# THE GHANA – CARNEGIE POSTGRADUATE PROGRAM IN OB-STETRICS & GYNAECOLOGY

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#### SUMMARY

The Carnegie Corporation of New York, the American College of Obstetricians and Gynae-cologists (ACOG), USA, the Royal College of Obstetricians and Gynaecologists (RCOG) UK, the Ghana Ministry of Health, University of Ghana Medical School, Accra and the University of Science and Technology School of Medical Sciences, Kumasi, collaborated to establish an innovative community-oriented Postgraduate Training Program in Obstetrics and Gynaecology in 1987 (P/G Obgyn).

In the 10 years since its inception (1987-1997), 14 specialists graduated.

This paper outlines the Aims and Objectives of the Program, the various components of Reproductive Health where most research and publications were done, and the important role that professional training can play in reproductive health research.

#### INTRODUCTION

The Ghana-Carnegie Postgraduate Obstetrics Gynaecology Program (P/G Ob-Gyn) (1, 2)

The Ghana-Carnegie P/G Ob-gyn project was initiated in October 1987 at an international consultative meeting at the Royal College of Obstetricians and Gynaecologists, London UK to formalise complete specialty training in Ghana in Obstetrics and Gynaecology. This initiative was in response to the tragically high maternal mortality rate in Sub-Saharan Africa, including Ghana due in part to the shortage of certified Specialists available to train doctors and lead maternity units.

The training program was inaugurated in Accra in January 1989 with Dr. K. K. Korsah, a retired Consultant Obstetrician and Gynaecologist as the first in-country Co-ordinator. The Program is sponsored by the following organisations and institutions:

- The Carnegie Corporation of New York, New York, USA
- The American College of Obstetricians and Gynaecologists, USA
- The Royal College of Obstetricians and Gynae cologists, UK
- ♦ The Ministry of Health, Ghana
- The University of Ghana Medical School, Accra and
- The University of Science and Technology School of Medical Sciences, Kumasi

# Aims and Objectives of the Program The goals of the program are:

- To develop a training program appropriate to the health needs of West Africa, which will contribute to reducing maternal morbidity and mortality.
- 2. To provide a complete specialty training program in Ghana so that it would no longer be necessary for doctors to leave the country for obstetric and gynaecology training, such that at the completion of the program the graduates will have met all the requirements to sit for the Fellowship examination of the West Africa College of Surgeons.
- To support postgraduate teaching in the Obstetrics and Gynaecology Departments in Accra and Kumasi Medical Schools while sufficient medical faculty mem- bers are being trained.

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- To provide opportunities for advanced training in Obstetrics and Gynaecology for postgraduates from neighbouring West African countries where educational resources are insufficient.
- To demonstrate a model educational pilot program suitable for adoption by other clinical disciplines and other centres in West Africa.
- 6. To utilise the sponsorship of the American College of Obstetricians and Gynaecologists and the Royal College of Obstetricians and Gynaecologists to validate and publicise the program, to assist in recruitment of teachers, and to benefit from the colleges' expertise in medical education, curriculum planning and evaluation.
- To ensure that the postgraduate training program will be sustained by the Ghana Medical Schools after the funding period is over.

#### **Training Sites**

The two sites used for clinical training are the Korle-Bu Teaching Hospital in Accra, and the Komfo Anokye Teaching Hospital in Kumasi. These facilities provide excellent obstetric experiences with each having approximately 10,000 deliveries annually, as well as very large gynaecologic surgery services.

There are also four community based training sites for district/rural posting at Akosombo and Nkawkaw in the Eastern Region and Ashanti-Mampong and Offinso-Maase in the Ashanti Region. The rural parts of northern Ghana receive a special outreach service regularly from visiting professors and senior residents.

#### **Program Management**

The program is managed by the Program Coordinator who serves as chairman of the policy arm of management, the Ghana Management Committee (GMC). The GMC is composed of representatives from the University Medical Schools and the Ministry of Health in Ghana. The GMC governs the project with expert advice and assistance from an External Advisory

Board (EAB). The EAB is composed of representatives from Carnegie Corporation of New York, the American College of Obstetricians and Gynaecologists (USA) and the Royal College of Obstetricians and Gynaecologists (UK).

# West African College of Surgeons (WACS)

WACS started in 1960 as Association of Surgeons of West African (ASWA). The initial idea was mooted by Prof. Victor Anomoh Ngu and Sir Samuel Manuwa both at University College Hospital, Ibadan, Nigeria. Initially annual meetings were rotated between Anglophone and Francophone West African States.

At the 9<sup>th</sup> Annual Conference in Accra, Ghana in 1969 a decision was taken to establish the West African College of Surgeons (WACS) to take care of postgraduate training issues in the Sub-region.

Annual meetings of both ASWA and WACS ran pari passu until 1973. At the 13<sup>th</sup> Annual meeting of ASWA and WACS in Benin-City, Nigeria, ASWA was finally dissolved and its assets and liabilities transferred to WACS. It was formally inaugurated in Lagos in January 1975.

