necessary to carry out such evidence synthesis, but fortunately members of Ammalife had already established an international reputation for the work, thanks to the leadership of Professor Khalid Khan, a founder trustee. So it made sense for Ammalife to play to this local strength, for greatest global impact. We started slowly, but gathered real speed with the appointment of Ammalife's first PhD student, Amie Wilson, in June 2010.

Our work has now been published in several prestigious medical journals, including two in the Lancet and two in the BMJ, resulting in policy recommendations in three World Health Organisation guidelines. A necessary digression here: publications per se are not important to Ammalife. We see value in publications only if they change policy, improve care, and save lives. Read more about our life-saving research and publications in this booklet.

Once our evidence synthesis agenda was properly established, Ammalife decided to invest in projects and partnerships. The projects would be deliberately small-scale and designed to test ideas and collect evidence whilst saving lives. Our aim was to use this evidence to encourage larger organisations and governments to adopt, develop and expand good practice.



Dr Sadia Malick
worked in Pakistan

Sadia Malick, a founder trustee of the charity, rose to the challenge of launching our first ever direct action project in October 2007: to provide pregnant women with life-saving emergency transport from home to hospital. As a young doctor Sadia had worked in Havelian, Pakistan, so she knew the problems faced by local mothers first-hand.

Sadia, and her trusted implementation partner, Shakeel Khan, a pharmacist in Havelian, recruited a network of taxi drivers and volunteers to provide reliable, low-cost 24-7 emergency transport in return for a modest payment. Many mothers are alive today because of these life-saving journeys. You can read more about our life-saving projects and partnerships later in this booklet.

In February 2011, a delegation that included Steve Peak, then CEO of Birmingham Women's Hospital, Harry Gee, past medical director of Birmingham Women's Hospital, and David Lissauer, a University of Birmingham lecturer who had previously worked in Malawi for a year, boarded a flight to Malawi. The purpose of the visit was to found a partnership between Birmingham Women's Hospital, and the maternity wing of the Queen Elizabeth Hospital in Blantyre, Malawi. The Queen Elizabeth Hospital in Blantyre is a teaching referral hospital, and receives vital supplies, equipment and textbooks, as well as support for targeted refurbishment activities, from Ammalife.

*As Ammalife research and action projects took shape we realised all successful endeavours require an essential common ingredient: a committed individual. An individual who makes things happen, often against the odds. We call such individuals **change-makers**.*



Stanley Daudi is an
Ammalife change-maker

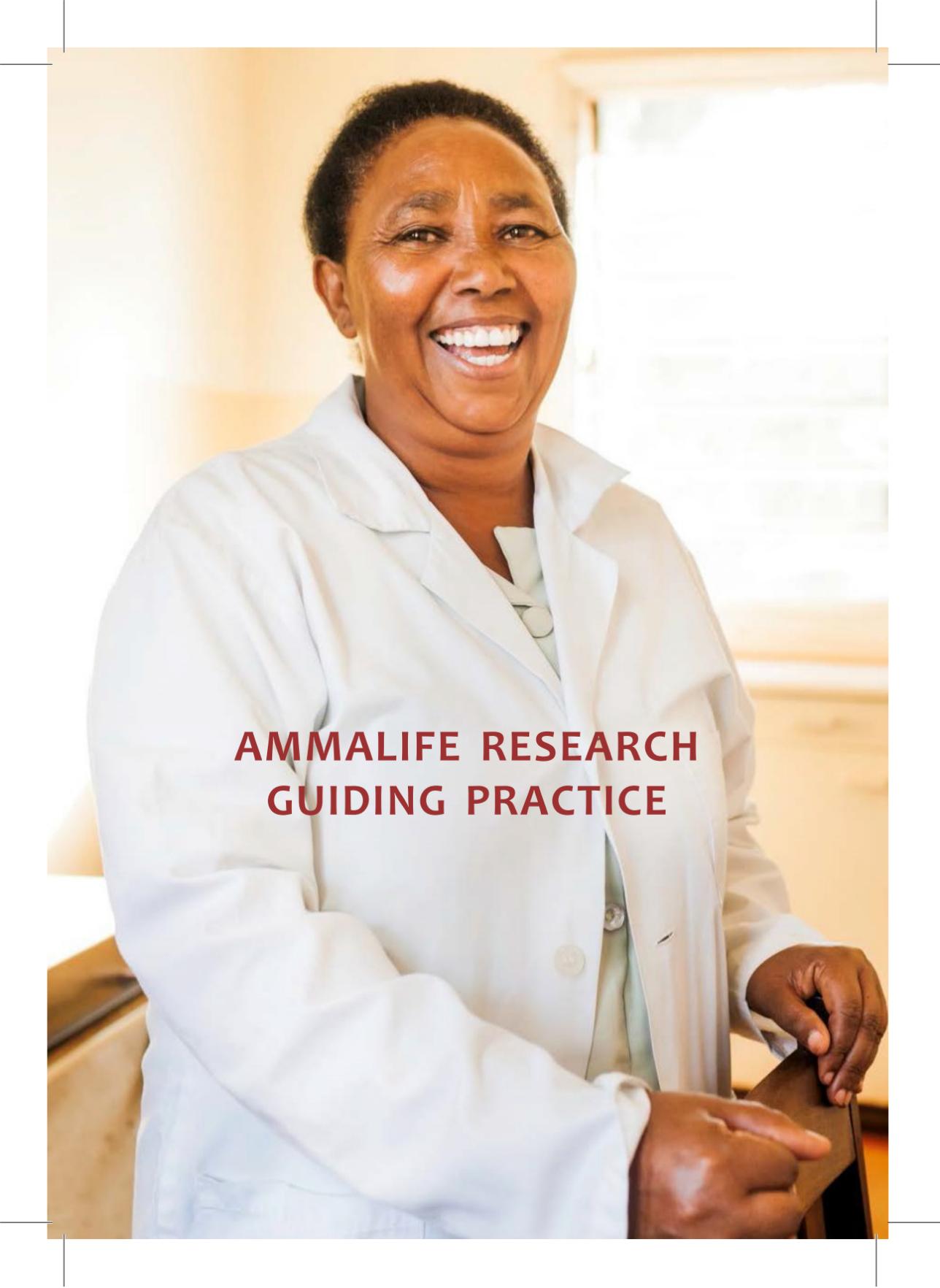
Stanley Daudi is an Ammalife change-maker. Stanley is from a poor background. He worked in Malawi as a clinical officer, doing the job of a doctor, but without the necessary training or support, and at a fraction of the salary of a doctor. He took every opportunity to learn, especially about anaesthetic care to pregnant women. Stanley's commitment, hard work and compassion were noticed by a priest, who thought that he would do well to become fully qualified, so that he could serve his community better. So the priest sponsored his medical education, and all went well until the end of the second year of medical school. Then the priest sadly died, and the sponsorship stopped. Stanley was stranded. He sold his house, but that was hardly enough to support him through an additional year of study. Ammalife stepped in and supported Stanley, and now as a fully qualified doctor, Stanley is serving his community. Read more about our change-makers towards the end of this booklet.

Over the past ten years, Ammalife has evolved to save mothers' lives in some of the poorest countries in the world, where women's needs and rights are often overlooked. We will continue to find out what works and why. We will continue to share that knowledge so that good ideas can spread rapidly. We welcome you on this journey.

Going back to Africa, in some African countries, a mother who is about to give birth will gather her older children and say "I am going to the sea to fetch a new baby, but the journey is long and dangerous. I may not return." This is not what a mother would say to her children here in Birmingham. And it need not be said in Africa either. You have the power to help; you can choose to make a difference.

Arri Coomarasamy, MBChB, MD, FRCOG
Professor of Gynaecology



A portrait of a smiling woman with dark skin and short, dark hair, wearing a white lab coat over a light green shirt. She is standing in a brightly lit room, possibly a laboratory or office, with a window in the background. The text "AMMALIFE RESEARCH GUIDING PRACTICE" is overlaid in the center of the image.

**AMMALIFE RESEARCH
GUIDING PRACTICE**

AN INTRODUCTION TO AMMALIFE'S RESEARCH

No one questions the fact that to beat cancer, we need cancer research... It is no different to beat unnecessary maternal deaths. Good research will find the best ways to save mothers. Good research will also identify ineffective approaches so that precious resources do not need to be wasted on them.

Ammalife invests in research to find effective and practical solutions. We support midwives and doctors to undertake careful research to find out what really will make a difference.

For example, in subSaharan Africa there are simply not enough doctors to go around. So clinical officers are often the only people who can carry out life-saving operations such as caesarean section. However, before our research, there was uncertainty about the safety and effectiveness of caesarean section when clinical officers performed the operation.

Our research showed that maternal death rates after caesarean section by clinical officers are no higher than maternal death rates following caesarean section by doctors. However, the research also showed that wound complications happen more often after caesarean section by clinical officers.

Now we know where to target training so that clinical officers will be better able to perform caesarean sections. This message is reaching the policy makers. Ammalife's research is changing practice so that for many more mothers, giving birth becomes safer.

Please read on to find out more about our research.

1 CAN CLINICAL OFFICERS DO A DOCTOR'S JOB?

What was the challenge?

In subSaharan Africa there are simply not enough doctors to go around, so clinical officers (also known as non-physician clinicians) are often the only people available to perform life-saving operations. When compared with doctors, clinical officers cost less to train and employ. Clinical officers are the backbone of obstetric care in many developing regions, performing as many as four fifths of caesarean sections in

some countries. Despite this, before our research, there was a limited understanding about the safety of clinical officers performing caesarean section operations.

