

National Diabetes Centre

(National Training, Education, Resource and
Research Centre)

Ministry of Health and Social Welfare

ANNUAL REPORT FOR THE YEAR 1984

A. ESTABLISHMENT OF THE DIABETES CENTRE

From being a relatively rare disease 30 years ago, diabetes mellitus and other Non-Communicable Diseases have become the major health problems in Fiji at the present time. Several clinical and community-based studies in the last two decades including the major 1980 National Diabetes and Cardiovascular Disease survey show that these diseases are almost reaching epidemic proportions. The prevalence (the number of people having the disease) is high, the incidence (the number of people developing the disease over a period) is high and the morbidity and mortality is excessive. These diseases put on an undue strain on the limited health care resources that exist in this country. The preventive measures for diabetes and other Non-Communicable Diseases remain undeveloped, the facilities for continuing education of health care professionals is minimal and the problem is further worsened by an absence of coordinating centres.

Following the 1980 National Diabetes and Cardiovascular Diseases survey several discussions were held between the Ministry of Health, the WHO Consultants and the South Pacific Commission regarding the prospect of planning and obtaining funding for intervention programmes by establishing a National Non-Communicable Diseases Centre, to control the rapidly increasing trends of these diseases.

The trend towards an increasing incidence of diabetes mellitus and other Non-Communicable Diseases is a global problem.

"The problems in the field of diabetes mellitus in the developing countries are already of large dimensions. Until a timely action is initiated, these may assume gigantic proportions" (Bajaj JS, *Bulletin: Delivery of Health Care for diabetes in developing countries*, 2/1980).

"The establishment of special centres in developing countries to promote and integrate care, learning and research in diabetes is desirable. The centres would constitute the focal points in the national network of diabetes care" (Recommendation: *WHO Expert Committee on Diabetes Mellitus, Technical Series 646, 1980*).

In the World Health Organisation sponsored "Workshop on Diabetes Control in the South Pacific" held in Suva in 1982 the problems of diabetes control were discussed and the desirability of establishing diabetes centres was again stressed

"The absence of diabetes centres in developing countries is a major problem in diabetes control. Such centres should have the responsibility for promotion and integration of diabetes care and for dissemination of knowledge locally. They should provide guidance on and coordinate diabetes related research and be focal points in the national health care system and in the international diabetes community, for the control of diabetes" (Ram P., *In Diabetes Mellitus, Primary Health Care Prevention and Control, I.D.F. Publication*).

Following Seminars on Diabetes Mellitus for health care professionals held at the CWM Hospital, Suva and Lautoka Hospital, Lautoka in 1983, a proposal to establish a diabetes centre was made and accepted by the Government. The Prime

Minister's keen interest and support lead to the establishment of a National Diabetes Centre in Suva in 1984.

B. NATIONAL DIABETES CENTRE

1. Physical Location

An old three bedroom quarters in Waimanu Road, opposite the Colonial War Memorial Hospital was selected to be the site of the centre. Extensive renovations were carried out by the Public Works Department. The centre has a large reception room, four offices, a lecture room to accommodate 15 people, a library, a kitchen and an urine testing area as well as a small area for teaching home glucose monitoring. There exist also adequate parking facilities for patients, their relatives and the staff.

2. Aims

The function of the National Diabetes Centre is to control diabetes in the country by promoting and integrating diabetes care and supplementing health care measures.

1. TO EDUCATE THE HEALTH CARE PROFESSIONALS, so that diabetics can be provided better and improved care.
2. TO EDUCATE THE DIABETICS, so that they are able to take better care of their condition and hence live a more healthy life and the same time being able to avoid many of the complications of the disease.
3. TO EDUCATE THE PUBLIC, so that preventive measures are taken to avoid or minimize the risk of the development of the disease in the community.
4. TO BE A RESOURCE CENTRE and to provide an expert advisory service on all aspects of the disease.
5. TO PROVIDE GUIDANCE ON, COORDINATE AND CONDUCT DIABETES — RELATED RESEARCH, so that more could be learned about the disease in the country and appropriate preventive measures could be instituted.

