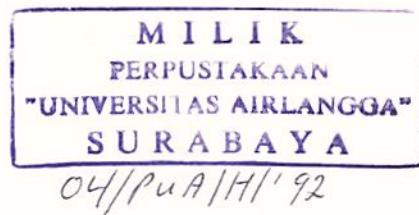


DIABETES, SOCIAL SERVICES

KKV  
K.K.  
362.196 462  
Dev



# DEVELOPMENT PLAN

## DIABETES CENTRE

Airlangga University School of Medicine –  
Dr. Sutomo Hospital Surabaya

Editors

Prof. Askandar Tjokroprawiro, MD, PhD  
Prof. Rachmat Santoso, MD  
Prof. Seizo Iwai, MD  
Prof. Shigeaki Baba, MD

Co Editors

Prof. F.X. Budhianto Suhadi, MD, PhD  
Hendromartono, MD  
Ari Sutjahjo, MD  
Benjamin P. Margono, MD, PhD  
Hans Tandra, MD  
All Members of Diabetes Centre

Surabaya, July 1, 1988

Laporan Penelitian

Development Plan Diabetes Centre

Askandar Tjokroprawiro

DEVELOPMENT PLAN

Diabetes Centre

Airlangga University School of Medicine - Dr.Sutomo Hospital Surabaya

This project is an outgrowth of the cooperation between the Directory General of the Higher Education (DGHE) and the Japan Society for the Promotion of Science (JSPS), implemented by Airlangga University School of Medicine - Dr.Sutomo Hospital Surabaya, in collaboration with other institutions in Indonesia as well as in Japan.

BOARD OF MANAGEMENT

Indonesia Side

Patrons : 1.Dean, Airlangga University School of Medicine Surabaya  
(Prof. I G.N.Ranuh, MD)  
2.Director, Dr.Sutomo Hospital Surabaya  
(Karjadi Wirjoatmodjo, MD)

Coordinator : Prof. Rachmat Santoso, MD

Project Leader and Head of DC :

Prof. Askandar Tjokroprawiro, MD, PhD

Secretary : Ari Sutjahjo, MD

Staff Members: Prof.F.X.Budhianto Suhadi, MD, PhD

E.P.Soedibjo MD, MPH

S.P.Edijanto, MD

M.S.Kardjati, MD, PhD

B.P.Margono, MD,PhD

Hendromartono, MD

Erni Untung Sudjadi, Pharm.

第二十章 民主黨派的統一戰線政策和民盟的成立

10. *Leucosia* *leucostoma* *leucostoma* *leucostoma* *leucostoma* *leucostoma*

10. The following table shows the number of hours worked by each employee in a company.

10. The following table gives the number of hours worked by each of the 100 workers.

10. The following table shows the number of hours worked by each employee.

1996-1997 学年第一学期期中考试

（五）在本屆大會上，我們將繼續發揮黨的優點，進一步加強黨的組織性、原則性和紀律性。

Figure 1. The effect of the number of clusters on the classification accuracy.

19. *Chlorophytum* (L.) Willd.

10. The following table shows the number of hours worked by each employee.

• 100 •

Journal of Aging Studies, Vol. 23, No. 3, June 2009, pp. 276–278

Castro, J. C., & Gómez-González, M. A. (2010). *El efecto de la estrategia de enseñanza en el desarrollo de la competencia de resolución de problemas matemáticos*. *Revista Iberoamericana de Investigación en Educación Matemática*, 25(1), 1-20.

Journal of International Accounting Auditing and Taxation, Vol. 17, No. 3, 2008

For more information about the National Institute of Child Health and Human Development, please go to the NICHD Web site at [www.nichd.nih.gov](http://www.nichd.nih.gov).

