

National Agenda of Priorities in Health Research - Brazil



Ministry of Health of Brazil

# MINISTRY OF HEALTH OF BRAZIL Secretariat of Science, Technology and Strategic Inputs Department of Science and Technology

# National Agenda of Priorities in Health Research - Brazil

Series B. Basic Health Texts

Brasilia – DF 2006

#### © 2006 Ministry of Health

All rights reserved. This work may be partially or totally reproduced, provided that it mentions the source and such reproduction is not for sales or any other commercial purpose. The Department of Science and Technology is responsible for the text and images' copyrights.

The Ministry of Health institutional collection may be accessed in its entirely form at the Virtual Health Library of Ministry of Health: http://www.saude.gov.br/bvs.

Series B. Basic Health Texts

1st edition - 2006 - 1.000 copies

Elaboration, distribution and information:

MINISTRY OF HEALTH

Secretariat for Science, Technology, and Strategic Inputs in Health

Department of Science and Technology

Assistance to Politics in Science and Technology

Esplanada dos Ministérios, Bloco G, Edifício Sede, sala 845

70058-900, Brasilia - DF

Phones: (61) 3315-3466 / 3315-3298

Fax: (61) 3315-3463 Homepage: www.saude.gov.br

The text of the National Agenda of Priorities in Health Research was partially approved during the 2<sup>nd</sup> National Conference of Science, Technology and Innovation in Health, and further approved during the 151<sup>st</sup> Ordinary Meeting of the National Health Council, on February 17 2005.

Printed in Brazil

#### Catalog Record

Brazil. Ministry of Health. Secretariat of Science, Technology and Strategic Inputs. Department of Science and Technology.

National Agenda of Priorities in Health Research / Ministry of Health, Secretariat of Science, Technology and Strategic Inputs, Department of Science and Technology – Brasília: Ministério da Saúde, 2006.

72 p. - (Series B. Basic Health Texts)

Translation: 2<sup>nd</sup> edition in Portuguese

ISBN 85-334-1242-8

1. Health policy. 2. Public health. 3. Research. I. Title. II. Series.

NLM W 84.3

Catalog record in the source – General Coordination of Information and Document – Editora MS – OS 2006/1037

Titles:

Portuguese: Agenda Nacional de Prioridades de Pesquisa em Saúde Spanish: Agenda Nacional de Prioridades de Investigación en Salud

# Technical team

# 2<sup>nd</sup> National Conference on Science, Technology and Innovation in Health

#### NATIONAL HEALTH COUNCIL – EXECUTIVE SECRETARIAT

Eliane Aparecida da Cruz

#### **GENERAL COORDINATOR**

Reinaldo Guimarães

#### **DEPUTY COORDINATORS**

Ana Lúcia Assad – Ministry of Science and Technology Representative Jorge Guimarães – Ministry of Education Representative

#### **GENERAL RAPPORTEUR**

Suzanne Jacob Serruya

#### **DEPUTY RAPPORTEUR**

Rita Barradas Barata

#### **ORGANIZING COMMISSION**

André Luiz de Oliveira Ciro Mortella Eni Carajá Filho Fernando Luiz Eliotério Flávio Andrade Goulart Francisca Walda da Silva Gilda Almeida de Souza José Rocha de Carvalheiro Lílian Alicke Mário Toscano de Brito Filho Moisés Goldbaum Neide Regina C. Barriguelli Noemy Yamaguishi Tomita Oraida Maria Abreu Gomes dos Santos Paulo Ernani Gadelha Vieira Reinaldo Guimarães Renato Cordeiro Walter Araújo Zin William Saad Hossne

#### **EXECUTIVE COMMISSION**

Reinaldo Guimarães - General Coordinator Ana Lúcia Assad - Deputy Coordinator Jorge Guimarães - Deputy Coordinator Antonia Angulo-Tuesta - General Secretary Nelson Rodrigues dos Santos - Deputy Secretary