3. Staff Training

In May 1984, a team of four health care professionals went to Sydney, Australia for a 10 week attachment-training programme on Diabetes Education. The team consisted of a senior medical officer, Dr. M. Cornelius, two registered nurses, Staff Nurses Lilly Gafoor and Setaita Sevuita and a Dietitian, Mrs Louisa Griffen.

The training programme was planned and conducted mostly by the staff of the Royal Prince Alfred Hospital Diabetes Centre; as well as the staff of the Royal Newcastle Hospital Diabetic Education and Stabilization Centre. The other Diabetes Centres visited during the training programme were at the St. Vincents Hospital, the Royal Alexandra Hospital for Children, the Sydney Adventists Hospital, the Royal North

Shore Hospital and the Concord Hospital.

Educational visits were made to the Regional Teacher Training College at the University of New South Wales, the School of Podiatry, Ames Company Head Office (the suppliers of Ames glucometers), the Diabetic Unit and the Endocrine Laboratory attached to the Royal Prince Alfred Hospital, the Adolescent Diabetic Clinic of the Royal Alexandra Hospital for Children, the Head Office of the Diabetic Association of New South Wales and the Lady Davidson Rehabilitation Centre.

The director was appointed in July 1984. Following this approaches were made to the American Diabetes Association, British Diabetes Association, Indian Diabetes Association and to the leading diabetologists in North America, Europe, Asia and Australasia for goodwill, support and assistance. These included:

Dr. Leo Krall, Boston U.S.A, President, International Diabetes Federation.

Professor J.S. Bajaj, India, President-elect, International Diabetes Federation.

Professor K. Kosaka, Japan, President, Western Pacific Region, I.D.F.

Professor S. Baba, Japan, Secretary-General, Western Pacific Region, I.D.F.

Professor Z. Skrabalo, Director, Institute of Diabetes, Zagreb, Yugoslavia.

Dr. D.D. Etzwiler, Minneapolis, U.S.A. Vice President, I.D.F.

Dr. S.S. Ajoankar, Bombay, India, Hon. President, I.D.F.

The response was overwhelming.

4. Facilities

The facilities at the centre include a small library, blood sugar machines and audio-visual aids, a slide projector, an overhead projector, six tapes on Diabetes Mellitus, a video, a photocopying machine, a small number of transparencies and other office equipment.

5. Opening

The National Diabetes Centre was officially opened by the The Right Honourable the Prime Minister Ratu Sir Kamisese Mara on 13.9.84 at 5.00pm. The Honourable Minister of Health and Social Welfare Dr. Apenisa N. Kuruisaqila welcomed the guests.

The substance of his speech is as follows:—

The Right Honourable The Prime Minister,
Ratu Sir Kamisese K.T. Mara,
Distinguished Guests,
Colleagues,
Ladies and Gentlemen !

May I, on behalf of the Staff of the Ministry, the Director and Staff of the Fiji National Diabetes Centre, extend to you, Sir, and to everyone as well, a very warm welcome this afternoon.

We are particularly delighted Sir, that you have consented to open this Centre this afternoon, because you were directly involved and personally interested in this project from its very beginning. Therefore, what we see (above here) symbolises your support and care for the health of our people.

Diabetes Mellitus is an ancient disease, known to the Greeks, who quite appropriately gave it the name, which literally means "SWEET WATER", due to the loss of sugar (and

other chemicals) in the urine.

However, now we know this ancient disease to be the result of an interaction of genetics and environmental risk factors such as:

- over-eating,
- obesity,
- physical inactivity,
- lack of exercise
- excess consumption of alcohol,
- stress and strain;

but recent studies showed that over-weight and hypertension are the most likely casual factors in this country.

Therefore, we need to tackle this disease which has become a major public health problem, with a vigorous will, either individually as patients or together as a responsible community.