Japan Side

Coordinator : Director of IOMR

(Prof. Seizo Iwai, MD, DMS) (Kobe)

Project Leader :

Prof. Shigeaki Baba, MD (Kobe)

Core Members : Prof. T.Kaneko, MD (Yamaguchi)

Prof. Y.Hirata, MD (Tokyo)

Prof. N.Sakamoto, MD (Nagoya)

Members : Prof. N.Yanaihara, MD (Shizouku)

Prof. M.Yamaikido, MD (Hiroshima)

G.Okuno, MD (Itami)

K.Doi, MD (Kobe)

H.Taniguchi, MD, PhD (Kobe)

M.Otsuki, MD (Kobe)

K.Kaku, MD (Yamaguchi)

#### INTRODUCTION

The Diabetes Clinic of the Departement of Medicine, Airlangga University School of Medicine - Dr.Sutomo Hospital, is located in the municipality of Surabaya, which has a population of approximately 3 millions; the former is the top referral clinic for diabetic patients in East Java, the largest province in Indonesia, which has a population of approximetely 30 millions (19% of the entire populaton of Indonesia), and whose area covers about 48.000 km<sup>2</sup>, with a density of 609 inhabitants per km<sup>2</sup>.

There are actually 13 State School of Medicine in Indonesia. In 10 of them Diabetes Clinics have been established namely in Sumatera (Medan, Padang, Palembang), Java (Jakarta, Bandung, Semarang, Yogyakarta, and Surabaya), Sulawesi (Ujung Pandang, and Manado).

penyakit diabetes melitus di Indonesia. Penyakit diabetes melitus merupakan penyakit yang sering terjadi pada masyarakat Indonesia. Penyakit ini dapat menyebabkan banyak masalah kesehatan dan bahkan dapat menyebabkan kematian. Untuk mengatasi penyakit diabetes melitus, diperlukan pengetahuan dan teknologi yang tepat. Dalam penelitian ini, kita akan mencoba untuk menemukan teknologi yang efektif dalam mengatasi penyakit diabetes melitus.

Penelitian ini dilakukan dengan metode eksperimen. Kita akan membandingkan teknologi yang ada dengan teknologi baru yang dikembangkan oleh tim peneliti. Teknologi baru ini dibuat dengan menggunakan teknologi canggih seperti AI dan machine learning. Kita akan melihat bagaimana teknologi ini dapat membantu dalam mengatasi penyakit diabetes melitus. Selain itu, kita juga akan melihat bagaimana teknologi ini dapat membantu dalam memberikan pelayanan kesehatan yang lebih baik bagi masyarakat.

Hasil penelitian ini akan memberikan kontribusi yang signifikan bagi pengembangan teknologi dalam mengatasi penyakit diabetes melitus. Dengan adanya teknologi baru ini, kita dapat memberikan pelayanan kesehatan yang lebih baik bagi masyarakat. Selain itu, teknologi ini juga dapat membantu dalam mengatasi masalah kesehatan lainnya yang terkait dengan penyakit diabetes melitus.

Penelitian ini juga akan memberikan kontribusi bagi pengembangan teknologi dalam mengatasi penyakit diabetes melitus di Indonesia. Penyakit diabetes melitus merupakan penyakit yang sering terjadi pada masyarakat Indonesia. Penyakit ini dapat menyebabkan banyak masalah kesehatan dan bahkan dapat menyebabkan kematian. Untuk mengatasi penyakit diabetes melitus, diperlukan pengetahuan dan teknologi yang tepat. Dalam penelitian ini, kita akan mencoba untuk menemukan teknologi yang efektif dalam mengatasi penyakit diabetes melitus.

Penelitian ini dilakukan dengan metode eksperimen. Kita akan membandingkan teknologi yang ada dengan teknologi baru yang dikembangkan oleh tim peneliti. Teknologi baru ini dibuat dengan menggunakan teknologi canggih seperti AI dan machine learning. Kita akan melihat bagaimana teknologi ini dapat membantu dalam mengatasi penyakit diabetes melitus. Selain itu, kita juga akan melihat bagaimana teknologi ini dapat membantu dalam memberikan pelayanan kesehatan yang lebih baik bagi masyarakat.

Hasil penelitian ini akan memberikan kontribusi yang signifikan bagi pengembangan teknologi dalam mengatasi penyakit diabetes melitus. Dengan adanya teknologi baru ini, kita dapat memberikan pelayanan kesehatan yang lebih baik bagi masyarakat. Selain itu, teknologi ini juga dapat membantu dalam mengatasi masalah kesehatan lainnya yang terkait dengan penyakit diabetes melitus.

While in Surakarta (Mid Java), Malang (East Java), and Denpasar (Bali), the Diabetes Clinics are being established.

