

Project Title: Creation of a sustainable training collaboration in perinatal medicine between the University Hospitals of Lausanne (Switzerland) and Conakry (Guinea).

Context

The under-5-mortality-rate (U5MR) is estimated in Guinea by 94/1000 live births of which 43 deaths/1000 live births appear within the four first weeks of life, - during the neonatal period. Comparable data from Switzerland are 4/1000 live births for the U5MR and for the neonatal mortality rate 2/1000 live births. Asphyxia due to perinatal adaptation problems and infections are together responsible for almost 60% of all neonatal deaths worldwide.

A vast majority of newborn deaths in Africa (eg. due to infections, respiratory impairment, asphyxia etc) could be easily avoided with simple and low cost preventive and therapeutic measures, like improved use of hand hygiene, antibiotics, oxygen supply, basic resuscitation measures in hands of well trained health care professionals. Asphyxia for example, in Guinea the reason for 30.8% of neonatal deaths, can in most situations be prevented by the presence of a health care professional at birth who is well trained in basic neonatal resuscitation care and equipped with a neonatal ventilation bag and a handheld aspiration tool. Unfortunately, even in university hospitals in Guinea, by far not all deliveries are assisted by such fully trained and equipped health care professionals.

With this project we would like to set up theoretical and practical training modules for health care professionals in perinatal medicine. With a continuous institutional health partnership between the two pediatric and obstetric university centers of Conakry and the CHUV in Lausanne, we intend to potentiate the training of guinean health care workers in perinatology. We are convinced that with such an established, sustained training program of basic diagnostic and therapeutic measures of perinatal medicine, a dramatic decrease of the neonatal morbidity and mortality rate in Guinea will be achieved.



Picture 1: The neonatal intensive care unit at the INSE.

Therefore, the goal of our start-up project is to explore the needs and to develop at least three training modules for perinatal health care providers as starting point of such a sustainable collaborative training program between the two University Hospitals (Ignace Deen and Donka), the neonatology unit of the Donka University Hospital, called « Institut de Nutrition et de Santé de l'Enfant » (INSE) in Conakry and the Department woman-mother-child of the University Hospital of Lausanne.

Project description

Our project intends to develop a framework of a sustainable collaborative training program for health care workers in perinatal medicine between the two University Hospitals of Conakry (Ignace Deen and Donka), the only tertiary neonatal unit in Guinea, the 'Institut de Nutrition et de Santé de l'Enfant' (INSE) and the University Hospital of Lausanne (Centre Hospitalier Universitaire Vaudois, CHUV).

The NGO "Souffle2vie" will hire a physician who was trained in pediatrics at the CHUV, in order to set up three modules of a training program for perinatal health care workers in Guinea. During a three months period, this physician will work side-by-side at the aforementioned institutions in Conakry to explore, together with his guinean colleagues, the essential needs of training topics in perinatal medicine. He will then have to prioritize them and to make proposals how these needs could be answered by three to five tangible, combined theoretical-practical training modules of a duration of a few days. Existing training programs for identified topics will have to be searched for and their applicability to the guinean context will then be explored and adaptations to the local context elaborated. One example might be an efficient training program with theoretical instructions and hands-on practical seminars in neonatal resuscitation, e.g. according to "Helping Babies Breathe", the training program for neonatal resuscitation of the American Academy of Pediatrics.

The objectif of this start-up project is to create, by the end of the three months period, at least three tangible, applicable and fully elaborated training modules which then can be taught twice per year in Conakry.



Picture 2



Picture 3

The Swiss and Guinean directors of the program will then, together with the respective colleagues of the CHUV and the University Hospitals Ignace Deen and Donka, plan these interventions, recruit health care professionals as trainers for weekly training sessions in Conakry.

In the future, this partnership between the involved University Hospitals might be enlarged to other modalities of training and teaching collaborations, like short training periods of guinean health care professionals at the CHUV, installation of new treatment approaches in Guinea like non-invasive ventilation for newborn infants etc, and might lead to an application to ESTHER Switzerland of a Partnership Project Grant in the near future.



Partnership

By the end of 2015, a team of health care professionals of the CHUV undertook a first mission to perform a basic evaluation of the perinatal health care system of Conakry, invited by the Dean of the Medical Faculty of the University of Conakry. Since then, some logistic support, provision of few medical equipment, occasional bedside teaching sessions and a neonatal resuscitation course have been organized by “souffle2vie”, in collaboration and with the support of the CHUV (pictures 2 and 3).

Although this binational and multidisciplinary training was very successful, it was an occasional event and no further training has been organized since then nor has been installed a sustained continuous training program.

Since 2015, the whole University Hospital of Donka in Conakry is being renovated. Unfortunately, the “Institut de Nutrition et de Santé de l’Enfant” (INSE) which represents the only university neonatal unit in Guinea, has not been included, keeping this unit in a terrible situation regarding lack of space, needs of basic functional medical devices for neonatal care and an overcrowded ward leading to increased rates of nosocomial infections. Due to the fact that many stakeholders in perinatal care, among them “souffle2vie”, insisted by the Ministry of Health of Guinea, the government has accepted to invest in the renovation of this neonatal unit, based on plans designed in a collaborative project between engineers and architects of Guinea and the CHUV in Lausanne.

Therefore, it is a crucial moment to start now a sustainable partnership regarding educational and training programs for health care professionals in order to be prepared to fill the new locations with an improved perinatal medicine know-how. It is important that the renewal of the infrastructure goes along with a well organized and adapted continuous training program for health care professionals and that the improvement of standards in neonatal care is well planned and coordinated.

To support this activity, a convention of collaboration has been signed by the CEOs of the following four Institutions: the two University Hospitals in Conakry (Hôpital National de Ignace Deen and Hôpital National de Donka), the INSE and the University Hospital of Lausanne (CHUV).

Timeframe

From April 1 to June 30, 2019 (3 months)



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