We need the support of everyone in this country to enable us to set up the National Diabetes Support Fund. This Fund, which is going to be raised and administered under a National Committee, will be utilised for the continued education of the staff, the diabetic patients, the public, as well as the on-going research work in Diabetes and other non-communicable diseases.

It gives me great pleasure to announce that Mr. Mahendra Patel has graciously accepted the Chairmanship of this National Committee. May I wish him and his Members success.

While we are grateful to so many people who have helped us to set up this Centre, let us not forget our doctors and nurses who have done so much for Diabetes in this country, both in the Government and private sectors.

But I must express our deep gratitude to —

- (1) the Lions Club of Ba and the National Body for support;
- (2) the World Health Organization for the provision of \$10,000 for equipment and other materials.

Last but not the least, I must express our deep gratitude to both Professor John Turtle of the Royal Prince Alfred Hospital and his Staff and to Professor Paul Zimmet of Melbourne. They have this to say, and I quote :—

"Congratulations on the Opening of the Diabetes Centre. Sorry can't be with you".

Professor J. Turtle and Staff,
Diabetes Centre,
Royal Prince Alfred Hospital, Sydney.

"Congratulations on Opening of National Diabetes Centre. Regret that I cannot be present but wish you well in your pioneering Diabetes Prevention and Control effort. It is of major importance not only for Fiji but also the Pacific Nations."

Professor Paul Zimmet,
Melbourne.

Mr. Prime Minister, Sir, may I now invite you to address us and to officially open the Centre.

Ladies and Gentlemen, the Right Honourable the Prime Minister.

The Prime Minister's Speech was as follows:—

Ladies and Gentlemen,

I am pleased to be with you this evening to open this National Diabetes Centre and to launch the appeal for funds to complement the Government's effort to combat diabetes. This disease has become a major and increasing health problem in Fiji and is a cause of great concern to us all. Thirty years ago diabetes was an uncommon condition in this country. The recent increase in diabetes appears to be largely

related to our changing lifestyles and in particular, our eating habits.

Diabetes is a chronic disease that results when the body does not produce enough insulin, a chemical substance necessary for the proper utilisation of food and particularly, the starchy foods that we eat. The disease causes short-term problems and may lead to long-term damage to the heart, kidneys, legs, eyes and nerves.

Studies undertaken by the Ministry of Health over the years, and the assistance of the World Health Organisation and the Medical Team from Melbourne Hospitals in 1980, and by Professor Turtle and his team from Sydney last year, confirm the increasing incidence of diabetes amongst our people. Many of us will be surprised to learn that eight (8) out of every 100 adults suffer from the disease and that there are 20,000 diabetics in the country and almost the same number with borderline diabetes. It is estimated that 1000 adults may develop diabetes each year. There is no doubt that diabetes is one of the leading causes of heart disease, kidney disease, blindness and leg problems leading to loss of limb.

The hospital admissions for diabetes have increased five-fold in the last 30 years. At present up to 20% of the hospital beds are used to treat diabetes-related problems.

The disease is increasing rapidly and many people who have the disease do not know that they are suffering from it.

The Ministry of Health and Social Welfare is continuing studies in the field of diabetes. A study on the incidence of diabetes is in progress and is expected to be completed next year. The results should provide further factual information on how rapidly the disease is increasing and the possible risk factors in the community.

Diabetes causes considerable suffering and ill health to the affected individual and his family, and undue strain on our health services. In view of all this, the Government has decided to take a major step to control diabetes in the country by establishing a National Diabetes Centre with wide objectives and functions. These will include the education of health care professionals, so that diabetics can be provided with better service. The Centre will help diabetics to take better care of their condition and hence live a more healthy life and avoid many of the complications of the disease. The public too will be assisted to take preventive measures in order to avoid or minimise the incidence of the disease in the community.

As a National Resource Centre, it will provide expert advisory service on all aspects of the disease and co-ordinate and conduct diabetes-related research. In this way, more would be learned about the disease and appropriate preventive measures can be instituted.