The majority of the Indonesian population deal with agriculture in rural areas. Their staple food is rice. Carbohydrate consumption makes up roughly 70% of the total calories which is on average 1800 calori per day.

Based on previos surveys there will be 27.105 DM in the municipality of Surabaya, and 222.430 DM in East Java Province.

Our present activities has covered two main fields of DM :

**1. Clinical Activities revealing : Clinical Data**

    1. Basic / Fundamental Data

    2. Hospital Data

**2. Epidemiological Activities revealing : Epidemiological Data (Community Data)**

    1. Municipality of Surabaya (urban areas) :

        a. 6 - 20 yrs (18.118 samples)

        b. > 20 yrs (13.423 samples)

    2. Rural areas of East Java Province.

**1.1. Basic / Fundamental Data**

Various types of diabetes diets mentioned below had been scientifical-  
ly investigated.

- The B diets (68 % cal.Cbh., 20% cal.Fat, 12% cal.Protein) and its variations : the B1, B2, B3, and Be diets
- The B1 diets : 60% cal.Cbh., 20% cal.Fat, 20% cal.protein
- The B2 diets : similar with B diets but enriched with Essential Ami-  
no Acids
- The B3 diets : consist of 40 gram protein per day, and the remainder is divided between Cbh : Fat with a 4 : 1 ratio
- The Be diets : "the free diet" for diabetic nephropathy type Be =

penelitian ini dilakukan dengan tujuan untuk mengetahui faktor-faktor yang mempengaruhi terjadinya diabetes melitus pada pasien di Rumah Sakit Diabetes Cirebon. Penelitian ini merupakan penelitian kuantitatif dengan pendekatan korelasional. Penelitian ini dilakukan pada pasien diabetes melitus yang dirujuk ke Rumah Sakit Diabetes Cirebon. Sampel dalam penelitian ini sebanyak 100 responden. Penelitian ini dilakukan selama 3 bulan. Penelitian ini dilakukan dengan teknik wawancara mendalam. Data yang diperoleh dalam penelitian ini adalah data deskriptif dan data korelasional. Data deskriptif digunakan untuk mengetahui karakteristik responden. Data korelasional digunakan untuk mengetahui hubungan antara variabel independen dan variabel dependen. Analisis data yang digunakan dalam penelitian ini adalah analisis korelasi dan regresi. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor demografis dengan terjadinya diabetes melitus. Faktor-faktor demografis yang berpengaruh terhadap terjadinya diabetes melitus adalah usia, jenis kelamin, dan status perkawinan. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor kesehatan dengan terjadinya diabetes melitus. Faktor-faktor kesehatan yang berpengaruh terhadap terjadinya diabetes melitus adalah riwayat penyakit, pola makan, dan gaya hidup. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor sosial dengan terjadinya diabetes melitus. Faktor-faktor sosial yang berpengaruh terhadap terjadinya diabetes melitus adalah pendidikan, pekerjaan, dan ekonomi. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor psikologis dengan terjadinya diabetes melitus. Faktor-faktor psikologis yang berpengaruh terhadap terjadinya diabetes melitus adalah stres, depresi, dan rasa takut. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor lingkungan dengan terjadinya diabetes melitus. Faktor-faktor lingkungan yang berpengaruh terhadap terjadinya diabetes melitus adalah lingkungan kerja, lingkungan rumah, dan lingkungan masyarakat. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor genetik dengan terjadinya diabetes melitus. Faktor-faktor genetik yang berpengaruh terhadap terjadinya diabetes melitus adalah riwayat penyakit keluarga. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara faktor-faktor diet dengan terjadinya diabetes melitus. Faktor-faktor diet yang berpengaruh terhadap terjadinya diabetes melitus adalah pola makan yang tidak seimbang, konsumsi makanan yang tinggi gula, dan konsumsi makanan yang tinggi lemak.

Stadium IV = Terminal Stage

- The metabolic effects of green beans and onions
- The Diabetic Diet for Moslem in fasting month
- etc.