#### INFRASTRUCTURE COMMISSION

Luiz Gonzaga Araújo Margarete Martins de Oliveira Sonia Machado de Campos Dietrich Volmir Raimondi

#### **COMMUNICATIONS COMMISSION**

Hebert Otto Schubart Luiz Alberto Silva Maria Cristina Costa de Arrochela Lobo Walmer José da Trindade Urtiga

#### REPORTING COMMISSION

Members Carlos Alberto dos Santos Célia Machado Gervasio Chaves Fidelarina T. do Carmo Gerson Oliveira Penna José Cláudio dos Santos Márcia Luz da Motta Margarida Maria Santana da Silva Regina Célia Borges de Lucena

### **SUMMARY RAPPORTEUR**

Alba Lúcia B. Leite de Barros Ana Paula Reche Corrêa Bernadete Moreira de Moura Carla Valéria Martins Rodrigues Cristianne Aparecida Costa Haraki Dirce Guilhem Erika Camargo Fátima Cabral Flávia Helena Ciccone Flávia Tavares Silva Elias Guilherme Pinho Helena Behrens Helena Luna Isabel Cristina G. P. dos Santos Isabel Ouint Berretta Jacqueline Carvalho Gagliardi Joel Luis Heisler Jorge Luiz Buerger Leila Nina Ribeiro Freire Lilian Rose Peters Luciana Alves Pereira Luis Eugenio Souza Maria Alice Fernandes Branco

Maria Aparecida Gussi Marília Cristina P. Louvison Paulo Roberto do Nascimento Rosanita Baptista Shirlene Holanda Sonia Maria Cavacanti Suely do Nascimento Silva

Eliane Aparecida da Cruz

#### ARTICULATION AND MOBILIZATION COMMISSION

Alessandra Ximenes da Silva Lúcia Maria Figueiredo Ada Rodrigues Viana Adalgiza Balsemão Araújo Augusto Alves de Amorim Crescêncio Antunes da Silveira neto Eni Carajá Filho Francisco das Chagas Dias Monteiro Gilca Ribeiro Starling Diniz José Teófilo Cavalcante Júlio César das Neves Luiz Augusto Ângelo Martins Maria de Lourdes Afonso Ribeiro Maria do Espírito Santos Tavares dos Santos Maria Eugênia C. Cury Moisés Goldbaum Nildes de Oliveira Andrade Paulo César Augusto de Souza Paulo Roberto V. de Carvalho Pedro Gonçalves Oliveira Sílvia Marques Dantas Oliveira Solange Gonçalves Belchior Volmir Raimondi Wanderli Machado William Saad Hossne Zilda Arns Neumann

#### ORGANIZATION OFFICE

Marylene Rocha de Souza (Coordination) Adinan Sidnei Trovo Cristiane Vasconcelos Cruz Eisenhower Bonfim Pereira Fabrício Rocha Gangana João Batista Geovanini da Silva Paulo Ricardo Araújo de Ornellas Mendes

#### CO-WORKERS NATIONAL HEALTH COUNCIL EXECUTIVE **SECRETARIAT**

Eliane Aparecida da Cruz Alessandra Ximenes da Silva Lucia Maria Costa Figueiredo

#### NATIONAL HEALTH COUNCIL TECHNICAL OFFICE

Ana Gabriela Nascimento Sena Silvia Maria Alves Verbena Lúcia Melo Gonçalves Maria Camila Borges Faccenda Luciano Chagas Barbosa Gleude Moura Rocha Couto

#### **NATIONAL HEALTH COUNCIL**

Sandra Cassiano Jannayna Martins Sales Charles Lopes Nascimento José Maria do Amaral Sobreira Filho Willian de Lima Barreto Maicon Vinicius de Camargo Maria Rita Rodrigues da Silva Rosa Amélia Pereira Dias Wagner de Almeida Muniz