The Government is grateful for the assistance of the World Health Organisation for teaching materials and finance for staff training in this important field. We also acknowledge the continued help, guidance and support for the Centre and the training of local staff provided by Professor John Turtle of the Diabetes Centre in Sydney.

Because of the wide incidence of the disease, this National Diabetes Centre will need the support of all the citizens of Fiji in order that its work is carried out effectively. The Minister of Health and Social Welfare has appointed a National Committee to raise funds for the Centre and assist in its administration.

The fund will be used to help the Centre fulfill its role in our fight against diabetes. I am confident that our people will give generously to this national cause and help the Government combat this major health problem.

I now have much pleasure in opening the National Diabetes Centre and in launching the appeal for funds to support its work.

C. ACTIVITIES

The major activity of the centre has been the critical assessment of the current method of delivery of diabetes care, data collection and developing an approach to diabetes mellitus that is realistic, practical and appropriate for local conditions and ensuring that the benefits of such an approach reach diabetics in all parts of the country.

"Technologies and systems cannot be adopted from richer countries but must be adapted to local conditions: indeed emerging countries should be encouraged to work out their own solutions and become self-reliant"
(Mahler, H. : WHO and the New Economic Order, WHO Chronicle, 30: 215, 1976).

1. Education of Health Care Professionals

The education of the health care professionals included a series of lectures during the year at the CWM Hospital Post-graduate sessions, a lecture to the Private Practitioners in November and the first National Training Course in Diabetes.

National Training Course

The first National Training Course on Diabetes for Health Care Professionals was conducted at the National Diabetes Centre from 19th-23rd November. The course was officially opened by Dr. M.V. Mataitoga, the Director of Preventive Medicine, who in welcoming the participants said —

"I am happy to be with you today to officially open the first National Training Course on diabetes. This centre was recently opened by the Right Honourable the Prime Minister and I am pleased to see that the work of the Centre is already progressing well despite numerous restraints.

Diabetes has become a major health problem in Fiji during recent years and the Ministry of Health and Social Welfare is taking positive steps to control and combat the disease. The first of these steps being the establishment of this National Diabetes Centre and training of staff in Australia who are now operating the Centre.

The next activity is the training of field staff who are directly involved in the care of diabetic patients. Therefore you are the first field staff to undergo their short training course. I am confident that during the week you are going to learn a great deal about diabetes from your tutors. Therefore I do not wish to take too much of your time this morning as I am sure that you are all eager to commence with the task before you.

I wish to take this opportunity in thanking the Director of the Centre and also Director of the training course Dr. Parshu Ram and his staff most sincerely in planning and organising this course. Without their hard work and perseverance, this course would not be a reality.

I also wish to record the profound appreciation of the Ministry to Professor John Turtle and the World Health Organisation for their enormous contribution towards the establishment of National Diabetes Centre and the training of its staff. I hope that their support and assistance towards the centre would continue into the future until diabetes in Fiji is under control.

Finally, I wish the participants a successful course and of course a pleasant time in the capital city".

The participants of the first training course were :—

1. Mere Diligolevu — Dietitian, Lautoka Hospital
2. S/N Amelia Baiculacula — Lautoka Hospital
3. Prem Sharma — Dietitian, Labasa Hospital
4. Sr. Rita Nauku — Labasa Hospital

5. S/N Arieta Likuivalu — Nausori Health Centre
6. S/N Asinati Dauwiri — Ba Health Centre
7. S/N Miliana Vatanitawake — Sigatoka Hospital
8. S/N Vosita Tuitoga — Navua Health Centre

9. S/N Bimla Hussein — Nadi Hospital
10. S/N S. Sahid — CWM Hospital, Suva
11. Mrs. J.N. Singh — Ministry of Health & Social Welfare, Suva.

The course content covered various aspects of diabetes with particular emphasis on practical and public health aspects of diabetes.