2.2. Hospital Data (Dr.Sutomo Hospital Surabaya with 1.600 bed capacities, average overall inpatients 50.000/year)

A. Registered Diabetic outpatients in Dr.Sutomo Hospital :

1964 — 133 diabetic patients  
1970 — 1081 diabetic patients  
1975 — 2914 diabetic patients  
1980 — 5654 diabetic patients  
1984 — 8322 diabetic patients  
1986 — 10278 diabetic patients

B. Morbidity : 0.16 - 0.72% (average 0.30%)

Mortality : 0.94 - 1.14% (average 1.05%)

C. Types of treatment : 70.3% OAD treated, 15% insulin treated, 14.7% diet treated.

Chronic complications : decreased sexual ability 50.9%, symptomatic neuropathy 30.6%, diabetic retinopathy 29.6%, cataract 16.3%, pulmonary tuberculosis 12.8%, coronary heart disease 10%, and diabetic cellulitis gangren 2.5%.

D. From 1980 - 1984 (with strict criteria for admission) : 2688 diabetics were admitted with death rate 19.6% (4.4% sepsis, 3.6% diabetic coma, 1.9% CVA, 1.5% myocardial infarction, and 1.4% chronic renal failure).

E. Classification of Diabetic Nephopathy (DN) based on Surabaya Criteria (DM with two times albuminuria in two-week-period, without urinary tract infection)

DN type B = Stadium I

DN type B2 = Stadium II

DN type B3 = Stadium III

DN type Be = Stadium IV = Terminal Stage.

Survival rates : type B more than 5 yrs, type B2 more than 2 yrs, type B3 between 4-18 months, type Be between 2-5 months.

## 2.1. Urban Areas

1. The prevalence of DM in survey on the 6-20 year age group which was conducted on 18.118 school children of Surabaya Municipality (3 million population) was : 0,07% (6-10 years), 0.20% (11-15 years), and 0.6% (16-20 years).

The overall prevalence was 0.26%.

2. The overall prevalence of DM in the age group of more than 20 years was 1.43%, and it increased with age : 0.23% (20-29 years), 0.72% (30-39 years), 2.68% (40-49 years), 4.48% (50-59 years), and 5.33% (60 years and over).

3. Based on the data, a "Diabetes Map" of Surabaya Municipality was drawn, and there were three high diabetic prevalence districts (Genteng 2.93%; Tandes 2.29%; and Tambaksari 2.04%).

4. The average prevalence of DM in the age group more than 40 years was 4.16%

## 2.2. Rural Areas

There are 4 nutritional areas in East Java; the results from 9 surveys showed the prevalence of DM in Surplus Area : 2.47% (sample size 3645), Marginal Area 1.05% (sample size 4663), Critical Marginal Area 1.41% (sample size 4467), and Critical Area 1.11% (sample size 3860); the average prevalence of DM in rural areas showed a prevalence of

Development Plan Diabetes Centre  
Askandar Tjokroprawiro

1. **INTRODUCTION**

The Diabetes Center is a center that provides services related to diabetes prevention, diagnosis, treatment, and follow-up. The center aims to provide quality services to patients with diabetes and their families. The center will be located in the Faculty of Medicine, Universitas Airlangga, Surabaya.

2. **GOALS**

The main goal of the Diabetes Center is to provide high-quality services to patients with diabetes and their families. The center will also aim to:

- To prevent the onset of diabetes through education and screening programs.
- To diagnose diabetes early through screening programs.
- To treat diabetes effectively through medical and non-medical interventions.
- To follow up on patients with diabetes to ensure they are receiving appropriate care.

3. **STRUCTURE**

The Diabetes Center will be organized into several units:

- Administrative Unit: Responsible for managing the center's operations, including personnel, budget, and facilities.
- Medical Unit: Responsible for providing medical services to patients with diabetes, including diagnosis, treatment, and follow-up.
- Nursing Unit: Responsible for providing nursing care to patients with diabetes.
- Pharmacy Unit: Responsible for providing pharmaceutical services to patients with diabetes.
- Education and Research Unit: Responsible for providing education and research related to diabetes prevention and treatment.

4. **OPERATIONS**

The Diabetes Center will operate from Monday to Friday, from 8:00 AM to 5:00 PM. The center will be open to the public and will accept new patients. The center will also offer telemedicine services for patients who cannot physically come to the center.