#### **DEPARTMENT OF SCIENCE AND** TECHNOLOGY/SECRETARIAT OF SCIENCE, TECHNOLOGY AND STRATEGIC INPUTS/MINISTRY OF HEALTH

Adriana Vieira de Sousa Cássia Maria de Souza Barreto Clarice Abreu Barros Cristiano Gomes da Costa Flávia Tavares Silva Elias Francisco de Assis Correia Serra João Carlos Saraiva Pinheiro Juliana Araújo Pinheiro Leonor Pacheco Márcio Alex de Carvalho Silva Maria Beatriz Amaro Ronise Guerra de Sousa Carlos Wendell Queiroz de Souza -SCTIE

#### **DATASUS**

Cláudia Rizzo Ezequiel Pinto Dias Gustavo Nascimento Rios Marcelo Couto Ferreira

# **Summary**

Int	roduction	. 7
Sul	b-agendas of Health Research	11
1.	Indigenous Peoples' Health	11
2.	Mental Health	13
3.	Violence, Accidents and Trauma	15
4.	African-Brazilian's Health	17
5.	Non-transmissible Diseases	19
6.	Elderly Health	22
7.	Child's and Adolescent's Health	24
8.	Women's Health	27
9	Health of Individuals with Special Needs	31
10	Food and Nutrition	33
11	Bioethics and Ethics in Research	35
12	Clinical Research	36
13	Health Production Complex	37
14	Health Technologies Assessment and Economic Evaluation	39
15	Epidemiology	43
16	Demography and Health	45
17	Oral Health	46
18	Health Promotion	47
19	Transmissible Diseases	49
20	Communication and Information in Health	58
	Management of Labor and Education in Health	
22	Health Systems and Policies	63
23	Health, Environment, Labor and Bio-security	65
24	Pharmaceutical Care	69

# INTRODUCTION

The constructing and implementation of a National Agenda of Priorities in Health Research is a political process that pursues, in all of its stages, the broad participation of actors with different backgrounds and languages, from both research and health. The articulation around the Agenda is the most important action towards legitimating that tool in the National Policy on Science, Technology and Innovation in Health in Brazil and should assist in streamlining health research priorities and the Brazilian Unified Health System (Sistema Único de Saúde - SUS) principles.

The National Agenda of Priorities in Health Research is drawn upon the respect to national and regional health needs and aims at increasing the selective inducement of knowledge, material and procedural assets production in priority areas to social policies development.

The Agenda was constructed through a 5-stage process, prior to its approval during the 2<sup>nd</sup> National Conference on Science Technology and Innovation in Health (2ª Conferência Nacional de Ciência, Tecnologia e Inovação em Saúde - CNCTIS), as described below:

# 1 Health Status and Living Conditions

The first stage in building that Agenda was to commend experts to produce texts to disclose relevant aspects of health status and health policies, based on the knowledge available and providing updated information to support the decision-making process. The health status assessment is a process of analysis and synthesis aimed at characterizing, measuring and explaining the populations' profiles of necessities and health-disease issues and getting to know the organized social responses to them (CASTELLANOS, 19971). These processes allow: a) identifying the needs, priorities and policies in health, and assessing the interventions' impacts; b) formulating strategies on promotion, prevention and control of damages to health and evaluating their implementation; c) building prospective health scenarios (OPS, 1999<sup>2</sup>).

The content was organized in the publication Saúde no Brasil: contri*buicões para a Agenda de Prioridades de Pesquisa* (Health in Brazil: contributions to the Agenda of Priorities in Research), launched during national stage of the Conference.

<sup>&</sup>lt;sup>1</sup> Castellanos, P.L. 1997. Epidemiologia, Saúde Pública, Situação de Saúde e Condições de Vida: Considerações conceituais. In: Barata, R. (org..) Condições de vida e situação de saúde. RJ

<sup>&</sup>lt;sup>2</sup> PAHO. Epidemiological Journal. Vol. 20 # 3 1999

# 8

# 2 Outlining Sub-agendas in Research

At this stage, broad areas of research, involving different subject matters that compose the different priority research themes are defined in the sub-agendas.