DAY 1

8.00 - 9.00am	Registration Introduction and Pre Course Test	Dr M. Cornelius Miss Sekola (Receptionist)
9.00 - 10.00am	HISTORY & EPIDEMIOLOGY OF DIABETES	Dr P. Ram
10.00 - 10.30am	Break	
10.30 - 11.30am	DETECTION & DIAGNOSIS OF DIABETES	Dr. P. Ram
11.30 - 12.30pm	Slide/Video	S/N Gafoor
12.30 - 1.00pm	Discussion	Dr M. Cornelius
1.00 - 2.00pm	Lunch	
2.00 - 3.00pm	Ward Visits to WSW, WMW	S/N Sevutia
3.00 - 4.00pm	INTRODUCTION TO DIET AND NORMAL PHYSIOLOGY OF FOOD DIGESTION	Mrs Griffen (Dietitian)
4.00 - 4.30pm	Discussion Homework	

DAY 2

8.00 - 9.00am	COMPLICATIONS OF DIABETES DIABETIC KETOACIDOSIS RETINOPATHY	Dr P. Ram Dr M. Cornelius Dr C.B. Rathod
9.00 - 10.00am	MANAGEMENT OF DIABETES i) Diabetic Diet	Mrs Griffen
10.00 - 10.30am	Break	
10.30 - 11.00am	ii) Exercise	S/N Gafoor
11.00 - 12.00pm	iii) Use of Tablets in Diabetes	Dr. M. Cornelius
12.00 - 1.00pm	Discussion on Homework Patient Observation & Education	S/N Sevutia
1.00 - 2.00pm	Lunch	
2.00 - 3.00pm	INSULIN	Dr. P. Ram
3.00 - 4.00pm	FOOT CARE	Mr S. Nandam
4.00 - 4.30pm	Discussion/Homework	Mrs Griffen

DAY 3

8.00 - 9.00am	Insulin Injections	S/N Sevutia
9.00 - 10.00am	Demonstration/Video	S/N Gafoor
10.00 - 10.30am	Break	
10.30 - 11.30am	DIABETES IN CHILDREN	Dr. J. Mudaliar
11.30 - 12.00pm	Discussion on Homework	Mrs Griffen
12.00 - 1.00pm	Sterilization of Syringes and Needles	S/N Sevutia
1.00 - 2.00pm	Lunch	
2.00 - 3.00pm	URINE TESTING	S/N Gafoor
3.00 - 3.30pm	Discussion/Demonstration	S/N Sevutia
3.30 - 4.30pm	BLOOD TESTING	Dr. M. Cornelius

DAY 4

8.00 - 9.00am	PREVENTION OF DIABETES	Dr. P. Ram
9.00 - 10.00am	Patient Observation and Education	S/Ns Gafoor/Sevutia

10.00 - 10.30am	Break	
10.30 - 1.00pm	Patient Observation & Education	S/Ns Gafoor/Sevutia Mrs Griffen
2.00 - 3.00pm	Hints on Diabetes Education	Dr M. Cornelius
3.00 - 4.00pm	Problem Solving Groups	S/N Sevutia
4.00 - 4.30pm	Discussion on Problems	S/N Gafoor
DAY 5		
8.00 - 9.00am	DIABETES IN PREGNANCY	Dr. R. Gyaneshwar
9.00 - 10.00am	SOCIAL ASPECTS OF DIABETES	Mrs Griffen
10.00 - 10.30am	Break	
10.30 - 11.30am	Post Course Test	S/N Sevutia
11.30 - 12.30am	Problem Solving Groups	S/N Gafoor
12.30 - 1.00pm	Discussion on Problems	Dr M. Cornelius
1.00 - 2.00pm	Lunch	
2.00 - 3.00pm	Questionnaire Answers General Discussion	S/N Sevutia
3.00 - 4.00pm	Reports and Meeting	

2. Patient Education and Educational Materials

Patient education was started in November 1984. A total of 300 patients and their relatives were seen, of these 10 patients were referred by private medical practitioners. In addition 55 ward cases at the CWM Hospital were seen.

Record cards were made for 45 patients, especially those with uncontrolled diabetes for programmed diabetes education.

Public education included radio interviews and a lecture to a Women's Club in Nausori.