The West African Postgraduate Medical College (WAPMC) was formed in 1974. Its curriculum in Obstetrics and Gynaecology was partially adapted and used in the training of residents.

The Ghana Carnegie Postgraduate training program has given great stimulus, encouragement, enthusiasm and the determination to residents to do more original research particularly in the innovative community fourth year.

In January 1998 the internal and external organisers of the program namely the Ghana Management Committee (GMC) and the External Advisory Board (EAB, USA & UK) celebrated the tenth anniversary of the program by holding an international "Grand Show" comprising a Presentation and Awards ceremony and Scientific Session at the Accra International Conference Centre.

This paper was presented at the above Scientific Session by the first author (SWKA):

It outlines the aims and objectives of the programme and gives an overview of the following three areas:

Firstly,

- The research conducted and papers published by the graduates
- The journals in which the publications appeared

- The papers read at Conferences
- The Conferences at which the papers were presented during the ten year period of this unique innovative community oriented postgraduate training program

Secondly, the various components of Reproductive Health where most research and publications' were done as well as those areas in which further research and publications still need to be done have been identified and described

Thirdly, it illustrates the important role that professional training can play in reproductive health research.

It also seeks to disseminate information about the research activities of the program residents and graduates to both the national and international medical communities.

#### MATERIALS AND METHODS

A circular letter was sent out to all 14 graduates of the program. The graduates were requested to submit:

- List of research/studies done during the period of the Residency postgraduate training
- List of publications resulting from the research
- List of Journals in which the papers were published
- Reprints or Photocopies of the published papers
- List of Conferences attended
- List of paper(s) read at each conference
- Photocopies of the papers read at conferences

These papers were thoroughly studied and meticulously analysed and then assigned/allocated to the appropriate component of reproductive health as defined in the national reproductive health service manual (4).

#### RESULTS

In the period of ten years, a total of 31 papers were published and 47 papers were read at various conferences. Twenty-eight studies (14 Obstetric and 14 Gynaecology) were done and written up with relevant references and literature review in Case Books for the Part II (Final) FWACS examinations.

Table 1: Publications, Conference papers and Long Commentaries.

Number of publications	31
Number of conference papers read	47
Number of long commentaries	28 (14 Obs, 14 Gyn)
Number of journals in which papers were published (including textbooks)	9

Table 2: Journals in which papers were published.

Journal ,	No. of papers (%)	
Ghana Medical Journal	10(32.3%)	
Int. J. Gynecol Obstet.	8(25.8%)	
West African Journal of Medicine	4(12.9%)	
East African Medical Journal	2(6.5%)	
Health Guide	2(6.5%)	
Obstetrics & Gynaecology	1(3.2%)	
Int. Urogynecology Journal	1(3.2%)	
Casa di Obstetricia et Gyn Gior- nale Italiano	1(3.2%)	
Text books	2(6.5%)	
Total	31(100%)	

Table 3: Conferences at which papers were read.

Conference		No. of papers (%)	
a	Ghana Surgical Research Society (GSRS)	17(36.2%)	
m	West African College of Sur- geons Congress (WACS)	12(25.5%)	
	Society of Obstetricians and Gynaecologists of Ghana (SOGOG)	8(17.0%)	
п	Ghana Medical Association (GMA)	5(10.6%)	
28	FIGO '94 Congress	3(6.4%)	
10	Pan African Federation for Mother and Child Health (PAFMACH)	1(2.1%)	
21	Ghana Society of Anaesthesia	1(2.1%)	
To	tal	47 (100%)	

The papers were published in 8 internationally renowned peer review journals and two text-books. The breakdown is as shown in Table 2.

Most of the papers <sup>10</sup>/<sub>31</sub> (32.3%) were published in the Ghana Medical Journal which is subscribed by all members of the GMA; <sup>8</sup>/<sub>31</sub> (25.8%) International Journal of Obstetrics and Gynaecology and <sup>4</sup>/<sub>31</sub> (12.9%) in the West African Journal of Medicine.

Table 3 shows the list of conferences at which various papers were read. This list includes the

FIGO '94 congress in Montréal, Canada at which three poster presentations were made by residents of the program.

Table 4: Reproductive health service components covered by publications and papers (excluding long commentaries) 78 papers.

Topic	Publica- tions (%)	Conf. Papers (%)
Safe motherhood (ANC, Labour & delivery)	19(61.3%)	32(68.1%)
Family Planning	154	1(2.1%)
Prevention and manage- ment of unsafe abortion and post abortion care	2(6.5%)	2(4.3%)
Prevention and treatment of RTI incl. STDs, HIV/ AIDS	( <del>1</del> )	1(2.1%)
Others: Urogynecology (VVF, U-V Prolapse)	5(16.1%)	5(10.5%)
Prevention and treatment of infertility	1(3.2%)	2
Management of Neo- plasms of the reproduc- tive system incl. cervical cancer	2(6.5%)	4(8.5%)
Responding to concerns about menopause	1(3.2%)	7.
Discouragement of harm- ful traditional practices that affect the reproduc- tive health of men and women such as FGM*	1(3.2%)	2(4.3%)
Information and counsel- ling on human sexuality, responsible sexual be- haviours, responsible parenthood, preconcep- tional care and sexual health	-	-
Total	31(100%)	47(100%)

<sup>\*</sup> FMG = female genital mutilation

Most of these papers <sup>42</sup>/<sub>47</sub> (89.4%) were read at national and sub-regional conferences viz. GSRS (36.2%), WACS (25.5%), SOGOG (17.0%) and GMA (10.6%) conferences.