What did we do?

We synthesised the evidence examining the safety of clinical officers carrying out caesarean section operations in low-income countries.

Malawian clinical officers (MAOCO)



What did we find?

We found that mothers and babies were just as likely to survive caesarean section performed by clinical officers, as they are to survive caesarean section performed by doctors. We found that wound complications were more likely after surgery by clinical officers, but this finding could be explained by other factors such as inadequate medical equipment (doctors are more likely than clinical officers to be adequately supplied).

What does it mean?

Caesarean section by a clinical officer rather than a doctor does not increase the risk of death for mother or baby, which is very reassuring. But a greater risk of wound complications reveals possible requirements for more training or investment in resources and facilities available to clinical officers.

Where next?

Our evidence has been incorporated into World Health Organisation guidelines, influencing policy.

We are currently sponsoring the professional development of two clinical officers. And in 2015 Ammalife was privileged to support the inaugural meeting of the newly formed Malawi Association of Obstetric Clinical Officers (MAOCO), which aims to provide support and training for clinical officers caring for women in labour.

How can you help?

Would you like to sponsor the professional development of a clinical officer? Would you like to sponsor a MAOCO meeting? Please see the end of this booklet to find out how to help.

*Our academic citation is: Wilson A, Lissauer D, Thangaratinam S, Khan KS, MacArthur C, Coomarasamy A. BMJ. 2011 May 13; 342. **A comparison of clinical officers with medical doctors on outcomes of caesarean section in the developing world: meta-analysis of controlled studies.***

2 DO TRADITIONAL BIRTH ATTENDANTS HAVE A ROLE IN MATERNITY CARE?

What was the challenge?

In low-resource settings many births occur outside healthcare facilities, without any formal clinical assistance, because there are not enough midwives and doctors to care for pregnant women. In some countries around half of all births (up to 90% in some rural areas) are attended instead by traditional birth attendants.

Traditional birth attendants are rarely formally trained; they learn their skills by delivering many babies or through apprenticeship with others. In years gone by traditional birth attendants were supported by governmental healthcare providers, but more recently investment in their training was discontinued due to lack of formal evidence of any benefits to mothers and babies.

Traditional birth attendants deliver many babies



What did we do?

We examined all the previously published and new evidence that was available, bringing together data collected from 138,000 births, and analysed it to find out the effects on risks of death for mothers and their newborn babies.

What did we find?

We found that if traditional birth attendants were trained, given the right resources and involved in maternity care in the right way, deaths of newborn babies could be reduced (by 24%).

What does it mean?

Our work has encouraged further discussion of the role of traditional birth attendants and how we should involve them in maternity care. Trained traditional birth attendants could be used to enhance access to care during pregnancy and labour, in areas with the most limited coverage by midwives and doctors.

Importantly, traditional birth attendants are on location and culturally acceptable to many traditional communities.

Where next?

Our research has encouraged policy makers to recognise opportunities for lay health workers contributing to the fight against unnecessary maternal death. Our research can also guide organisations working directly with traditional communities, by showing that without an appropriate package of training and support, traditional birth attendants alone may not be able to improve the outcomes of mothers and babies.

How can you help?

With your support we can continue to tackle contentious issues such as this one, through research to find out the facts. Please see the end of this booklet to find out how to help.

Our academic citation is: Wilson A; Gallos I; Plana N; Lissauer D; Khan K; Zamora J; MacArthur C; Coomarasamy A. BMJ. 2011; 343 (d7102).

Effectiveness of strategies incorporating training and support of traditional birth attendants on perinatal and maternal mortality: meta-analysis.

3 CAN COMMUNITY MOBILISATION SAVE LIVES?

What was the challenge?

Community-based programmes are widely thought to improve health outcomes for mothers and babies, but there has been uncertainty about the precise effects and the best ways to organise such programmes.

What did we do?

We worked with Professor Anthony Costello's team at University College London, to synthesise evidence of the impact of community-based programmes characterised by a cycle of action and learning among the members of women's groups in low-resource settings.

These programmes all shared the idea that women and their families could identify and prioritise the local problems they faced in pregnancy and childbirth. The programmes were designed to empower

local communities to devise appropriate solutions, and to instigate changes in a continuous cycle of action and learning. The programmes were also designed to monitor local pregnancy outcomes. Our analysis was performed with data gathered from more than 119,000 births.

What did we find?

Our work in collaboration with University College London showed that maternal deaths could be halved and newborn deaths could be reduced by a third if local women's groups adopted action and learning cycles.

What does it mean?

Action and learning cycles among women's groups are being scaled up to improve outcomes in some of the regions of the world where the need is greatest.

The World Health Organisation considers the strategy to be cost-effective, and in 2015 estimated that if applied to the 74 countries of the world where mothers and babies are most likely to die in pregnancy or childbirth, an estimated 41,100 mothers and 283,000 newborns could be saved every year.

Where next?

Not only do action and learning cycles among women's groups directly benefit communities by saving women's lives; they also contribute to women's empowerment, autonomy and independence.

How can you help?

With your support we can be advocates for women and their families. We can campaign for better, more targeted government support of community-based projects. And with your financial support we can continue to provide hard-hitting testimony of what works to save the lives of mothers and their newborn babies. Please see the end of this booklet to find out how to help.

*Our academic citation is: Prost A; Colbourn T; Seward N; Azad K; Coomarasamy A; Copas A; Houweling TA; Fottrell E; Kuddus A; Lewycka S; MacArthur C; Manandhar D; Morrison J; Mwansambo C; Nair N; Nambiar B; Osrin D; Pagel C; Phiri T; Pulkki-Brännström A; Rosato M; Skordis-Worrall J; Saville N; More NS; Shrestha B; Tripathy P; Wilson A; Costello A. Lancet. 2013; 381 (9879). **Women's groups practising participatory learning and action to improve maternal and newborn health in low-resource settings: a systematic review and meta-analysis.***



Women in Bangladesh, where community mobilisation has been shown to improve newborn survival and maternal health indicators such as hygienic home delivery



Local communities can also develop innovative emergency transport systems

4 WHAT ARE THE BARRIERS TO EMERGENCY TRANSPORT IN PREGNANCY?

What was the challenge?

The death of a mother is often preventable if she receives timely emergency treatment. Unfortunately in many low-resource settings the journey to reach medical treatment is not straightforward. In some countries less than 1% of the population is able to call an ambulance. Many people do not own motor vehicles, and public transport is often overcrowded, unreliable, uncomfortable, and unsuitable for a heavily pregnant woman who may be bleeding or in pain. Numerous organisations have introduced emergency transport schemes to improve access to hospitals but many of these initiatives are unsuccessful, because simply providing a way to reach hospital does not mean that more women in need will actually do so.

What did we do?

We examined reports of emergency transport research and existing transport projects in low-resource settings. We also examined emergency transport reports produced by governmental and non-governmental organisations. We consulted and collaborated with experts in the field to understand the complexities of the situation. We pulled all this information together in a meaningful way to clarify the most common issues.

What did we find?

We found that it is essential to work with local partners to achieve effective, efficient, reliable, acceptable and affordable emergency transport solutions. We also found that it is essential to work with local communities and stakeholders to produce

clear and practical emergency transport recommendations. We found that vehicles not compatible with the local economy, terrain and customs are not effective or sustainable. We also found that providing emergency transport information and education to drivers and communities could reduce potential barriers to new solutions.

What does it mean?

Transportation is a critical factor in reducing the deaths of mothers and their babies. Most births in low-resource countries occur outside hospitals (typically in the home or in a poorly-equipped local clinic), so it is essential that mothers can access emergency care in a timely manner to save their lives.

Where next?

Our research has gained the attention of the World Health Organisation, and can also guide other organisations involved in ongoing or future emergency transport projects to save mothers' lives.

How can you help?

Would you like to sponsor a life-saving journey for a pregnant mother at a cost of £10? Please see the end of this booklet to find out how to help.

With your support we can continue to provide evidence-based information and guidance in often-neglected aspects of maternal healthcare. Indirect or complex pieces of the puzzle, such as emergency transport services, are often left unaddressed, but every piece must be fitted together if more lives are to be saved.

Our academic citation is: Wilson A; Hillman S; Rosato M; Skelton J; Costello A; Hussein J; MacArthur C; Coomarasamy A. *International Journal of Gynecology and Obstetrics*. 2013; 122 (3). **A systematic review and thematic synthesis of qualitative studies on maternal emergency transport in low-and middle-income countries.**

5 WHAT IS THE BEST MEDICATION TO PREVENT BLEEDING FROM CHILDBIRTH?

What was the challenge?

Postpartum haemorrhage - bleeding after childbirth - is the leading cause of maternal death in low-income settings. The use of certain medications during childbirth can reduce the amount of bleeding, but there are many medications with different mechanisms of action, effectiveness and side effects.

As a result there has been significant uncertainty about which is the most effective solution.

What did we do?

We synthesised all the available evidence, with a network meta-analysis to find out which medication is most effective to reduce bleeding after childbirth.