Considerable time was spent on producing diabetes educational materials. Six pamphlets were produced in English and translated both into Fijian and Hindustani, for distribution to all hospitals, health centres, nursing stations and to all medical practitioners in the country.

The pamphlets were :—

1. Common questions in diabetes
2. How do I know I have diabetes
3. Learning to live with diabetes
4. Lead a normal life with diabetes
5. A diabetic diet is a healthy diet
6. Foot care in diabetes

Beginning was made on a 40 page booklet on diabetes education, on 10 page pamphlet on diet in diabetes and a pamphlet on insulin. It is expected that these would be completed in 1985 as well as a number of posters on diabetes. Ultimately it is hoped to produce a booklet on Diabetes Care for the Health Care Professionals and a number of video tapes on diabetes in local languages.

3. **Resource Facilities** — are gradually being developed.

4. **Research Activities** — This area needs to be developed with research activities aimed at basic clinical research which will ultimately lead to an improvement in patient management and preventive measures.

“The problem of health care in developing countries are not those of lack of knowledge requiring more research, but those of non-application and implementation of what we know already because of lack of money, resources, leadership and motivation” (Fry J; A *New Approach to Medicine*. MTP Press Limited, Lancaster 1978).

THE LONGITUDINAL STUDY of urban cohort of the 1980 National Diabetes and Cardiovascular Diseases Survey, which had been in progress since 1981 under the supervision of consultant physician, Medical Unit, has been incorporated in the research activities of the National Diabetes Centre. Staff Nurse Sereima Cabealawa is engaged full time on this study. This study is carried out in collaboration and largely funded by Professor Paul Zimmet, Director, WHO Collaborating Centre on the Epidemiology of Diabetes, Melbourne, Australia. This study should provide factual information on:—

- the incidence of diabetes
- time trend — whether the disease rate is static, increasing or decreasing
- and the burden of complications on health services.

The Director in collaboration with the Senior Clinical Tutor in Obstetrics and Gynaecology Dr. Rajat Gyneshwar had applied to the New Zealand Medical Research Council for a grant to study the PREVALENCE OF GESTATIONAL DIABETES IN SUVA. The research grant was successful and it is expected that the study will start in mid-1985 and will take at least 24 months.

D. FUNDING AND FUTURE ACTIVITIES

1. Funding

The centre is largely funded by the Ministry of Health in terms of staff salaries, office stationery and maintenance costs. There is an urgent need for considerable funding initially for the production of diabetes educational materials, expenses for national training courses and the development of resource facilities.

The National Diabetes Fund Raising Committee is being formed under the chairmanship of Mr. Mahendra Motibhai.

2. Future Activities

The activities of the National Diabetes Centre for the next three years, 1985-1987 would include, in order of priority, the development and continued assessment of diabetes education, preparation of education materials, increase in the number of

training courses, development of resources facilities and research activities.

EXPECTED ACTIVITIES IN 1985

Diabetes Education — the development and assessment of educational programme and the preparation of educational materials. The latter would include :—

- a publication of 40 page booklet on diabetes education
- preparation of pamphlets on Diet and Diabetes (10 pages)
Insulin (6 pages)
Hypoglycaemia (4 pages)
Prevention of diabetes (4 pages)
- preparation of posters on diabetes (at least 6)

All the above need to be produced in three languages and in adequate numbers (booklet and pamphlets 10,000 each and posters 1,000 each).

National Training Course — It is anticipated that six, five day training courses will be conducted; three for the medical officers and three for other health care professionals including the nurses and dietitians. The course numbers would be limited to 10. The approximate cost of each course would be \$1,500.00. This would include travel costs and per diem allowance for 2-3 participants for each of the four Divisions, secretarial assistance, stationery and preparation costs.

Resource Facilities — to be developed.

Research Activities — No additional major research activity is envisaged other than the Incidence Study already in progress and the commencement of the Prevalence Study on Gestational Diabetes.