An Advisory Technical Committee (Comitê Técnico Assessor - CTA) was established to assist all stages of the agenda construction. The Committee is composed by renowned experts and managers.

Based on the methodology used in national and international experiences, a set of 20 research sub-agendas was organized and approved by the Advisory Technical Committee.

# 3 Establishing Research Themes

The research themes comprise more specific topics gathered in each sub-agenda. They may contemplate any stage of the knowledge chain, basic research and even the operational stage, with no limitation in relation to knowledge areas involved. In many cases, the priority themes are associated to health priorities. However, it is worth noticing that, sometimes, solving health issues is not a dependent variable of research, and sometimes the field of knowledge and scientific and technological practices misses proper concepts, methodologies or tools to produce research-based solutions.

The research themes were defined during the Seminar towards Constructing the Agenda held on November 6-7 2003, in Brasilia. Based on several international experiences, the following criteria were adopted to set priorities in health:

- a) The disease burden, measured in DALY (Disability Adjusted Life Years) or any other indicator;
- b) Analysis on the disease burden determinants, according to different intervention levels: individual, family, community; health ministry, system and services; research institutions; governmental policies and other sectors of impact to health;
- c) State-of-the-arts scientific and technological knowledge available;
- d) Cost-effectiveness of potential interventions and likely success;
- e) Effect on social equity and justice;
- f) Ethical, political, social and cultural acceptability;
- g) Possibility of finding solutions;
- h) Scientific quality of researches proposed;
- i) Human and financial resources feasibility.

The Seminar employed a methodology that involved oral presentations, work groups and plenary sessions for debate. It established work groups to debate each sub-agenda, composed by researchers linked to teaching and research institutions, and managers from the three SUS' political-administrative spheres. The Seminar culminated in the approval of an Agenda composed by 20 priority subagendas in health research.

# 4 Public Consultation

In order to know the services users' and health workers' perceptions, while expanding the debate on the priority setting in research, the National Agenda of Priorities in Health Research (Agenda Nacional de Prioridades de Pesquisa em Saúde - ANPPS) public consultation was held, as defined in the seminar.

The agenda was submitted to public consultation from March 23 to May 8, 2004, totaling 2,500 accesses. The respondents provided 600 contributions to the sub-agendas set, and were systematized and incorporated to the Agenda text presented during the 2<sup>nd</sup> CNCTIS.

# 5 2<sup>nd</sup> National Conference on Science, Technology and Innovation in Health

To support the discussion about municipal, regional and state stages of the 2<sup>nd</sup> National Conference on Science, Technology and Innovation in Health (2ª Conferência Nacional de Ciência, Tecnologia e Inovação em Saúde - CNCTIS), a baseline document was prepared comprising the National Policy on Science, Technology and Innovation in Health (Política Nacional de Ciência, Tecnologia e Inovação em Saúde - PNCTIS) and the latest issue of the National Agenda of Priorities in Health Research.

The contributions received during the debate held at municipal, regional and state levels have enhanced the document. They were consolidated and discussed to be approved during the 2<sup>nd</sup> CNCTIS.

The National Conference defined two thematic axes to be discussed in the plenary: the first one about the National Policy on Science, Technology and Innovation in Health, and the second one about the Agenda. The results of the discussions held about each axis were then submitted to the final Plenary that voted and approved the integral PNCTIS text, and partially approved the ANPPS report.

The ANPPS consolidate text was submitted to the delegates attending the national phase, during the final Plenary of the  $2^{nd}$  CNCTIS. However, there was no time enough to evaluate all of the 24 sub-agendas: the sub-agendas 1 - 14 and the 24 were integrally assessed, while sub-agendas 15 - 23 were not voted. As decided by the final Plenary of the  $2^{nd}$  CNCTIS, the amendments to those sub-agendas were submitted to the State Health Councils (Conselhos Estaduais de Saúde - CES) which should coordinate the voting process, pursuant to the decision by the National Health Council (Conselho Nacional de Saúde - CNS) in each State participating in the 2<sup>nd</sup> CNCTIS.

