

## Harold and Ethel Pupkewitz Heart Foundation

## ANNUAL REPORT 2016

1. Introduction

The Harold and Ethel Pupkewitz Heart Foundation (HEPHF) was established in 2011 by the late Mr Harold Pupkewitz with a grant of N\$ 1.7 million. The purpose is to support of research into heart disease in Namibian children. This is the annual report for 2016 and is presented to the Board of Directors in support of the budget and work plan for 2017.

- 2. Activities and outputs supported by and through the HEPHF
  - 2.1. Namibian Registry for Rheumatic Heart Disease

The registry started in January 2010. Patients are recruited at Windhoek Central Hospital and on outreach visits to Oshakati and Rundu Intermediate Hospitals. Data has been obtained on 534 patients.

## 2.2. REMEDY

- 2.2.1. The baseline results of the Namibian sub-study of 280 patients were presented by Dr Hugo-Hamman at the meeting of the Pan African Society of Cardiology (PASCAR) in Mauritius and the Annual Congress of the South African Heart Association in 2015.
- 2.2.2. Baseline results for Namibia are being written up by Dr Tangeni Auala and Hugo-Hamman for publication later this year.
- 2.2.3. Baseline results on the 3343 patients enrolled in REMEDY globally were reported at the annual meeting of the European Cardiology Society in November 2014 and published in the European Heart Journal in November 2014.
- 2.2.4. The 24 month follow-up data on those 3343 patients was presented at the World Congress of Cardiology in Mexico in June 2016.

- 2.3.1. Namibia were co-applicants with the University of Cape Town to the Welcome Foundation to study the genetics of RHD with 7 other countries in Africa. Dr Hugo-Hamman is the Principal Investigator. The Study Doctors are Dr Tangeni Auala, Dr Liina Sikwaya and Dr Camantha Brinkman.
- 2.3.2. The Namibian research group supported by HEPHF has recruited 334 patients living with RHD and 341 healthy controls. The target has been reached and the study recruitment concludes on 31 July 2016.
- 2.3.3. Funding from Welcome has contributed £44 650 to funds under management by the HEPHF and this supports the study nurses, technologists, laboratory assistants and some administration costs. The HEPHF has provided additional financial support to the project including consulting costs of the Principal Investigator, financial management and research administration.
- 2.4. Adults with native congenital heart disease
  - 2.4.1. Mr Paul Barno, Dr du Toit and Dr Hugo-Hamman collected data on 114 adolescents and young adults born with congenital heart disease.
  - 2.4.2. They reported this data to the annual meeting of the Association of European Paediatric Cardiology on 21 May 2015 in Prague and at the annual congress of the South African Heart Association in October 2015.
- 2.5. The Namibian Children's Heart Project
  - 2.5.1. This project was initiated with the help of Dr Amadhila and Mr Pupkewitz in 2009. To date over 5 years more that 250 Namibians have been referred for heart surgery in Cape Town.
  - 2.5.2. The outcomes from this project are being analysed by Dr Fenny Shidhika and Dr Hugo-Hamman.
  - 2.5.3. Dr Shidhika presented results from 2009-2014 at the 2015 Congress of the South African Heart Association and was awarded the prize for the best research paper from a trainee. The HEPHF supports this research and enabled Dr Shidhika attend this meeting.
  - 2.5.4. Dr Shidhika will submit the paper for her MPhil thesis in the University of Cape Town.

## 3. Supporting the Eradication of RHD

- 3.1. Eradication of Rheumatic Heart Disease in Africa
  - 3.1.1. The Namibian team participated in the 2nd All-Africa Workshop on RHD held under auspices of the World Health Organisation (WHO AFRO) and the Pan African Society of Cardiology (PASCAR) in February 2014 with Dr Hugo-Hamman was a co-chairman and rapporteur. The most significant output was publication in the Lancet in August 2014 of "Rheumatic Heart Disease A.S.A.P. in Africa: the Mosi-o-Tunya Call to Action".
  - 3.1.2. This "call to Action" attracted the attention of the African Union and as a result, under the auspices of the AU, the third All Africa workshop on RF and RHD was held on 21 and 22 February 2015 where the goal was to develop "A Roadmap Towards the Eradication of Rheumatic Heart Disease in Africa". A significant public health breakthrough in RHD in Africa.
  - 3.1.3. Recommendations for Prevention and Control were tabled at the meeting of African Health Ministers in May 2015. The outcome was the African Union "Addis Ababa Communique on eradication of rheumatic heart disease in Africa" published in the Cardiovascular Journal of Africa in 2016.
  - 3.1.4. None of this would have been possible without the work done in REMEDY, the Namibian and other national registries in Africa.
- 3.2. Eradication of Rheumatic Heart Disease in Namibia
  - 3.2.1. The National Advisory Committee for Prevention and Control of RF/RHD was formed in 2015. Knowledge and evidence on RHD acquired through the Namibian National Registry is what enabled its formation and what supports its important agenda.
  - 3.2.2. The Committee will serve as the primary decisionmaking body of the program and be responsible for designing, implementing and adapting the "Beat RHD A.S.A.P." for Namibia. The second meeting was on 1 June 2016 with a writing sub-committee drafting the national programme.