EXPECTED ACTIVITIES IN 1986

Diabetes Education: Further development and continued assessment of the diabetes educational programme and educational materials including posters (two) on prevention of diabetes and the beginning of a booklet on Diabetes Care for Health Care Professionals.

National Training Course — Increase in the number of training course to eight; four for the medical officers and four for other health care professionals. It would be possible to include a small number of participants from other countries in the South Pacific.

Resource Facilities — developed further.

Research Activities — continuation of above research activities and a study on the Genetics of Diabetes (under consideration at present).

EXPECTED ACTIVITIES IN 1987

Diabetes Education — continued development and assessment of the educational programme and completion of the booklet on Diabetes Care for Health Care Professionals.

National Training Course — to be increased to ten per year, with inclusion of participants from other South Pacific countries.

Resource Facilities — continued development.

Research Activities — considerable expansion of research activities.

E. ACKNOWLEDGEMENT

We are most grateful for the assistance and the support of the following:—

1. The World Health Organization for assistance in Fiji's participation in several seminars and conferences on diabetes over the years, the 1980 National Diabetes and Cardiovascular Diseases Survey, for providing consultant in diabetes, for financial assistance in training the staff of the centre in 1984, for a donation of \$10,000 worth of teaching aids including a slide projector, an overhead projector, a photocopying machine, a video set, transparencies, stationery and office equipments as well as medical equipments, agreeing to supply books and journals on diabetes (estimated cost \$2500.00) for the library and for the continued support of the National Diabetes Centre.
2. Professor John Turtle, Professor of Medicine, University of Sydney and the team from the Diabetes Centre, Royal Prince Alfred Hospital Sydney for the seminars they conducted in diabetes (both at the CWM Hospital and Lautoka Hospital during Diabetes Awareness week in 1983) for a diabetes survey in 1983, for advice and planning of the Centre (this necessitating a further visit by Professor Turtle in March 1984) for training of staff of the Centre, for providing educational material on diabetes and for their continued support.
3. Professor Paul Zimmet, Head of WHO Collaborating Center for Epidemiology of Diabetes, Melbourne for the 1980 National Diabetes and Cardiovascular Diseases Survey, for regular assistance and advice regarding control of diabetes, for the provision of educational material on diabetes and for the current study on the incidence of diabetes in Fiji.
4. Dr. Ken Lal, the Medical Superintendent, Mr. S. Goundar, the Hospital Secretary, the Matron and the staff of the CWM Hospital for assistance in the planning and continued support and to the consultant staff and in particular Dr. C.B. Rathod, Consultant Ophthalmologist, Dr. S. Nandam, Consultant Surgeon, Dr. J. Mudaliar, Consultant Paediatrician and Dr. R. Gyaneshwar, Senior lecturer in Obstetrics and Gynaecology for support and participation in the training course and to Dr. F. Beg for numerous discussions concerning the problem of diabetes, and the planning and role of the National Diabetes Centre.
5. Pundit K.P. Sharma leading Hindi scholar and Dr. K.D. Sharma for translating the pamphlets in Hindustani and to Dr. S. Seruvatu, Dr. J. Nasome, Dr. J. Nasarua and Mr. G.B. Toganivalu for translating the pamphlets in Fijian.
6. The Lions Clubs in Fiji. In particular the Ba Lions Club for organising with the assistance of Motibhai and Company the diabetes seminars and diabetes awareness week in 1983, the Suva North Lions for a donation of a glucometer and the Lions Club Suva for obtaining and donating four video tapes on diabetes and for providing insurance cover for the centre equipments.
7. Mr Tomasi Vuetilovoni, the Manager and the Board of the Colonial Mutual Life Assurance Company for financial assistance for the director's attendance at the Third International Congress on Diabetes in the Tropics and the Developing Countries in Bangkok in December 1984.
8. For donation of books, monographs and diabetes educational material from :—