5. **BUDGET**

The estimated budget for the Diabetes Center is as follows:

Category	Budget (Rp)
Personnel	100,000,000
Facilities	50,000,000
Equipment	30,000,000
Medicines	20,000,000
Research	10,000,000
Other	10,000,000
Total	200,000,000

6. **CONCLUSION**

The Diabetes Center is a valuable addition to the Faculty of Medicine, Universitas Airlangga. It will provide high-quality services to patients with diabetes and their families. The center will also contribute to the prevention and treatment of diabetes in the community.

1.47% (cumulative sample size 16635). Broad outline Diabetes Map of East Java enclosed.

#### COOPERATING DISCIPLINES

##### **Department of Internal Medicine**

1. Prof. Askandar Tjokroprawiro, MD, PhD (internist - endocrinologist)
2. Hendormartono, MD (internist)
3. Ari Sutjahjo, MD (internist)
4. W. Sumarto, MD (internist - hepatologist)
5. Moh. Yogi Antoro, MD (internist - nephrologist)
6. G.H. Santoso, MD (internist - rheumatologist)
7. B.P. Margono, MD, PhD (pulmonologist)
8. B.S. Pikir, MD (internist - cardiologist)

##### **Department of Clinical Pathology**

9. Prof. F.X. Budhianto, MD, PhD (clinical pathologist)
10. S.P. Edijanto, MD (clinical pathologist)
11. F.H. Sudewo, MD, MS (clinical pathologist)
12. S. Satjadibrata, MD, MS (clinical pathologist)
13. F.M. Judajana, MD (clinical pathologist)
14. Djoko Marsudi, MD, MS (clinical pathologist)

##### **Department of Public Health**

15. E.P. Soedibjo, MD, MPH
16. M.S. Kardjati, MD, PhD
17. Sunarjo, MD
18. Bambang Wirjatmadi, MD, MSc

**Department of Pathology**

19. Prof.Rachmat Santoso, MD (pathologist)
20. Soegeng Soekamto, MD, PhD (pathologist)
21. Faroek Hoesin, MD, (pathologist)

**Department of Obstetrics and Gynecology**

22. Agus Abadi, MD (obstetrician & gynecologist)

**Department of Dermatology**

23. Sunarko, MD (dermatologist)
24. Urip Suherman, MD (dermatologist)

**Department of Ear, Nose, and Throat**

25. M.S.Wiyadi, MD (otorhinolaryngologist)

**Department of Ophthalmology**

26. Gatot Suhendro, MD (ophthalmologist)
27. Moestidjab, MD (ophthalmologist)

**Department of Neurology**

28. Prof.Benjamin Chandra, MD,PhD (neurologist)
29. Troeboes Poerwadi, MD (neurologist)

**Department of Psychiatry**

30. H.M.Margono, MD (psychiatrist)
31. L.B.Suharjono, MD (psychiatrist)

**Department of Medical Rehabilitation**

32. Bayu Santoso, MD (physiatrist)

33. Thamrinsyam, MD (physiatrist)

**Department of Child Health**

34. Netty Pratono, MD (pediatrician)

35. Ratna Indrawati, MD (pediatrician)

**Department of Oral Medicine School of Dentistry**

36. Moh.Yusri, DDS,MS

**Department of Surgery**

37. Sunarjo, MD (urologist)

38. Dr.Med.Puruhitto, MD (heart and vascular surgeon)

39. Dr.Med.P.Tahalele, MD (heart and vascular surgeon)

40. Djoko Roeshadi, MD,FICS (orthopedic surgeon)

**Department of Anesthesiology**

41. Karjadi Wirjoatmodjo, MD (anesthesiologist)

**Department of Biochemistry**

42. Prof.S.U.Purnomo, MD (biochemist)

43. Juniadi, MD (biochemist)

44. Edhi Rianto, MD (biochemist)

**Department of Physiology**

45. Prof.R.Soeckarman, MD,PhD (physiologist)

**Department of Microbiology**

46. Setio Harsono, MD (microbiologist)

**Department of Biology**

47. K.Suhadi, MD (andrologist)

**Department of Radiology**

48. Benny Huwae, MD (radiologist)

49. Nifa Wahid, MD (radiologist)

**Instalation of Nutrition Dr.Sutomo Hospital**

50. Hariwitarti, MPH (nutritionist)

**Instalation of Pharmacy Dr.Sutomo Hospital**

51. E.U.Sudjadi (pharmacist)

**Social Sciences**

52. Sutandio Wignjosubroto, MPA

**OBJECTIVES**

**General Objectives**

To improve science, knowledge, and skill in the field of DM through activities in Service, Education, and Research for the welfare of mankind.