Finally, the seven State Health Councils (of the states of Alagoas, Amazonas, Minas Gerais, Pernambuco, Rio Grande do Sul, Sergipe and Santa Catarina) have forwarded their contributions. As decided by the National Health Council Plenary, in its 151st Ordinary Meeting held on February 17 2005, the results of the voting process developed in those seven states were integrally incorporated to the minutes of the 2nd CNCTIS.

The ANPPS, composed by 24 sub-agendas of research in health, is presented below.

# SUB-AGENDAS OF HEALTH RESEARCH

# 1 INDIGENOUS PEOPLES' HEALTH

- DIMENSION AND DYNAMICS OF INDIGENOUS HEALTH-RELATED 1.1 **ISSUES**
- Research on epidemiological, demographic and nutritional 1.1.1 transition
  - 1.1.1.1 Nutritional and food inquiries: identification of food and eating habits, malnutrition, obesity, anemia and hipovitaminosis A;
  - 1.1.1.2 Evaluation of programs and projects on food and nutrition developed in Indigenous people's areas;
  - 1.1.1.3 Inquiries on the main non-transmissible chronic diseases;
  - 1.1.1.4 Cross-disciplinary studies on abuse of alcohol or other drugs, violence, suicide, psychical suffering and special needs;
  - Determinants of morbi-mortality, fecundity and 1.1.1.5 migration which are directly and indirectly related to health;
  - Studies aimed at understanding the population 1.1.1.6 growth-related demographic factors among representative segments of Indigenous peoples;
  - 1.1.1.7 Studies on the Indigenous people's urbanization processes; epidemiological, nutritional and demographic transition; and, use of health services;
  - 1.1.1.8 Health indicators for Indigenous populations.
- 1.1.2 Epidemiological studies about the main groups of infectious and endemic parasite-transmitted diseases among Indigenous populations.
- 1.1.3 Impact of environmental changes on socio-sanitary conditions of Indigenous peoples:
  - 1.1.3.1 Studies on disorders resulting from environmental contamination by heavy metals and agricultural chemicals, water-transmitted diseases, emergence of parasite-transmitted diseases;

- 1.1.3.2 Studies on the development of strategies and technologies of basic sanitation and housing responsive to different socio-cultural contexts;
- 1.1.3.3 Studies on the influence and impact of displacement of indigenous communities form their origin settlements due to the constructing of infrastructural works, such as roads and dams;
- 1.1.3.4 Study on health-disease patterns of ethnics in neighboring territories at boundary areas, including the standard of health services use.
- 1.1.4 Research on socio-cultural practices related to self-care in health in its broader sense (social and physical reproduction of the community) and in its strict sense, and research on practices related to the health-disease process:
  - 1.1.4.1 Study on the forms of socio-political organization of Indigenous peoples and their interfaces with health;
  - 1.1.4.2 Survey on Indigenous health systems; self-care and Indigenous healing practices, with emphasis on the epidemiological transition context;
  - 1.1.4.3 Studies focused on gender and Indigenous health interface, comprising reproductive and sexual health.
- 1.2 ORGANIZATION AND EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 1.2.1 Evaluation of the management model, planning, working and impacts of the Indigenous health sub-system:
  - 1.2.1.1 Studies on Indigenous health care policies, taking into consideration the current transition scenario experienced by such models;
  - 1.2.1.2 Evaluation of the distritalization process that involves the National Health Foundation (*Fundação Nacional de Saúde* Funasa), associate organizations and reference networks;
  - 1.2.1.3 Evaluation of social control and Indigenous community participation in health, notably concerning the Indigenous communities' power in face of foreign NGOs working in Indigenous areas;

- 1.2.1.4 Studies on human resources training and recruiting for Indigenous health;
- 1.2.1.5 Evaluation of information systems on Indigenous health, taking into consideration the articulation with national databases and the incorporation of geographic components and ethnical specificities;
- 1.2.1.6 Evaluation of health services: the perspective of Indigenous user; therapeutic routes; the no territory limitation of Indigenous population and its implications on the access to services;
- 1.2.1.7 Studies on practices of health care to Indigenous populations at local level, analyzing the links among health professionals, including Indigenous health team and users;
- 1.2.1.8 Monitoring and evaluation of technologies in the Indigenous health sub-system, iatrogenics and collateral reactions to medications.