Postpartum haemorrhage is commonly defined as blood loss of 500 mL or more within 24 hours after birth: Ioannis Gallos and Helen Williams are leading our study of medications to prevent it

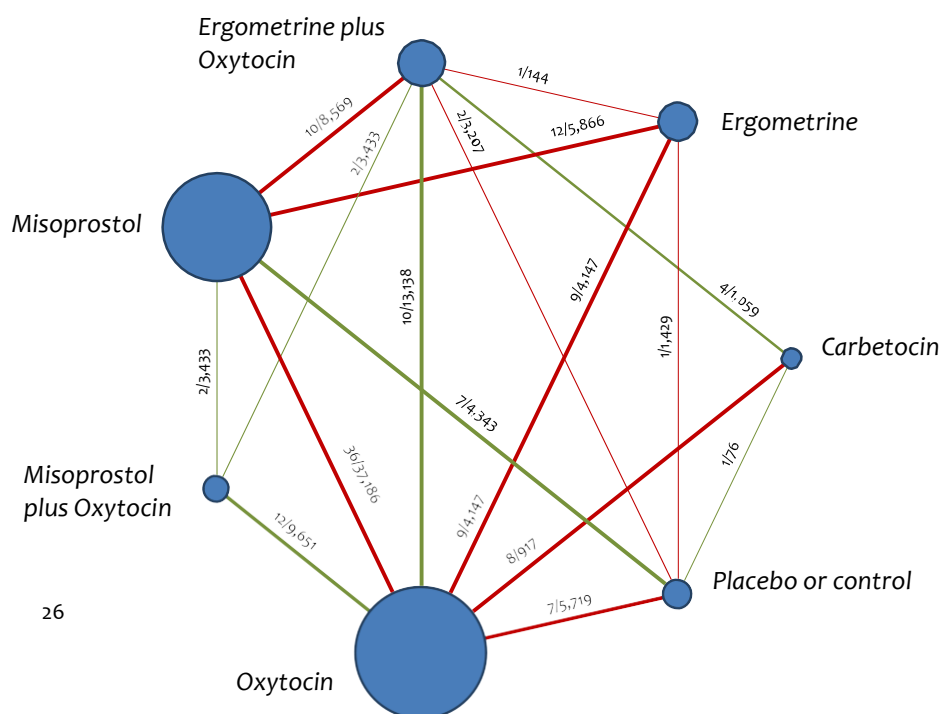


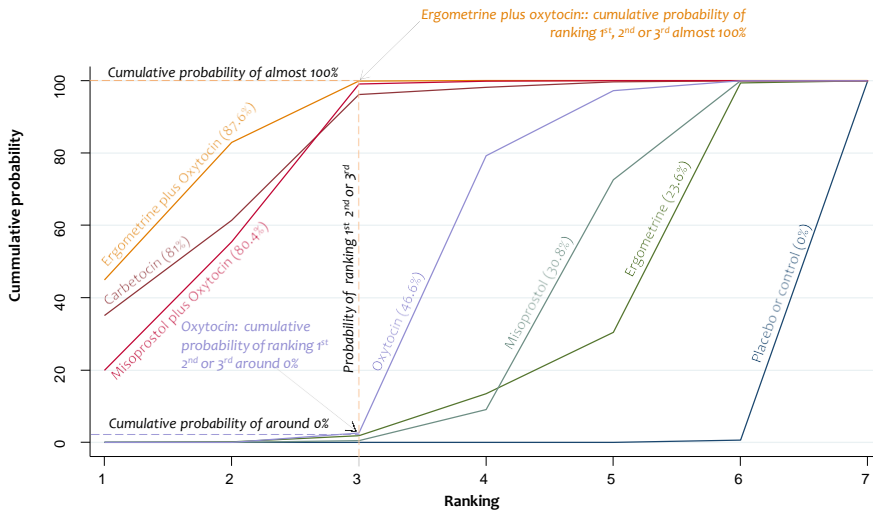
Our network meta-analysis simultaneously pooled all the available direct and indirect evidence to estimate the relative effects of each medication, allowing us to calculate the probabilities of each medication being the best for any given outcome, and producing a clinically useful ranking of the different drugs.

We put the different studies together in a network to enable both direct and indirect comparisons between them

What did we find?

Our study included 136 clinical trials of medications for preventing postpartum haemorrhage. Collectively there were 86,609 participants in these clinical trials. We found that oxytocin, the medication currently recommended by the World Health Organisation for preventing postpartum haemorrhage, ranks only fourth for effectiveness. Other medications perform better without causing more side-effects and (in some cases) without any additional financial costs.





The medications found to be more effective than oxytocin are: oxytocin and misoprostol combined; carbetocin; and syntometrine.

What does it mean?

By using more effective medications to prevent postpartum haemorrhage, more lives could be saved.

Where next?

The results of our research will be published in the coming months and then we expect them to be incorporated into new clinical recommendations from the World Health Organisation.

How can you help?

With your donations, we will be able to conduct further studies of different medications.

It will also be important to determine the most effective medications for the treatment (rather than prevention) of postpartum haemorrhage.

Our academic citation is: Gallos ID; Williams H; Price M; Merriel A; Gee HY; Lissauer D; Moorthy V; Tuncalp O; Gulmezoglu AM; Deeks JJ; Hofmeyr GJ; Coomarasamy A. Cochrane Database of Systematic Reviews. 2015; 5 (CD011689). **Uterotonic agents for preventing postpartum haemorrhage: a network meta-analysis.**

6 WHAT IS THE BEST MEDICATION TO TREAT BLEEDING FROM CHILDBIRTH?

What was the challenge?

Amalife research to date has considered the prevention of postpartum haemorrhage; but there is also a challenge for treatment. Once a woman has started to bleed it is essential to provide the most effective care without delay. We know that medication is important to manage bleeding after childbirth, but there is uncertainty about which medication to give. In the United Kingdom, we administer multiple medications, but supplies are severely limited in poor countries, so multiple simultaneous treatments are not feasible.

What are we doing?

In partnership with international experts including

the World Health Organisation, we are reviewing all the available evidence to find out what is the best medication to treat bleeding from childbirth.

Where next?

Once we understand which medications are most effective to treat bleeding after childbirth, we hope for our findings make a real difference in policy and practice.

How can you help?

Sifting painstakingly through the global literature to find and extract any useful data requires dedication and determination. Please sponsor a research fellow to do this important and vital work; information about how to help is available at the end of this booklet.

7 HOW CAN WE STOP MOTHERS DYING FROM SEPSIS?

What was the challenge?

Globally, maternal sepsis, a life-threatening infection during or shortly after pregnancy, is one of the three leading causes of maternal death. In Malawi, up to one in four maternal deaths are caused by maternal sepsis.

A recent governmental report in Malawi found deficiencies in identifying and treating women with maternal sepsis, concluding that the deaths could be prevented with a structured approach to diagnose, treat and monitor the condition. Unfortunately, the structured approaches used in high-income countries are not feasible in a resource-poor setting such as Malawi.

What did we do?

Supported by you, in partnership with the World Health Organisation and local

Malawian healthcare workers, our team of researchers in Birmingham developed a specialist toolkit to help healthcare workers to identify and treat maternal sepsis quickly and effectively.

What did we find?

We worked with a broad group of clinical practitioners and sepsis experts from around the world, and the World Health Organisation, to reach a consensus on how best to manage maternal sepsis in resource-limited settings. We then travelled to Malawi, and worked with the Ministry of Health and practitioners there to develop a practical bundle of tools that could be routinely implemented on the ground. FAST-M is a memorable acronym, which stands for the consideration of five important issues when treating maternal sepsis (overleaf).

FAST-M

PATHWAY

Optimal care for maternal sepsis requires FAST-M:

- Fluids,
- Antibiotics,
- Source identification,
- Transport to better care, and
- Monitoring (of the mother and newborn).



David Lissauer is leading the international FAST-M team

What does it mean?

Having designed the toolkit, we can now introduce it to 15 sites across Malawi, and obtain valuable feedback from healthcare workers, to ensure it is effective and acceptable.

Where next?

If we find that the FAST-M toolkit can be implemented in Malawi, a large multi-country study will be undertaken to ascertain whether it improves maternal sepsis outcomes in other parts of the world.

UNITED AGAINST MATERNAL SEPSIS

The FAST-M toolkit is set to form a key component of the World Health Organisation Maternal Sepsis Initiative, and could be used to treat maternal sepsis worldwide, thereby contributing to better maternal care globally.

How can you help?

With your support we can continue to develop practical, low-cost tools to help healthcare workers in low-resource settings.



The FAST-M toolkit will improve maternal sepsis care

Our academic citations are:

Bonet M; Nogueira-Pileggi V; Rijken M; Coomarasamy A; Lissauer D; de Souza JPD; Gulmezoglu AM. Reproductive Health. 2017. **Towards a Consensus Definition of Maternal Sepsis: Results of a Systematic Review and Expert Consultation.**

Global Maternal and Neonatal Sepsis Initiative Working Group. Lancet Global Health. 2017 Apr; 5 (4). **The Global Maternal and Neonatal Sepsis Initiative: a call for collaboration and action by 2030.**

8 HOW CAN WE IMPROVE HEALTHCARE WORKING?

What was the challenge?

In Malawi and other poor countries, there is a shortage of healthcare workers to deliver care for pregnant women. Those doctors and midwives who are available often work in challenging conditions, where it is difficult to deliver high-quality services. But if we can find a way to make life at work happier and easier, we can help healthcare workers to perform more effectively and offer better care to women.