**Specific Objectives**

1. To educate health personnel, related scientist, and patients.
2. To perform basic and applied research in the field of DM through experimental, clinical, epidemiological, and sociological approach.
3. To improve service qualitatively as well as quantitatively.

The desired results could only be obtained through cooperative involvement of other centres and institutions.

DEVELOPMENT PLAN DIABETES CENTRE

Development Plan Diabetes Centre is a project that aims to build a center for diabetes treatment and research. The center will be located in Surabaya, Indonesia. The project is expected to be completed by the end of 2024. The center will have a capacity of 100 patients per day. It will provide medical services, research facilities, and educational programs. The center will be staffed by a team of experienced doctors, nurses, and researchers. The project is funded by the government and private donors. The center will be open to the public and will provide services to people from all walks of life.

## FIVE-YEAR PLAN OF DC 1988-1993

The proposed five-year plan is based on the existing conditions describe below.

### **Manpower**

Scientists interested in DM, consisting of staff members of the School of Medicine and other disciplines within Airlangga University - Dr.Sutomo Hospital, and other institutions.

### **Facilities**

#### **1. Clinical Departments of Dr.Sutomo Hospital and Airlangga University School of Medicine.**

- Internal Medicine
- Clinical Pathology
- Pathology
- Radiology
- Neurology
- Ophthalmology
- ENT
- Nutrition
- Obstetrics and Gynecology
- Dermatology
- Psychiatry
- Medical Rehabilitation
- Pediatrics
- Surgery
- Anesthesiology

- Pharmacy

**2. Basic medical sciences Departments of the School of Medicine :**

- Physiology
- Biochemistry
- Biomedics
- Cytogenetics
- Pathology
- Pharmacology

**3. Department of Public Health**

**4. Other disciplines within the Airlangga University :**

- Pharmacy
- Mathematics and Natural Sciences
- Dentistry
- Veterinary Medicine
- Social Sciences

**5. Other institutions**

e.g. The Naval Health Institution

**Scope of Activities**

**1. Service**

Prevention, Promotion, Treatment, and Rehabilitation to :

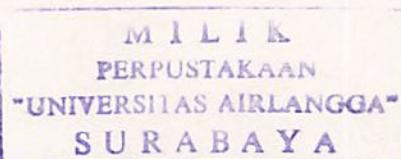
- inpatients
- outpatients
- community

Coordinator : Hendromartono, MD

Members : Benny Huwae, MD  
F.H.Saedewo, MD  
Djoko Marsudi, MD  
B.P.Margono, MD, PhD

## 2. Education

- Patients
- Community
- General Practitioners
- Trainees
- Nurses
- Technician
- Nutritionist
- Others



Coordinator : Prof.A.Tjokroprawiro, MD, PhD

Members : Prof.R.Santoso, MD  
Prof.R.Soekarman, MD, PhD  
Benny Huwae, MD  
S.P.Edijanto, MD

## 3. Research

Individual, group, and multidisciplinary

- Basic
- Applied : Clinical
  - Epidemiological

Coordinator : Prof.R.Santoso, MD

Members : Prof.A.Tjokroprawiro, MD, PhD  
Prof.F.X.Budhianto Suhadi, MD, PhD  
Prof.S.U.Purnomo, MD  
Dr.Med.Puruhipto, MD  
E.P.Saedibjo, MD, MPH

### Pancreas Transplantation Team

#### *Indonesia Side*

Coordinators : Prof.Rachmat Santoso, MD  
Leaders : Prof.A.Tjokroprawiro, MD,PhD  
Vice Leaders : Hendromartono, MD  
Secretary : Ari Sutjahjo, MD  
Members : Prof.F.X.Budhianto Suhadi, MD,PhD  
              F.M.Judajana, MD  
              R.Suemarto, MD  
              Made Sukahatya, MD  
              Abdus Syukur, MD  
              B.P.Margono, MD,PhD  
              Mulja Hadi Santoso, PhD,Pharm  
              Faroeck Hoesin, MD  
              Soegeng Soekamto, MD,PhD  
              Hans Tandra, MD