- 4. Capacity Building
  - 4.1. An important objective of the HEPHF is, "to identify young medical scientists and build research capacity in our country".
  - 4.2. To date the HEPHF has engaged and supported the following clinician scientists and research assistants.
    - 4.2.1. Dr Brenda Kaaya
    - 4.2.2. Dr Liina Sikwaya
    - 4.2.3. Mrs A Awases RN
    - 4.2.4. Mrs A Bock RN
    - 4.2.5. Mrs A Amanyanga RN
    - 4.2.6. Mrs H Neumbo RN
    - 4.2.7. Dr J Shapaaka
    - 4.2.8. Dr T Auala
    - 4.2.9. Dr F Shidhika
- 5. Annual Financial Statements
  - 5.1. The annual financial statement ending 29 February 2016 are presented for approval.
  - 5.2. Total assets and retained income is N\$ 986 160.
- 6. Work plan 2016 2020 INVICTUS
  - 6.1. With Dr Hugo-Hamman as the Principal Investigator, the Namibian research team has been invited to participate in the international INVICTUS study.
  - 6.2. INVICTUS is a large randomised trial investigating novel treatments for prevention of cardiovascular outcomes in rheumatic valvular heart disease. Rheumatic valvular heart disease (RVHD) is a major cause of stroke and heart failure. We have made great progress in prevention of stroke from cardiac embolism related to other heart disorders, but we still do not have good evidence for treatment decisions in RHD managing atrial fibrillation and stroke prevention.
  - 6.3. INVICTUS will perform two simple and well-designed randomised clinical trials of a promising novel oral anticoagulant, rivaroxaban vs the standard treatment with a drug called warfarin. It will include a large registry (20,000) to help understand the natural history of the condition, factors that affect outcomes and barriers to appropriate care. So the national registry will continue under INVICTUS and will be the vehicle through which patients are enrolled in the clinical trial.

- 7. Budget 2016/2017
  - 7.1. A draft budget for the year ending 28 February 2017 is presented for approval.
- 8. Fund raising
  - 8.1. Our vision is to grow as a principal heart disease research funding agency in Namibia.
  - 8.2. To date the HEPHF has received the following funding.
    - 8.2.1. N\$ 1.2 million from the Pupkewitz Family Foundation with N\$ 500 000 due.
    - 8.2.2. Mediclinic Hospital Group NS 148 834.75 in 2013.
  - 8.3. Dr Hugo-Hamman was awarded the following research grants which have more than doubled the funds under management.
    - 8.3.1. N\$ 76 001 towards REMEDY from PPI Canada.
    - 8.3.2. N\$ 1 021 380 towards RHD GEN from the Welcome Trust, United Kingdom.
    - 8.3.3. N\$ 20 000 from PASCAR/World Heart Federation.
  - 8.4. To realise our vision Dr Hugo-Hamman will continue to write grant applications. However, to grow as a research institution which invites research proposals the added impetus of external donations is an imperative. A fund-raising sub-committee was formed in 2015 with Mrs Barry as Chairperson.
- 9. Conclusion

The Foundation continues to make an invaluable contribution to heart disease research in children in Namibia. However, the impact of that research is best measured by its relevance to and influence on health policy in Namibia and Africa. Without our research into RHD the national programme for prevention and control would never have been launched and the National Advisory Committee would not have been constituted. We are fulfilling our mandate namely, supporting heart research in Namibia and building research capacity.

THE HON MINISTER T ALWEENDO CHAIRMAN