Appreciative Inquiry is a motivational organisational change method to encourage an active and creative vision for the future. Because it highlights success rather than dwelling on failure, it can inspire and motivate workers facing tough challenges. But before our research, the tool had not been applied in a low-resource healthcare setting.

What did we do?

We worked with the maternity departments of three government healthcare facilities in Malawi, and invited all the workers there to attend action meetings. We adopted a participatory approach to allow everyone to contribute, and progressed from discussion of the best of **what is now** before imagining **what might be** and then agreeing **what should be** and finally experiencing **what can be** through designing and implementing action plans.

What did we find?

Each action team chose a particular issue to focus upon:

- Team spirit,
- Infection prevention for healthcare worker health, and
- Infection prevention for good patient outcomes.

All the participants reported that they experienced better team relationships after adopting appreciative inquiry, and better understood each other's roles. Many believed they were able to work together more effectively as a result. Teams also made tangible changes such as implementing the removal of shoes before entering neonatal areas, and training hospital attendants to take observations.

What does it mean?

We now know that it is possible to implement appreciative

inquiry in low-resource healthcare settings, and thus to improve the professional lives of midwives, doctors and other workers.

Where next?

Before advocating the approach universally, we plan to test it among healthcare workers in other low-resource countries.

How can you help?

Please see the end of this booklet to find out how to help us pursue other pilot projects.

Valuing maternal healthcare workers in Malawi

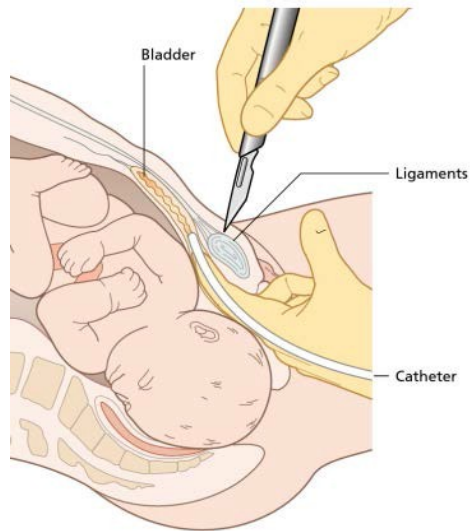


9 IS SYMPHYSIOTOMY AN OPTION IN OBSTRUCTED LABOUR?

What was the challenge?

Obstructed labour is a major cause of maternal death in many poor countries. Caesarean section is recommended to reduce death and complications associated with obstructed labour, but it also brings many risks.

An operation to widen the pelvis (symphysiotomy) is an alternative solution to the problem. It requires fewer resources and does not require specialist surgical skills: it can be performed by a midwife in a clinic, and can save the life of a mother and her baby. But there is much scepticism about the safety of the procedure.



Symphysiotomy technique

What did we do?

We examined the data representing over 1,200 births in low-resource countries.

We compared maternal and neonatal outcomes after symphysiotomy or caesarean section for obstructed labour.

What did we find?

We found no increase in the risk of death for mothers or newborn babies when a symphysiotomy was performed. We also found no increase in the risk of bleeding and a reduction in the risk of infection (another important cause of maternal deaths).

However, we found an increase in the risk of fistula (an abnormal hole between the bladder and the vagina) after symphysiotomy, but this finding could be explained by factors other than symphysiotomy itself.

For example, it is very possible that cases requiring symphysiotomy are likely to bring complications caused by delays in reaching care. Finally, we found similar long-term complications from both symphysiotomy and caesarean section.

What does it mean?

Our work suggests that symphysiotomy could be an alternative to caesarean section, in areas where resources for caesarean section are limited or where caesarean section is risky.

Where next?

Symphysiotomy is a procedure that has been cast aside despite being described by the Lancet as an under-utilised technology. We hope that our work will encourage others to consider it for women who are not able to access safe and timely caesarean section.

How can you help?

With your support we can advocate for evidence-based care for mothers and their newborn babies. We can examine under-researched and under-utilised technologies to try and save the lives of women in childbirth.

Our academic citation is: Wilson A; Truchanowicz EG; Elmoghazy D; MacArthur C; Coomarasamy A. BJOG. 2016 Apr 29; 123 (9).

Symphysiotomy for obstructed labour: a systematic review and meta-analysis.

10 WHAT IS THE STATE OF ANAESTHETIC CARE IN POOR COUNTRIES?

What was the challenge?

Anaesthetic interventions are an integral part of emergency obstetric care, essential to carry out life-saving surgery. Yet before our research there were no robust estimates of maternal deaths caused by anaesthetic factors.

What did we do?

We performed a systematic review and meta-analysis of all the studies reporting the risks of maternal death from anaesthesia in low- and middle-income countries.

What did we find?

We found that in low- and middle-income countries, anaesthesia accounted for around 3% of all maternal deaths, and 14% of maternal deaths following caesarean section. These figures are

entirely disproportionate to those observed in high-income countries. We also found that exposure to general (rather than local) anaesthesia increased the odds of maternal death threefold, and that anaesthesia managed by non-physician clinicians (clinical officers) brings greater risks than anaesthesia managed by physician anaesthetists.

What does it mean?

Now that we have robust evidence of the poor state of obstetric anaesthesia in low- and middle-income countries, effort and investment can be directed towards improving it. Targeted training could help to improve outcomes. Other potentially useful approaches include advocating the use of regional anaesthesia and, better management of airways.



Anaesthesia is required to carry out life-saving interventions such as caesarean section

Where next?

The World Health Organisation recently passed a resolution at the World Health Assembly to recognise issues of relevance to safe surgical care and anaesthesia. Meanwhile, Ammalife has also been supporting the medical education of Stanley Daudi, a clinical officer who wishes to specialise in obstetric anaesthesia, and is expected to be a powerful change maker in this field in Malawi.

How can you help?

Please see the end of this booklet to find out how you could use your time, skills or money to help Ammalife perform research that makes a difference.



Obstetric anaesthesia is an important issue in low-income settings such as the busy Queen Elizabeth Hospital of Blantyre, Malawi

Our academic citation is: Sobhy S; Zamora J; Dharmarajah K; Arroyo-Manzano D; Wilson M; Navaratnarajah R; Coomarasamy A; Khan KS; Thangaratinam S. *Lancet Glob Health*. 2016 May; 4 (5). **Anaesthesia-related maternal mortality in low-income and middle-income countries: a systematic review and meta-analysis.**

11 WHAT RESEARCH IS BEING DONE IN POOR COUNTRIES?

What was the challenge?

We wanted to understand the research agenda in low- and middle-income countries, to identify gaps in the evidence and plan collaborations among research groups.

What did we do?

We systematically searched the International Clinical Trials Registry Platform of the World Health Organisation to identify studies with a focus on women's health.

What did we find?

We identified 509 relevant studies. Among these, the single most popular research subject was (in)fertility (17%), with antenatal care (15%) and benign gynaecology (14%) following behind. Most gynaecological studies were located in middle-income countries, whereas research in low-income countries tended to focus on obstetrics.

Most of the clinical trials were small, with 500 or fewer participants, but trials in low-income countries tended to be larger (median 815 participants) than those in middle-income countries (median 128 participants). Most studies were funded locally (62%). Only just over half of all the studies were registered prior to commencement.

What does it mean?

The research priorities of investigators in low-income countries are different to the research priorities of counterparts in middle-income countries. Studies in middle-income settings tend to be funded locally, and to consider gynaecological questions, whilst those in low-income settings tend to be supported by large international funders with interests in obstetric care.

Where next?

It is important for all clinical trials to be registered before any participants are recruited, in order to ensure that the study objectives are not manipulated afterwards.

How can you help?

Please see the end of this booklet to find out how to help us pursue other pilot projects.

*Our academic citation is: Merriel A; Harb HM; Williams H; Lilford R; Coomarasamy A. BJOG. 2015 Jan;122(2):190-8. **Global women's health: current clinical trials in low- and middle-income countries.***

We performed a search for clinical trials from around the world



12 WHO WILL DISSEMINATE RESEARCH FINDINGS?

What is the challenge?

Research findings must reach healthcare workers on the ground in order to make a difference. All too often excellent research results get published in medical journals but then sit on dusty old library shelves or in deeply hidden internet archives, resulting in missed opportunities to change practice and policy.

An active dissemination and implementation strategy is necessary. Our track record in maternal health research and advocacy in association with the University of Birmingham has persuaded governmental bodies to invest in our international dissemination work. For example, the AIMS (Antibiotics in Miscarriage Surgery) trial enables us to explore pathways to impact, and start dissemination activities in many low-income countries.

What will we do?

We are developing a strategy and detailed action plan to engage the public, media and policy communities in the AIMS trial. We involve women and couples in our planning to ensure the dissemination and implementation activities are appropriate. We are connecting with people through schools and other community organisations, and we make particular efforts to include those from vulnerable or marginalised backgrounds.

Modern social media are expanding rapidly in low-resource countries, so we additionally use platforms such as Twitter and Facebook to share our stories, although we appreciate that many poor women will not have access to mobile technology.

We target the clinical and policy communities via meetings with hospital leaders and governmental representatives. We deliver presentations to professional societies such as Royal College of Obstetricians and Gynaecologists, International College of Midwifery, and International Federation of Gynaecology and Obstetrics. We also develop and maintain up-to-date resources online.

Where next?