#### *Japan Side*

Prof.Shigeaki Baba, MD  
Hiroshi Taniguchi, MD,PhD

Y.Hara, MD

### **SERVICE**

patient

State Hospital

Private Hospital

Diagnostic

#### 1. Internal Medicine

- physical examinations
- interpretation
- data interpretation

## 2. Cardiology

- electrocardiology
- Doppler's examinations
- Holter's monitoring
- echocardiography

## 3. Pulmonology

- pulmonary function tests
- sputum examination
- bronchoscopy + bronchoalveolar lavage

## 4. Pediatrics

- physical examination
- interpretation
- data interpretation

## 5. Clinical Pathology

- screening tests: urine & blood examinations
- confirmation tests: OGTT, HbA1c, fructosamine, C-peptide, insulin, BT-PABA
- tests for complications: BUN, creatinin, blood gas analysis, blood electrolytes, etc.

## 6. Ophthalmology

- ophthalmoscopy
- fundal fluorescence angiography (FFA)
- tonometry
- visual field

## 7. Neurology

- electromyography
- electro encephalography

## 8. Radiology

- conventional x-ray

- ultrasonography (real time & sectoral)
- CT-scanning
- cardiac angiography

**9. Ear, Nose, and Throat (ENT)**

- audiometry
- tympanometry
- vestibular examinations — calori test
  - electro nystagmography

**10. Dermatology**

- mycosis examinations

**11. Microbiology**

- culture & sensitivity tests

**12. Virology**

- tissue culture

**13. Biochemistry**

- vitamin A/C
- carotene

**14. Pathology**

- diagnostics
- postmortem examinations

**15. Andrology**

- male infertility (sperm analysis)

**16. Urology**

- flowmetry, cytosmetry

**B. Treatment**

**1. Internal Medicine**

- ward
- emergency care unit

## 2. Cardiology

- ward
- ICCU

## 3. Pulmonology

- ward
- ECU

## 4. Ophthalmology

- operative : \* cataract
  - \* vitrectomy
  - \* lens implantation
  - \* cryosurgery
- laser

## 5. Neurology

- ward

## 6. Nutrition

- diet therapy

## 7. Physiology

- exercise therapy

## 8. Surgery

- neurosurgery
- cardiovascular surgery
- orthopedics

## 9. Naval Health Institution

- hyperbaric therapy

## C. Rehabilitation

### 1. Physical rehabilitation

- Department of Medical Rehabilitation
- Department of Physiology



## 2. Mental Rehabilitation

- Department of Psychiatry

### Outpatient

#### A. Dr.Sutomo Hospital Outpatient Department

#### B. Private Clinics

- diagnostics
- treatment as required (referred to inpatient department)
- rehabilitation

#### C. Primary Health Centres

### Promotion, Education and Prevention

- personal
- mass media
- books
- leaflets
- audiovisuals
- courses / CME (GPs, nurses, public)

through the Indonesian Society of Endocrinology (for scientists) and Indonesian Diabetes Association (IDA, for patients).



## PHYSICAL PLANNING OF DIABETES CENTER

### Ground Area

10000 m<sup>2</sup> — 4000 m<sup>2</sup> to be occupied by main building

1000 m<sup>2</sup> by satellite buildings

5000 m<sup>2</sup> by open space

### Floor

4 — including basement and parking space

plus satellite buildings

### Directory

1. Basement : receptionist

medical records

hospital administration

cafetaria

dispensary

medical rehabilitation

2. Ground Floor (I) : Outpatient Department / Diabetes Clinic (including all supporting disciplines)

- internal medicine (endocrinology, cardiology, pulmonology, nephrology, rheumatology, etc.)

- surgery

- obstetrics/gynecology

- pediatrics

- ophthalmology

- ENT

- dermatology

- neurology

- oral medicine
- nutrition
- radiology
- clinical pathology

Diabetes Education (capacity: 50)

Intensive Cardiac Care Unit (ICCU)

Emergency Care Unit (ECU)

Operating Room

Hemodialysis Unit

Duty Officer

3. Floor II : Special Diabetes Ward (gangrene, pulmonary tb, and other infectious complications)  
General Diabetes Ward  
(VIP, 1st, 2nd, 3rd, & 4th class)

4. Floor III : Research & Education  
Staff Office & Cafetaria  
Conference room

All floors are connected by lift & ramp; floor I and II are connected by escalator.