Prof. H. Berger, West Germany	Dr. J.D. Baum, England
Prof. J.W. Farquhar, Scotland	Mr Emmanuel Sharan, Suva
Dr. Irwin Faris, Australia	Prof. S.C. Bunnag, Thailand
Dr. M. Natrass, England	Prof. S.D. Bhandarkar, India
Dr. R.B. Tattersall, England	Dr. N.G. Talwalker, India
Miss Hull & Dr. J.I. Mann, England	Prof. J.M.B. Bloodworth, USA
Dr. Dorothy Ghodes, USA	Prof. S.S. Ajoankar, India
Prof. M.M.S. Ahuja, India	Prof. D.W. Beaven, New Zealand
Prof. S. Baba, Japan	Dr. R.B.W. Smith, New Zealand
Prof. Daniel Porte, USA	Dr. D. Scott, New Zealand
Dr. Delcher, USA	Eli Lilly & Co., New Zealand
Prof. M. Viswanathan, India	American Diabetes Association

Dr. D.D. Etzwiler, USA
Prof. J. Santiago, USA
Dr. M.A. Sperling, USA

British Diabetes Association
Australian Diabetes Association
Diabetes Association of India

educators and Louisa Griffen, the dietitian for their enthusiasm, initiative, and dedication and more importantly for undertaking the pioneering and difficult task of developing one of the first diabetes centres to come into being in the developing countries of the world, and to Sereima Cabealawa for her superb work in the Longitudinal Study on Diabetes.

We are also very grateful for the assistance we have received from Radio Fiji, The Fiji Sun, The Fiji Times, Mr. B. Mishra, Councillor Noor Dean, Novo Laboratories, Miles Laboratories, The Fiji School of Medicine, Fiji Food and Nutrition Committee, Fiji Medical Association, Fiji Dietitian and Nutritionist Association, Boehringer Limited, Mr. Abdul Jalal, Mr Mohammed Hassan, Mr Mahendra Motibhai, Mr. Hari Punja and Mr. Mohan Musadilal.

Finally, I would like to thank Dr Margaret Cornelius, the Coordinator of the Centre, Lilly Gafoor and Setaita Sevutia, the nurse.

Dr. Parshu Ram M.B., M.R.C.P., F.R.A.C.P.
Director, National Diabetes Centre
C.W.M. Hospital, Suva
Ministry of Health and Social Welfare

DIAGNOSTIC CYTOPATHOLOGY FOR PATHOLOGISTS 1986 POSTGRADUATE INSTITUTE

The John Hopkins University School of Medicine offer the **Twenty-seventh Postgraduate Institute for Pathologists in Clinical Cytopathology**. This is designed as a Subspecialty Residency in **Clinical Cytopathology**, then highly compressed for the busy Pathologist into **152 AMA Category I credit hours** in two courses, both of which must be taken:

- February to April 1986, Home Study Course A is provided each registrant for personal reading and microscopic study in their own laboratory; and
- April 28 to May 9, 1986, In-Residence Course B is an extremely concentrated lecture series, intensive laboratory study, and vital clinical experience at the Johns Hopkins Medical Institutions, Baltimore, Maryland, U.S.A.

This Institute, Course A and Course B, is designed solely for pathologists who are Certified (or qualified for certification) by the American Board of Pathology or its international equivalent. An intensive refresher in all aspects of **Clinical Cytopathology** will be provided with time devoted to newer developments and techniques, special problems, and recent applications including immunodiagnosis and needle aspiration. Topics are covered in lectures, explored in small informal conferences, and discussed over the microscope with the Faculty. Abundant self-instructional material is available to augment at individual pace.

The loan set of slides with texts (Course A) will be sent to each participant within the United States and Canada for home-study during February through April before Course B in Baltimore, April 28-May 9. Participants outside of the United States and Canada must make prior special arrangements to study Course A in adequate time before Course B.

Application and completed pre-registration is advised at the earliest date possible, to assure an opening. Completed pre-registration, however, must be accomplished before March 28, 1986, unless by **special arrangement**.

For details, write: John K. Frost, M.D., 604 Pathology Building, The Johns Hopkins Hospital, Baltimore, Maryland 21205, U.S.A.

The entire Course is given in **English**.