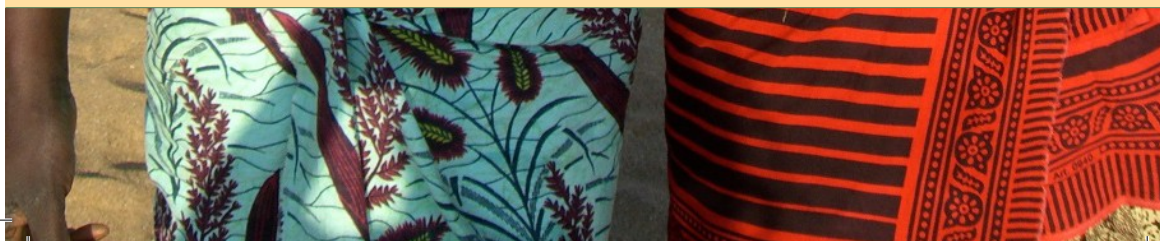
We plan to develop pathways to impact for more key research studies, such as the PRISM (Progesterone in Spontaneous Miscarriage) trial and the CHAMPION (Carbetocin vs Oxytocin) trial. We will also continue to work with other organisations to disseminate credible research to achieve real impact on the ground.

We must disseminate the findings of international research in order to improve clinical care





**AMMALIFE PROJECTS
AND PARTNERSHIPS
MAKING A DIFFERENCE**



AN INTRODUCTION TO AMMALIFE'S PROJECTS AND PARTNERSHIPS

Our practical research finds effective ways to save mothers' lives, but unless this knowledge is translated into action on the ground, lives will not be saved. Ammalife does not merely wish to be an academic outfit, but to be an organisation that makes the most of all it has learnt to bring effective solutions to where they are desperately needed, through projects and partnerships.

We are constantly looking for ways to make a difference. If we find a clear need and we are able to develop a robust and sustainable solution, and if there are credible and committed local implementation partners with whom to collaborate, we become eager to explore the possibility of a meaningful project. Over the years, we have learnt that project success relies heavily on positive local partnerships. Ammalife's change-makers (examples later in this booklet) are obvious partners to make things happen on the ground.

Ammalife does not maintain overseas offices and infrastructure, so our projects are small, but we still aim for big impact. In addition to saving many lives, our intention is to carefully evaluate activities past and present so that we can learn from them for the future. The lessons we learn can then be made available to other organisations so that they can provide effective solutions at scale.

Please read on to find out more about our projects and partnerships.

13 LIFE-SAVING JOURNEYS FOR PREGNANT MOTHERS IN PAKISTAN

What was the challenge?

We know that in Pakistan, about 80% of childbirths take place at home. An estimated 95% of these events are attended by untrained traditional birth attendants.

We also know that death in childbirth is more likely for women in remote, low-resource settings, where it is difficult to reach emergency healthcare facilities before it is too late. For example, Havelian is a town in the remote and rural district of Abbottabad, Pakistan, where poverty and malnourishment are widespread, and access to medical care is minimal. Public transport is limited and there are few private cars. The most well-developed mode of motorised transport is a fleet of small minicabs operated by private drivers.

They seldom venture out after dark and thus at night it becomes almost impossible to reach the villages at the top of the mountains.

What did we do?

In collaboration with credible local partners, Ammalife developed a transport service to ensure pregnant women remote from the town centre could reach hospital safely and cost-effectively in times of emergency.

We spread the message that mothers in childbirth or just after delivery could telephone our project team to request transport to a place of care. We also made arrangements to cover the cost of transport arranged independently, subject to proof of the journey.



We provided reliable, low-cost 24-7 emergency transport for mothers in and around Havelian, Pakistan

Our project team leaders Sadia Malick and Shakeel Khan collaborated closely with the local taxi industry (drivers pictured) to achieve competitive fares, priority for emergency services and out-of-hours coverage.

What did we find?

We provided life-saving journeys to over 500 women in 85 villages. Ammalife is now a household name in the area and the community is very grateful for the help. Vigorous campaigning by our local project team improved public awareness of the importance of emergency maternal transport.

What does it mean?

We have demonstrated that small but well-organised transport services can make a difference. The story of the Havelian community is told by a short YouTube video documentary called **Ammalife in Pakistan**.

Where next?

We recently helped our project team in Pakistan to register a local charity, to satisfy newly-instituted statutory regulations. The charity **Mothers and Babies In Need** (MABIN) shares Ammalife objectives and values, and will implement our transport solution henceforth.

How can you help?

Would you like to sponsor a life-saving journey for a pregnant mother at a cost of £10? Please see the end of this booklet to find out how to help Ammalife and MABIN to transport mothers in need.



We provided life-saving journeys over perilous mountain roads in Pakistan



14 REFURBISHMENT AT THE QUEEN ELIZABETH HOSPITAL, MALAWI

What was the challenge?

Malawi's main teaching hospital has a maternity unit where over 11,000 mothers give birth each year, twice as many as the unit was originally designed to serve. Over the decades the physical condition of the labour ward has deteriorated and since the floods of 2015 the unit has been inundated with foul water from broken drains.

What did we do?

Ammalife collaborated with the Lady Fatemah Charitable Trust and our partners in Malawi, the Chira Fund, to completely renovate the toilets, shower blocks and washbasins in the maternity unit. The Lady Fatemah Charitable Trust very generously covered the cost of improvements to the patient facilities and Ammalife, acutely aware of the risks of cross

infection, took on the task of renewing the operating theatre and washing and sanitation facilities for healthcare workers. Between us and under the scrupulous supervision of George Musowa, Project Manager of the Chira Fund, we transformed the very fabric of the hospital.

What did we find?

Morale among healthcare workers improved and the risk of infection among patients decreased.

What does it mean?

Often it is the simple things we take for granted that bring the biggest impact on health. Clean running water, flushing toilets, tiled walls and efficient drains slow the spread of infection and offer dignity to women, families and healthcare workers supporting them.

Where next?

Please read about our **On A Roll** campaign (later in this booklet) to find out what happened next.

How can you help?

Please check out our website to learn more about current projects and programmes that you may wish to support.



When the Queen Elizabeth Hospital was built in Blantyre in 1958 it represented the pinnacle of hospital facilities in Malawi. After several decades of heavy utilisation, the plumbing facilities deteriorated so much that they could not meet the needs of severely ill patients, let alone their guardians and families, or indeed healthcare workers. Blocked sewage systems, failed and leaking pipes, unsuitable toilets and broken showers and basins (above) encouraged rats and other vermin to take residence near the wards. We renovated the toilets, shower blocks and basins in the maternity unit to slow the spread of infection and improve hygiene (below).



15 VITAL SUPPLIES ACROSS THE OCEANS

What was the challenge?

Malawi is one of the poorest nations in the world and its currency fluctuates widely. This matters because it is almost entirely dependent on imported medical equipment and pharmaceutical supplies which must be paid for in US dollars. Sometimes it is more cost effective to use your donations to purchase goods in the UK and ship them directly to our partners in Malawi, than to buy them in the country. Each year the Diocese of Birmingham sends a container of assorted products, and Ammalife has been able to contribute to this effort. At other times we take direct action: buying a suitcase from a charity shop and sending it full of essentials whenever one of us travels to Africa.

What did we do?

We accept donations of clinical supplies for the container each year. For example, a general

practitioner and long-time supporter collects unopened drugs returned to her surgery by the families of deceased patients.

We purchase and send latex surgical gloves to minimise cross infection between patients, and as a first line of defence against the transmission of conditions such as HIV.

Precious heparin, to treat thrombosis and embolism, is saving lives. When we send medications, we attach the relevant pages of the British National Formulary, an authoritative pharmaceutical reference book, and all the supplies are managed in accordance with World Health Organisation guidelines. We are very grateful to our colleagues in the pharmacy of Birmingham Women's Hospital for their help with our work.

After severe flooding in 2015, when many families lost everything, we also sent clothing, blankets and children's shoes for distribution by local partners. The shoes protected against life-threatening snake bites and infections in open wounds, which presented a particular problem after the floods. We also sent two anatomical mannequins to facilitate clinical training.

We send stethoscopes, blood pressure monitors and other essential pieces of medical equipment to clinical officers. In Malawi, it would take months and years for the clinical officers to save and buy these items themselves.



Arri Coomarasamy demonstrates monitoring equipment to Edward Mhango, one of our experienced clinician colleagues in Malawi



Midwives at Chiradzula District Hospital receive essential medical supplies

What did we find?

Colleagues are delighted to receive whatever we send. Resourceful and adaptable, they always make sure that nothing goes to waste.

What does it mean?

Having the right tools to diagnose a condition, and the right equipment and medications to manage it, often makes the difference between life and death in low-resource settings.

Where next?

Ammalife will continue to support our colleagues in Malawi: over the years we have established mutual trust to ensure that whatever we send is well used for the benefit of mothers and their infants.

How can you help?

Would you like to contribute to our annual container costs of £6 per square metre? Please see the end of this booklet to find out how to help.

We have also received a specific request for rechargeable LED head torches. Electricity supplies are erratic and sometimes doctors and midwives find themselves in darkness mid-delivery or during an operation. Just £20 is enough to buy a rechargeable head torch.

<https://mydonate.bt.com/charities/ammalife>



Harry Gee unloads Ammalife medical supplies for onward delivery to Malawi



The materials travelled safely by container across the oceans

16 MEDICAL TEXTBOOKS

What was the challenge?