# 2 MENTAL HEALTH

- 2.1 THEORETICAL-METHODOLOGICAL FOCUS
- 2.1.1 Culture and society:
  - 2.1.1.1 Social representation;
  - 2.1.1.2 Prejudice, stigma, citizenship and rights of individuals with mental disorders:
  - 2.1.1.3 Mental health, gender and ethnics;
  - 2.1.1.4 Violence and psychosocial implications;
  - 2.1.1.5 Social, urban and rural ecology, life quality and mental health:
  - 2.1.1.6 Mental Health and religion
- 2.2 DIMENSION, DYNAMICS AND UNDERSTANDING OF MENTAL HEALTH DISORDERS
- 2.2.1 Mental health indicators
- 2.2.2 Studies on global burden of mental disease among the Brazilian population.
- 2.2.3 Factors of risk and protection, vulnerability and prognostic of mental health issues in specific population groups.

- 2.2.4 Epidemiological profile of mental disorder sufferers and chemical dependents.
- 2.2.5 Exploratory inventory of demographic and socio-economic aspects in mental health.
- 2.2.6 Toxic residues-associated predisposing factors to mental health disorders.
- 2.2.7 Postpartum mental disorders.
- 2.2.8 Mental health in childhood: traumas, depression and other pathologies.
- 2.3 ORGANIZATION AND EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 2.3.1 Studies on public mental health policies
- 2.3.2 Psychosocial rehabilitation.
- 2.3.3 Therapeutic appliances for serious and persistent mental disorders.
- 2.3.4 Efficacy of mental health care per cross-disciplinary and multiprofessional teams and studies on the efficacy of therapeutic groups approaches.
- 2.3.5 Mental health, moral and/or sexual harassment, labor and education.
- 2.3.6 Iatrogenics, efficacy and efficiency of psycho-pharmacological care.
- 2.3.7 Medicalization of psychical suffering and adjustment of psychotropic drugs use.
- 2.3.8 Therapeutic projects, strategies on prevention and damage reduction to the abusive use of alcohol and other legal and illegal drugs.
- 2.3.9 Life quality and care humanization.
- 2.3.10 Psychiatric reform: new actors, their methodologies and participation strategies.
- 2.3.11 Social impact of mental diseases and interventions.
- 2.3.12 Social support networks.
- 2.3.13 Natural medicine, alternative and complementary health practices such as homeopathy, acupuncture and phytotherapy.
- 2.3.14 Studies concerning the family of and care deliverers to people suffering mental disorders.

- 2.3.15 Studies to identify policies and programs towards deinstitutionalizing mentally diseased patients.
- 2.3.16 Impacts entailed by the decentralization, regionalization process and basic care in mental health care.
- 2.4 EVALUATION, DEVELOPMENT AND EMPLOYMENT OF **TECHNOLOGIES**
- Development and use of new technologies to the care of 2.4.1 mental disorder sufferers.
- 2.4.2 New methods and techniques to survey mental disorders.
- 2.4.3 Development of rehabilitation technologies.
- 2.4.4 Researches on medications for mental disorders focusing on their complexity, problems concerning population's access and reduction of side effects and adverse reactions.