Table 4 shows the reproductive health service components as listed in the National Reproductive Health policy and standards (MOH) April 1996 that is covered by the publications and papers presented at conferences.

It is obvious that most of the publications  $^{19}/_{31}$  (61.3%) and conference papers  $^{32}/_{47}$  (68.1%) were on safe motherhood.

#### DISCUSSION

## Achievements of the Programme

The numerous achievements of the programme include:

- Improvement in the pass rates at the West African College of Surgeons (WACS) Fellowship Examination. To date 14 specialists, currently in University Teaching and Specialist Positions have been produced with 25 other residents at various stages of training.
- Modernisation of the departmental libraries and upgrading of the two teaching departments through staff development, provision of computers, ultrasound, colposcopes, electronic teaching aids, communication equipment and teaching links with UK and USA.
- Provision of specialist-in-training services to district hospitals in Ghana resulting in improved maternal and childcare.
- Community based learning resulting in several research projects and publications within the program.
- v. Encouragement of other clinical departments in both Accra and Kumasi to seriously use this program as a model to improve postgraduate training at home.
- Identification of initial reduction in maternal mortality and morbidity ratios through improved maternal health care.

In reviewing and analysing the publications and scientific papers read at various national and international conferences, it is worth noting that most of the papers were published in journals that are immediately relevant to us in Ghana. Most of the papers <sup>22</sup>/<sub>31</sub> (71%) were published in the Ghana Medical Journal which is subscribed by all members of the Ghana medical Association (GMA). ie. all practising medical professionals in Ghana; in the International Journal of Obstetrics and Gynaecology, which is the official publication of the International Federation of Gynaecology and Obstetrics (FIGO); and in the West African Journal of Medicine which is subscribed by all Fellows of the West African

College of Surgeons and College of Physicians (Table 2). It is obvious therefore that dissemination of experiences and results gathered through these studies and researches is not limited to only readers in Ghana and the West African Sub-region but are also made available to the rest of Africa and the international community of obstetricians and gynaecologists.

As shown in Table 3, most of the scientific papers <sup>42</sup>/<sub>47</sub> (89.4%) were presented at national and sub-regional conferences. As a consequence, the graduates have acquired a respectable reputation and have established themselves as capable academics and researchers at the national and sub-regional levels. Most probably, the graduates would have featured more prominently at international conferences if funds were more readily available.

The observation in Table 4 that most of the publications (61.3%) and most of the scientific papers presented at conferences (68.1%) were on safe-motherhood is both interesting and exciting when seen against the background of the objectives that formed the basis for the Carnegie Grant support for the postgraduate training program in Ob-Gyn in Ghana.

The objectives of the training program is defined in the Summary Statement of the Explorative Consultative Meeting on development of postgraduate training in Ob-Gyn in Ghana held in London, October 1987 (2).

The main and primary goal/objective of the program is: "To develop a training program appropriate to the health needs of West Africa which will contribute to reducing maternal morbidity and mortality."

Data in Table 4, however, show that a lot more studies and research need to be done in other component areas of Reproductive Health. These are:

- Family Planning
- Unsafe abortion and post abortion care
- Reproductive tract infection (RTI) including STDs, HIV/AIDS
- Cancers of the reproductive system including cervical cancer
- The menopause
- Infertility

- Harmful traditional practices such as Female genital mutilation (FGM) and lastly
- Human sexuality, sexual behaviour, responsible parenthood, pre-conceptional care and sexual health.

In conclusion, the Ghana-Carnegie P/G Ob-Ggn Program with its innovative community 4<sup>th</sup> year, illustrates the important role that professional training can play in Reproductive Health Care, Service and Research. A good number of research and publications have been achieved through this innovative program especially in the area of safe-motherhood. There is however, still room for more research in the other areas of reproductive health listed above for the program to make its full impact as it is expected to do, on the reproductive health of women in Ghana.

## ACKNOWLEDGEMENT

We are grateful to all the graduates of the program for willingly supplying information on their research and publications.

#### REFERENCE

- Postgraduate training in Obstetrics and Gynaecology in Ghana. In collaboration with USA & UK., 1988 Revised August 1997.
- Martey JO, Elkins TE, Wilson JB, Adadevoh SWK, MacVicar J and Sciarra JJ. Innovative Community Based Postgraduate Training for Obstetrics and Gynaecology in West Africa. Obstetrics and Gynaecology, June 1995;85:(6):1042-1046.
- Information Booklet and Calender of events, 1999. West African Health Community.
- National Reproductive Health Service Policy and Standards. April 1996, Ministry of Health, Ghana.