Clinicians in low-resource settings are desperately short of textbooks and other up-to-date learning resources to acquire life-saving medical knowledge.

What did we do?

Librarians at Birmingham Women's Hospital have taken this challenge to their hearts, and donated hundreds of textbooks and journals to doctors and nurses in Malawi. The gifts were packaged for transportation via container and - although the journey took three months - the resources arrived undamaged.

What did we find?

Alex Sembo - a senior clinical officer - received the delivery and thanked everyone who donated the textbooks and money required to pay the shipping costs. Alex has used the textbooks to establish a library for clinical officers and other healthcare professionals.



Collecting textbooks for transport to Malawi

What does it mean?

The library will bring benefits for a very long time to come, building the knowledge of local clinicians and thus making childbirth safer for many more mothers and their babies in Malawi.

How can you help?

If you have any medical textbooks or other learning resources that could be useful to doctors, midwives and nurses in low-resource settings please let us know via info@ammalife.org.uk.

17 TOILET TISSUE: ON A ROLL

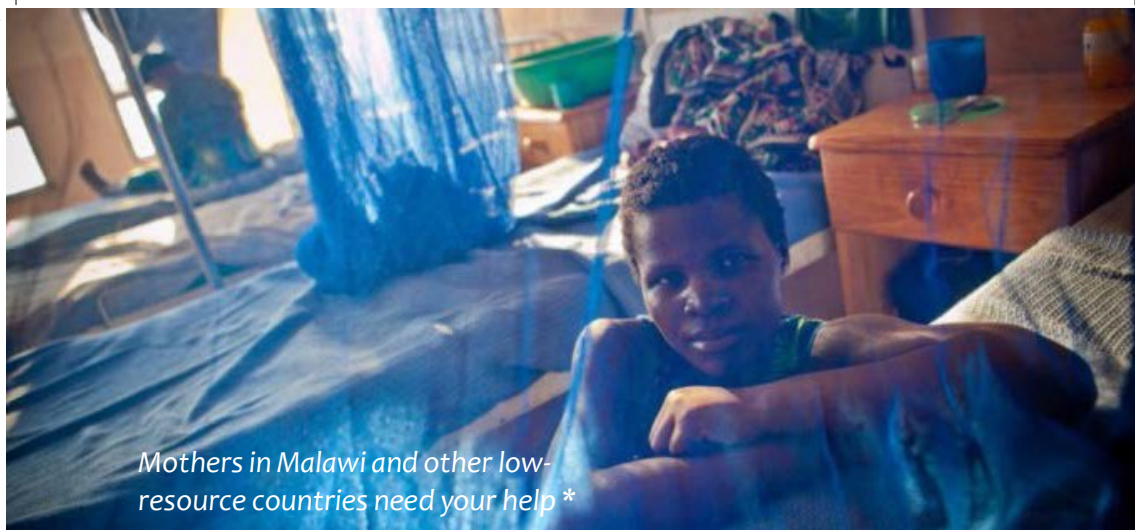
What was the challenge?

After renovating toilets and washing facilities in the maternity unit of the Queen Elizabeth Hospital in Blantyre, Malawi, a new problem came to light that took us by surprise. Nothing more clearly illustrates how much we take for granted in our comfortable surroundings of the United Kingdom.

Toilet paper is costly and beyond the reach of most of the mothers who give birth in the hospital. Instead, they use old and often soiled rags until the fibres fall apart and are washed away. Soap, too, is a precious commodity, so women will use stones to scrub their bodies clean. Sometimes these fall into the drains.

*Toilet paper is costly and beyond the reach of many mothers **





Our investment in good working sanitation was put at risk by practices forced on mothers by their extreme poverty.

What did we do?

The answer was the launch of **On A Roll**. Ammalife has committed to raise £1000 annually so that every mother has access to soap and toilet paper. We work with our partners, the Chira Fund, to source in bulk locally.

What did we find?

For only 9p a new mother can minimise her risk of infection, regain some dignity and prevent blockages to our new drains.

How can you help?

Please keep donating. We challenge you to spend 9p to better effect anywhere else.



Toilet paper for mothers in Malawi:
<https://mydonate.bt.com/events/onaroll>

18 ADVOCACY WORK

What was the challenge?

Few people in the United Kingdom - including many with family or friends in low-resource settings - are aware of the sheer numbers of unnecessary maternal deaths that occur in poor countries every day.

This is important because mothers are the heart of human society: when a mother dies in childbirth, a cycle of poverty and hardship begins for the whole family. When a mother dies, her child is ten times more likely to die too. Without a breadwinner to support them, surviving children are often taken out of school, sent out to work or married too soon. Young married girls who give birth before the age of 15 are five times more likely to die in childbirth. If we remain unaware of this issue, it will remain unaddressed.

What did we do?

In partnership with the charity MADE (Muslim Action for Development and Environment), between 2011 and 2013 we implemented the **At Our Mothers' Feet** campaign to raise awareness of global maternal death among Muslim communities in the United Kingdom, inspiring them to take action to save mothers' lives. More specifically, we produced evidence-based information resources for the lay public; that were distributed via workshops in many settings including schools and youth societies.



We campaigned to raise awareness among the British Islamic community

What did we find?

With our knowledge gained through research, we produced a maternal health resource pack, distributed among charities and other non-governmental organisations, to encourage focus and funding for maternal health projects.

What does it mean?

Not only did we encourage investment into specific interventions that have been shown to improve outcomes for mothers and babies, our campaign helped to dispel the myth that solutions to the problem of maternal deaths must be expensive.

We informed discussions and debates with policy makers and organisations pursuing health and development projects (including MADE in Europe, Islamic Relief, Muslim Hands and Muslim Charity).

We also challenged those who were deterred from or opposed to maternal health projects due to cultural or religious taboos.

Where next?

At Our Mothers' Feet was the first campaign of its kind to bring maternal health to the forefront of awareness among the Islamic community in the United Kingdom. Through the hard work of the project team and countless volunteers, we were able to reach thousands of people with our message that women do not need to die to give life. Our project brought together mosques, schools, religious leaders, charities, media personalities and women's groups, united for one cause. The movement for maternal health has well and truly begun.

How can you help?

We can all be advocates for women. We can campaign for better healthcare, better education and equal rights. We can be a voice for those who otherwise cannot be heard.

Through our research, we produced a maternal health resource pack for charities and other non-governmental organisations



At Our Mothers' Feet NGO Resource Pack



AMMALIFE INVESTING IN CHANGE-MAKERS



AN INTRODUCTION TO CHANGE-MAKERS

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.”

Margaret Mead

Ammalife change-makers are special individuals with unrelenting passion and commitment to make a difference, to save mothers' lives. When we identify individuals who show the potential to develop or inspire widespread improvements we get excited. We ask ourselves: What could we do to accelerate their progress? Could we invest in their professional development and leadership? Could thoughtful mentorship help them go further? If the answers are YES then we start to work with them to achieve great things.

Ammalife change-makers pursue key research questions; they work on the ground to provide effective and compassionate care; and they teach and share good practice, so that countless women benefit from their knowledge and skills, directly and indirectly.

Please read on to learn more about our change-makers. And if you would like to support the development of a change-maker, we would love to hear from you.

Previous page: Alex Sembo is a change-maker for Ammalife

19 AMIE WILSON



Amie Wilson

I am Amie Wilson, a midwife with a passion for improving the health of mothers and their babies.

Before I began my midwifery training I travelled to India where I worked as a volunteer for six months. I intended to work at an orphanage but ended up working on different projects in different settings, including a project that trained pregnant sex-workers in vocational skills, a project that focused on positive adolescent parenting, and a project that worked to address female infanticide.

As a qualified midwife, I taught emergency maternity and newborn courses in a number of low-resource countries, including Pakistan, Zimbabwe, Kenya and Sudan. I soon realised that in order to benefit more people, clinical practice must be based on real evidence of what works. But there are too many gaps in the evidence. So I decided to carry out my doctoral research on maternal death in developing countries, and look at ways in which it could be reduced.

My doctoral research investigated a number of different interventions. For example, our studies of community-based interventions and emergency transport for pregnant women have informed World Health Organisation guidelines for clinical and public health practice. Our studies of clinical officers and trained traditional birth attendants were incorporated into World Health Organisation recommendations for task-shifting.

Since my academic journey began, my commitment to improving maternal health has grown. Not only do I wish to carry on developing my knowledge, skills and experience, I also wish to transfer the knowledge and skills I have already gained in research methods and healthcare systems in low-income countries, to aspiring global health researchers and clinicians. I wish to continue to explore ways of improving maternal health through evidence synthesis and primary research. I hope to work with academic colleagues connected to health systems in low-resource countries where improvements are most needed. I hope to contribute to midwifery and obstetric training, hospital policies and protocols, and international guidelines to improve maternal health and reduce maternal mortality. I hope to provide academic support and guidance to other midwives wanting to pursue higher degrees and embark on research.

*Amie Wilson is dedicated to improving the lives of mothers in Malawi (pictured) and other resource-poor settings **



20 STANLEY DAUDI

We first heard about Stanley Daudi in 2014. After working as a clinical officer (non-physician clinician) in Malawi for over 15 years, he had become one of the most experienced and respected anaesthetists at the Queen Elizabeth Hospital in Blantyre. A grateful patient, impressed by his skill and dedication, offered to sponsor Stanley through medical school. He won a place to study in Dar Es Salaam, Tanzania, and taught himself Swahili so that he could listen to his patients and learn better. Sadly, his benefactor died just as Stanley commenced his third year of study and, despite excellent academic results and the efforts of his tutors, he faced expulsion for unpaid fees.