# 3 VIOLENCE, ACCIDENTS AND TRAUMA

- 3.1 STUDIES ON THE ORGANIZATION AND EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 3.1.1 Policies on care to violence, accidents and trauma, including the occupational ones, taking into consideration cultural, economic, geographic aspects and other issues.
- 3.1.2 Urgency and emergency systems and services management, models and quality, flow regulation and sorting in the pre-, intra- and post-hospital stages.
- 3.1.3 Evaluation of policies, programs, projects and other interventions related to the prevention of violence, accidents and traumas, including the occupational ones, familiar violence, suicides, homicides among adolescents and youths, traffic-related accidents, sexual violence, consumption of psychoactive substances, alcohol and intoxications.
- Systems of epidemiological information on violence, accidents 3.1.4 and trauma, including the occupational ones, for urgency, emergency and basic care.
- 3.1.5 Evaluation of epidemiological information systems on violence and accidents, including the occupational ones, taking into consideration political, social and cultural aspects.
- 3.1.6 Researches about treatment to assaulters and the victims' families, with emphasis on therapeutic models in the community itself.

- 3.1.7 Studies on the involvement, sensitiveness-building, mobilization, strengthening and capacity-building of leaderships and community-based organizations in preventive measures to control violence-related damages and risks.
- 3.2 PRE-, INTRA- AND POST-HOSPITAL CARE: CLINICAL ASSAYS AND EXPERIMENTAL STUDIES
- 3.2.1 Evaluation of the efficacy and security of treatment protocols used to deal with traumatic conditions.
- 3.2.2 Effectiveness of diagnosis, therapeutic and prognostic, with emphasis on image-based diagnosis.
- 3.2.3 Studies on new therapeutic methods.
- 3.3 DIMENSION, DYNAMICS AND UNDERSTANDING OF VIOLENCE, ACCIDENTS AND TRAUMA: POPULATION-BASED QUANTITATIVE AND QUALITATIVE STUDIES
- 3.3.1 Dimension according to the types of violence: domestic, sexual, psychological, community-based, institutional, self-inflicted, on job, in traffic, among different populations', ethnics' groups and social segments.
- 3.3.2 Incidence and prevalence of violent behavior and victimization.
- 3.3.3 Effects of violence on the illness process.
- 3.3.4 Morbimortality determinants concerning the main kinds of violence (on job, in traffic, domestic, sexual, community-based, institutional, self-inflicted, among different populations' and ethnics' groups and social segments).
- 3.3.5 Determinants, factors and areas of risk and occurrence of damages related to the consumption of alcohol and other psychoactive drugs.
- 3.3.6 Translation, adjustment and validation, in Brazil, of the violence measurement tools existing in other countries.
- 3.3.7 Forms of communication and education in health to prevent violence, accidents, traumas and intoxications, taking into consideration regional issues.
- 3.3.8 Exploratory inventory of demographic and socio-economic aspects in accidents and traumas.
- 3.3.9 Criminality, use and manipulation of weapons by adolescents in conflict with law and in risk situation, based on the Statute of the Child and the Adolescent (*Estatuto da Criança e do Adolescente ECA*).

- 3.3.10 Analysis of social stratification of violence and its effects, with ethnical and socio-economic cut.
  - Effects of social exclusion and racial discrimination 3.3.10.1 over mortality and violence that affect African-Brazilian adolescents and youths.
- 3.3.11 Impact of traffic-related traumas and violence on the generation of disabilities.
- 3.3.12 Studies on the reinsertion of sufferers from disabilities resulting from traumas and violence into the productive and social life.
- 3.3.13 Studies on ethical professional action and ethical legal aspects related to situation of conflict or dilemmas in emergency environments, observing the user's issues of gender, race, age and religious orientation.
- 3.3.14 Studies on the effect of alcoholic beverage advertisements on population's health, with emphasis on issues related to violence and trauma.
- 3.3.15 Studies on the impacts ensuing from cross-sector actions over the epidemiological picture of violence, accidents and traumas (Unified Public Security System, UNI Projects, Communitybased Forum of Combat to Violence).