#### Satellite Buildings

utilities

security

maintenance

kitchen

CSSD

animal room

research laboratory

Development Plan Diabetes Centre  
Askandar Tjokroprawiro

1. **INTRODUCTION**

The Diabetes Centre is a medical institution that provides services for the prevention, diagnosis, and treatment of diabetes. It is located in Surabaya, Indonesia. The centre has been established to address the growing prevalence of diabetes in the region. The centre aims to provide high-quality medical care and support to patients with diabetes, as well as to raise awareness about the disease and its management.

2. **MISSION AND VISION**

The mission of the Diabetes Centre is to provide comprehensive medical care and support to patients with diabetes, and to promote healthy lifestyles and diabetes prevention. The vision of the centre is to become a leading institution in the field of diabetes management, and to contribute to the improvement of the quality of life of people with diabetes.

3. **GOALS AND OBJECTIVES**

The goals of the Diabetes Centre are:

- To provide high-quality medical care and support to patients with diabetes.
- To promote healthy lifestyles and diabetes prevention.
- To contribute to the improvement of the quality of life of people with diabetes.
- To establish partnerships with other medical institutions and organizations.
- To conduct research and development in the field of diabetes management.

The objectives of the Diabetes Centre are:

- To provide medical services for the prevention, diagnosis, and treatment of diabetes.
- To provide education and support to patients and their families.
- To provide research and development opportunities for medical students and professionals.
- To establish partnerships with other medical institutions and organizations.
- To contribute to the improvement of the quality of life of people with diabetes.

4. **ORGANIZATION**

The Diabetes Centre is organized into several departments:

- Medical Department: responsible for the prevention, diagnosis, and treatment of diabetes.
- Nursing Department: responsible for providing nursing care and support to patients.
- Administrative Department: responsible for managing the administrative tasks of the centre.
- Research Department: responsible for conducting research and development in the field of diabetes management.

5. **OPERATIONS**

The Diabetes Centre operates on a daily basis, providing medical services to patients. The centre also conducts research and development activities, and provides education and support to patients and their families.

6. **FINANCIALS**

The Diabetes Centre has a budget of approximately 100 million Indonesian Rupiah per year. The budget is used for the operation of the centre, including salaries, equipment, and research activities.

7. **CONCLUSION**

The Diabetes Centre is a valuable resource for the community, providing high-quality medical care and support to patients with diabetes. The centre's mission and vision are aligned with the needs of the community, and its goals and objectives are achievable. The centre's organization, operations, financials, and conclusion are all important factors in its success.

**Hospital capacities**

150 beds

General Diabetes Ward : 130 beds

- VIP : 10 beds

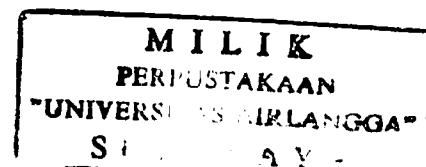
- 1st class : 16 beds

- 2nd class : 40 beds (2 persons/room)

- 3rd class : 40 beds (4 persons/room)

- 4th class : 24 beds (8 persons/room)

Special Diabetes Ward : 20 beds

**Manpower**

Medical: see listed experts of cooperating discipline

Paramedics and non medical personnels to propose to the Indonesia Government.

**Financial Arrangement / Backing**

- to be worked out later with the Indonesia and Japanese Governments.

- estimated cost :

\* area : Rp.

\* building : Rp. 7.500.000.000,-

\* supporting facilities : (not yet estimated)

soil preparation

new roads and parking lots

pedestrian

landscaping

drainage

electrical power line / trafos

gas supply

water supply

telephone and PABX

hydrant

\* Hospital equipment : Rp. (not yet estimated)

\* Research Laboratory Equipment : Rp. (not yet estimated)

#### Management

Professional management responsible to DC Foundation, to be set up later from the members of Japan Consultants and DC Surabaya.

#### Maintenance

Self reliance / self supporting with community involvement.

PERPUSTAKAAN UNIVERSITAS AIRLANGGA  
KOLEKSI KAMPUS : U T A R A  
JL. MARMAHUSADA 47, TELP. 44500  
SUKABUMI