As a Malawian citizen, Stanley was forbidden from working as a clinical officer whilst he studied in Tanzania. He had sold all he owned and was surviving on the generosity of fellow students when we met. Ammalife does not usually offer medical bursaries in low-income countries, but we do look out for those with the potential to make great changes for the benefit of patients. Stanley clearly fell into this category and so we launched a special campaign to pay his tuition fees and living costs for three years. Our campaign raised £13,445 towards his expenses and last autumn Stanley was awarded his medical degree and immediately began working as a doctor back in Blantyre.



The experience, depth of knowledge and compassionate care of Stanley Daudi sets an example for the next generation of clinicians in Malawi

21 ALEX SEMBO

Alex Sembo is a clinical officer who was moved by the misery of mothers suffering fistula (a tear in the wall of tissue between the bladder and the vagina) after obstructed labour. Tragically, this condition is still common, and brings not only the physical distress of incontinence, but also social isolation (many of the women affected are shunned by others and regarded as unclean).

In order to help his patients, Alex established a fistula repair clinic, a job that nobody else was keen to do. Over the years he developed expertise and became held in high regard by fellow clinicians as well as hundreds of mothers whose lives he transformed. When the University of Warwick developed a course in obstetrics and leadership for clinical officers, Alex was invited to be one of the examiners.

Alex was always conscious of the gaps in his knowledge of basic medical sciences and when the chance to learn at the College of Medicine in Malawi arose he was eager to take it, but he needed help with the fees. Ammalife stepped in, knowing that Alex was already serving his local community well, to enable him to achieve better scientific understanding, that would enhance his clinical practice and give him renewed confidence to train the next generation of fistula surgeons.

Following his year of study, Ammalife supported Alex for a second year, and whilst studying during this time he also worked with the United Nations Population Fund to organise Fistula Camps in Malawi and Zambia. He would travel to a district hospital and operate on upwards of a hundred injured mothers during each visit of just three weeks. At the same time he was training local clinicians in surgical procedures, and putting his newly gained theoretical understanding to good use in teaching them.

Alex has been generous in other ways. For example, he has supported the Ammalife student group at the University of Birmingham by participating in live discussions via skype connection.



Alex Sembo works with fistula patients whilst he studies to improve his technical knowledge



22 YOLAM KAMEME

Five years ago, the University of Warwick took the lead in running an innovative degree programme for Malawian clinical officers. The mature students specialised in obstetrics and studied whilst continuing in full-time employment. They came together annually for two weeks of intensive teaching, and otherwise carried out distance learning. It was demanding. Yolam was one of those students and he excelled. He was awarded a first class honours degree.

Yolam then won a place at the College of Medicine in Malawi, and a British benefactor endowed the Joseph O'Hare Ammalife Bursary to meet his tuition fees.

Now completing his second year of Malawian study, his outstanding examination results speak for themselves. Between semesters and among his weekly lectures and assignments, Yolam is employed as a clinical officer to cover his living costs. Ammalife donors have supported Yolam with essential clinical equipment and textbooks.

Yolam is a thoughtful and conscientious healthcare provider whom we expect to provide great service to his community.



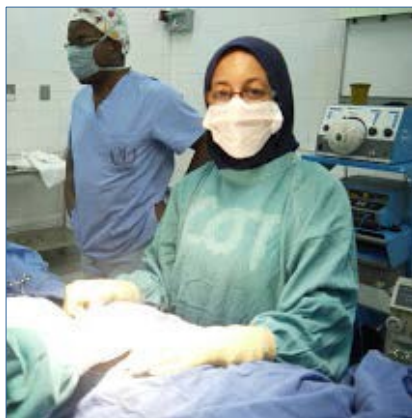
Yolam Kameme recently gained BSc in Obstetrics and Leadership

23 SOHA SOBHY

I gained my first exposure to healthcare in low-income settings through an elective medical placement of six weeks in Tanzania. I was struck by the inequalities in life chances among different locations, and realised that many different factors contribute to unnecessary maternal deaths across the world.

After completing two years of training in obstetrics and gynaecology, I approached Ammalife to gain further experience of work in low-income settings. With your support I travelled to Malawi and worked clinically at the Queen Elizabeth Hospital in Blantyre. I also helped to establish a programme of learning for trainees, and arranged some training days at surrounding health centres to ease the referral pathway. Through collaboration with paediatric volunteers from the United Kingdom, the programme grew to include neonatal resuscitation, and helped to re-establish neonatal mortality reviews in order to improve outcomes.

On my return Ammalife offered to support me in doctoral study with a particular focus on maternal health challenges connected to anaesthesia. I was recently awarded the qualification of MD and now I hope to continue disseminating my findings, to perform further research, and to ensure the work contributes to future policy in order to make a difference.



Soha Sobhy has secured an academic lectureship at Barts and the London Medical School, which enables her to keep answering global maternal health questions

24 ABI MERRIEL

I am a medical graduate and trainee in obstetrics and gynaecology. Inspired by some time in rural Kenya where I established a small medical and social education programme, I undertook a degree in international health before taking a year out to run a global health charity. This challenge introduced me to global health research. On returning to medical school I was determined to become an academic obstetrician and gynaecologist, and I was fortunate to be appointed to a role which enabled me to pursue a PhD course at the University of Birmingham, funded partly by Ammalife.

Much of my work considers how to improve the professional lives of maternity healthcare workers in Malawi: essentially making people happier to enable them to do a better job. Through my PhD project, I have been able to gain new skills and experience in a variety of different research techniques, including ethnography, that is watching people at work and trying to understand their working lives whilst getting to know them. I have also conducted interviews and questionnaires with those I observed, and thanks to Ammalife I have enjoyed the support of a Malawian midwife who has undertaken specially formulated questionnaires with patients, on my behalf. These data allowed me to find out whether happier healthcare workers achieve better outcomes.

I have also been fortunate to assist other Ammalife projects such as FAST-M and the AIMS clinical trial. I am looking forward to continuing to grow my research skills in the years to come.



Abi Merriel (left) and collaborators from the Parent and Child Health Initiative Trust (PACHI), Malawi

25 GLOW CONFERENCE 2013

What was the challenge?

The Global Women's (GLOW) Research Society is a society for researchers in global maternal, newborn, child and reproductive health. The annual GLOW conference provides an opportunity for academic experts and new graduates alike to share their work, build collaborations and hear updates from prominent international speakers.

What did we do?

In November 2013 the GLOW conference was hosted by the University of Birmingham with support from Ammalife. We brought together over 140 professionals from around the world to share their ideas and experiences in global women's and newborn health research. A symposium busy with presentations and posters from enthusiastic specialists achieved exciting insights of what works to save the lives of mothers and babies in low-income settings.

What did we find?

Speakers drew attention to priorities for working beyond Millennium Development Goals, respectful patient care and persistent socio-economic challenges facing many women, their families and healthcare providers. Tailored workshops enabled participants to examine key themes such as working abroad, health partnerships, maternal mortality and maternal morbidity.

Where next?

We will continue to work with the GLOW community and contribute to future conferences.

How can you help?

Why don't you consider attending the next GLOW event, in Cambridge in 2018? Please also consider sponsoring a healthcare worker from a resource-poor country to attend the conference.



International experts lead lively conference discussions



26 MAOCO: MALAWI ASSOCIATION OF OBSTETRIC CLINICAL OFFICERS

MAOCO is a grassroots organisation that grew from the professional dedication and maternal health interests of 46 Malawian clinical officers who recently graduated from the University of Warwick with degrees in obstetrics and leadership. When the clinical officers approached us (via Harry Gee who taught on the course and so knew them well) we were interested to know more. The clinical officers proposed activities to encourage rigorous learning and monitoring, including an annual meeting that would be open to all those interested in improving reproductive healthcare in Malawi.

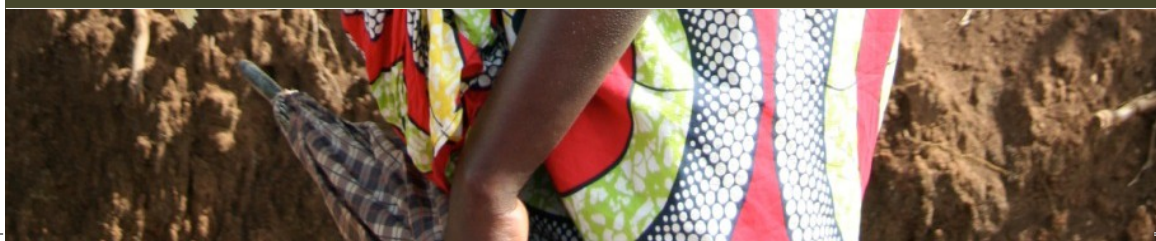
Ammalife supports MAOCO and has helped to cover the costs of its annual meetings. The clinicians value their professional association and there are direct benefits for patients.

“When I need to transfer a mother to the District Hospital, I call up and ask to speak to TC because I know and trust him. I can talk about the case and know that he will offer great care. It makes a big difference. In the old days, you sent the patient with the notes but you never knew what happened to them. Now we can talk about the case. I presented one of those cases at the MAOCO conference and we could all learn from it.”

MAOCO has already been recognised by the Malawian Ministry of Health, and called upon to lead clinical training events. MACAO has also contributed to the development of the FAST-M toolkit to improve maternal sepsis care.



WORKING WITH AMMALIFE



AN INTRODUCTION TO WORKING WITH AMMALIFE

“Women are not dying of a disease we cannot treat. They are dying because societies have yet to make the decision that their lives are worth saving.”

Professor Mahmoud Fathalla

**Past President of the International Federation of Obstetricians
and Gynaecologists**

Feeling moved by a cause is one thing; finding a way to contribute meaningfully is another. A lot can be lost in translation from goodwill and resources to tangible impact.

Ammalife is committed to convert your enthusiasm and effort into mothers' lives saved. No effort is too small, and everyone is invited to contribute. Whatever you are able to offer, we will convert it to results.

TOGETHER WE WILL MAKE A DIFFERENCE

Previous page: Many mothers work hard both within and outside the home in order to overcome poverty, that is also a major cause of maternal mortality

WHY SUPPORT AMMALIFE?

A mother is the most precious person in the world. She brings her children into the world and gives her unconditional love, often sacrificing herself for the happiness of her family.

Whilst we live our busy western lifestyles in comfortable surroundings and state-of-the-art healthcare facilities it is easy to forget the challenges that persist in poor countries. It is a tragic fact that every two minutes a mother dies from a pregnancy-related illness. This means 800 mothers die every day. That is 800 mothers who are deprived of motherhood and likewise hundreds of children who are denied the joy of having a mother in their lives.

Women and children from poor countries benefit from Ammalife research



The good news is that this challenge can be overcome. With determination and focus Ammalife has been at the forefront of finding solutions. Our clinicians and researchers are carrying out world-leading studies of medications, protocols and practices. Our work has been adopted by the World Health Organisation which in turn influences national health policies and local practices on the ground.

Ammalife brings a unique approach which can be summarised as “doing practical research to deliver local solutions through investing in change-makers.” Our research is not conducted in academic laboratories, but on the ground in far-flung corners of the world. The solutions we seek to implement are culturally sensitive, economically viable and sustainable. The people implementing the solutions are change-makers in whom we invest through training, mentoring and capacity building.

Ten years ago, when the charity was founded, Ammalife Trustees had the vision to articulate the shared values of the charity. These values, reproduced overleaf, remain true today.

Our holistic approach has helped to save many lives over the last ten years. But there is still much to be done, and this huge task requires help from as many individuals and organisations as possible. This is your chance to be the change that you want to see. Ammalife offers you opportunities to make a practical difference. There are many ways to contribute, for example, with your time, money or skills, or through your employer. Please contact a member of the team to see how you can help.

It is very rare to be part of a team that retains a family feel but at the same time has a reputation for being world leaders in maternal health. Ammalife offers the best of local and global. So make the most of this opportunity to make a positive change to save a mother's life.

“If you save one life it is as if you have saved the life of all mankind.”

Imran Pasha
Treasurer and Trustee of Ammalife



Our shared values, as articulated ten years ago when Ammalife was founded:

- Our fundamental belief is that we can make a difference to reduce maternal deaths and disability. We have the motivation to drive forward changes that will make a difference in low-resource settings.
- We believe Ammalife should be an evidence-informed charity, with work based on interventions and strategies that are field-tested to be effective, so that scarce resources are spent only on worthwhile interventions.
- We believe our projects and programmes should be based on enhanced awareness of women's needs.
- We believe in genuine partnerships, collaboration and shared commitment among all stakeholders. We believe projects and programmes without strong local ownership and commitment, not just from local healthcare professionals, but also from local women, families, communities and the political establishment, will fail.
- We believe in learning from the field (beneficiaries, practitioners and local organisations) and adapting to local needs and circumstances.
- We believe in working within existing healthcare systems as far as feasible, because this approach is likely to represent the most effective and efficient way to make a difference. We believe the most successful projects and programmes are those internalised by existing healthcare systems.
- We believe no effort is too small. Many healthcare practitioners in the West, for example, can only give limited time towards a charity such as Ammalife. We believe it should be the role of Ammalife to be flexible and offer a framework that allows everyone to contribute usefully to reduce maternal deaths and disability.
- We believe education and continued professional development are central in achieving Ammalife's mission.
- We believe in building sustainability from the beginning of any activity, project or programme.
- We believe in transparency, accountability, and efficiency.

HOW TO SUPPORT US?

Volunteer With Us

Ammalife is managed by volunteers, so with more of us to lend a hand we can find better solutions to the challenges we face. We can help you to identify the best way to use your time and skills to transform women's lives. Whatever your talents, we can find a way to use them.

Challenge Yourself

Have you always wanted to run that race or climb that mountain? Need a bit more motivation? Let us help you. Get healthy, have fun, surprise yourself and we will support you all the way. We will supply you with an Ammalife fundraising pack and help you to publicise your challenge.

Our volunteer and student Clara Treharne explains our work to an infant supporter





Mary Gee bakes for Ammalife

Please DONATE

We are supported entirely by donations from ordinary people and organisations that share our vision. Please visit www.ammalife.org/make-a-donation/ to donate easily and securely: every penny of the money you give will reach us and help us.

If you have any difficulty or queries then please contact us at info@ammalife.org.

Fundraise With Friends

Everybody loves a cake sale or a samosa sale: why not organise one with friends or colleagues? We know that every penny has the power to save lives so you can make a real difference. And if your baking skills are unpredictable then why not organise a book sale or a clothes swap or a henna party: you choose.

Narendra Pisal runs the London Marathon and University of Birmingham students climb three peaks in 24 hours for Ammalife





Ammalife volunteers enjoy the University of Birmingham Community Day

Stay In Touch

Register For Newsletters

Stay in touch with us. At www.ammalife.org you can register to receive newsletters: we will send you regular inside stories about our projects, as well as our latest research news. We also feature real-life stories about Ammalife volunteers as they work to raise awareness and those vital funds.



Follow Us

You can find the links to follow us on Twitter and Facebook via our website: www.ammalife.org.

We are only an email away from you, and there is no query that is too small or too big. Please drop a line to info@ammalife.org and let us know a convenient time to call you. Maria or Dukaydah will be in touch.



Dukaydah van der Berg and Maria Gee

Ammalife standing order form

Support the work of Ammalife
Registered charity number 1120236

Please return your completed form along with the Gift Aid declaration to:

Maria Gee (Ammalife Treasurer)
Ammalife,
Academic Dept - 3rd Floor,
Birmingham Women's Hospital Foundation Trust
Mindelsohn Way,
Birmingham
B15 2TG.

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Title

First name

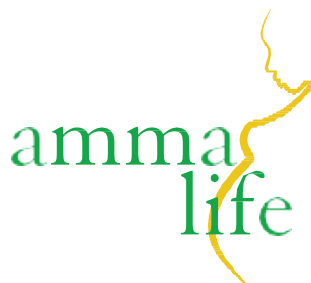
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Please pay to Ammalife (Sort Code 08 92 99; Account Number 65608269) The Co-operative Bank plc, PO Box 250, Delf House, Southway, Skelmersdale WN8 6WT
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The sum of

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You must notify Ammalife if you:

- Want to cancel this declaration. It will then not apply to donations you make on or after the date of cancellation or such later date as you specify.
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If you pay Income Tax at the higher or additional rate and want to receive the additional tax relief due to you, you must include all your Gift Aid donations on your Self Assessment tax return or ask HM Revenue and Customs to adjust your tax code. HMRC requires that all payments made are in a verifiable form i.e. Standing Order or Cheque, or are receipted.

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Ammalife Trustees believe we can make a difference to reduce maternal deaths and disability in low-income settings

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Skin-to-skin contact (kangaroo care) is important for premature babies



Ammalife... The Beginning	10
Ammalife Research Guiding Practice	14
1 Can Clinical Officers Do A Doctor's Job?	16
2 Do Traditional Birth Attendants Have A Role In Maternity Care?	18
3 Can Community Mobilisation Save Lives?	20
4 What Are The Barriers To Emergency Transport In Pregnancy?	23
5 What Is The Best Medication To Prevent Bleeding From Childbirth?	25
6 What Is The Best Medication To Treat Bleeding From Childbirth?	28
7 How Can We Stop Mothers Dying From Sepsis?	29
8 How Can We Improve Healthcare Working?	32
9 Is Symphysiotomy An Option In Obstructed Labour?	34
10 What Is The State Of Anaesthetic Care In Poor Countries?	36
11 What Research Is Being Done In Poor Countries?	39
12 Who Will Disseminate Research Findings?	41
Ammalife Projects And Partnerships Making A Difference	43
13 Life-saving Journeys For Pregnant Mothers In Pakistan	45
14 Refurbishment at the Queen Elizabeth Hospital, Malawi	48
15 Vital Supplies Across The Oceans	50
16 Medical Textbooks	53
17 Toilet Tissue: On A Roll	54
18 Advocacy Work	56
Ammalife Investing In Change-Makers	59
19 Amie Wilson	61
20 Stanley Daudi	63
21 Alex Sembo	64
22 Yolam Kameme	66
23 Soha Sobhy	67
24 Abi Merriel	68
25 GLOW Conference 2013	69
26 MAOCO: Malawi Association of Obstetric Clinical Officers	71
Working With Ammalife	72
Why Support Ammalife?	74
How To Support Us?	77
Trustees	81
Partners And Sponsors	82