#### ACCIDENTS CAUSED BY VENOMOUS ANIMALS 3.4

- 3.4.1 Natural history, determinants and risk factors of accidents caused by venomous animals, and study on preventive actions.
- Identification of biological material of venomous animals, aiming at the production of serum, observing the variability of such material and application in their region of origin.
- 3.4.3 Studies on the availability of serums, notably in rural areas and neglected areas.

# 4 AFRICAN-BRAZILIAN'S HEALTH

- DIMENSION AND DYNAMICS OF AFRICAN-BRAZILIAN 4.1 POPULATION'S HEALTH-RELATED ISSUES
- Study of the racial issue in Brazil, its impacts on social relationships and implications on health-disease process among the African-Brazilian population.

- 4.1.2 Health situation among African-Brazilian populations living in remainder communities of former *quilombos*<sup>3</sup> (*quilombolas*).
- 4.1.3 Development of health indicators for the African-Brazilian population:
  - 4.1.3.1 Statistical information on color and other important variables in the monitoring of health equity;
  - 4.1.3.2 Epidemiological analysis of morbimortality from genetic diseases and diseases worsened by living conditions;
  - 4.1.3.3 Systematic review on African-Brazilian's health.
- 4.1.4 Multi-disciplinary studies on falciform disease:
  - 4.1.4.1 Epidemiological impact, determinants, repercussions and risks;
  - 4.1.4.2 Clinical-epidemiological on the symptomatology heterogeneity, occurrence of complications and adverse reaction to medications;
  - 4.1.4.3 Development of basic diagnosis kits;
  - 4.1.4.4 Epidemiological surveillance of associated infections.
- 4.1.5 Diseases, disorders and conditions of African-Brazilian:
  - 4.1.5.1 Hemoglobinopathies, hypertension, diabetes mellitus and their disorders;
  - 4.1.5.2 Glucose-6-phosphate dehydrogenase deficiency and other genetic conditions;
  - 4.1.5.3 Infection by HTLV-I;
  - 4.1.5.4 Sexually transmitted diseases and HIV/Aids;
  - 4.1.5.5 Pregnancy and obesity in adolescence;
  - 4.1.5.6 Mental disorders.
- 4.1.6 Qualitative and quantitative researches about popular medicine of African matrix and contribution of Afro-Brazilian manifestations to promote health.
- 4.2 EVALUATION OF POLICIES, PROGRAMS, SERVICES AND TECHNOLOGIES
- 4.2.1 Studies on affirmative governmental policies of positive discrimination in the Health field.

<sup>&</sup>lt;sup>3</sup> A settlement of runaway and free-born African slaves.

# 5 NON-TRANSMISSIBLE DISEASES

- 5.1 ARTERIAL HYPERTENSION, DIABETES MELLITUS AND OBESITY
- 5.1.1 Morbimortality, socio-economic cost, adherence to treatment, disease evolution and complications.
- 5.1.2 Risk factors.
- 5.1.3 Physiopathological mechanisms.
- 5.1.4 Development of health promotion methods and preventive, diagnosis and early treatment methods.
- 5.1.5 Studies on tracking of celiac disease diagnosis of diabetic patients.
- 5.1.6 Studies on the importance of emotional tensions (stress) in the unfolding of arterial hypertension and worsening of diabetes mellitus and obesity.
- 5.1.7 Development of programs to foster active life style and study on the impact of such programs among different populations.
- 5.2 ATHEROTHROMBOSIS – cerebral-vascular diseases, coronary arterial disease and peripheral arterial disease
- 5.2.1 Morbimortality and socio-economic costs.
- 5.2.2 Risk factors.
- 5.2.3 Physiopathological mechanisms.
- 5.2.4 Development of health promotion, diagnosis and early treatment methods, acute and chronic stages, evaluating even the cellular therapy techniques.
- 5.3. RESPIRATORY DISEASES – asthma and chronic pulmonary obstructive disease
- 5.3.1 Impact of respiratory diseases on SUS emergency care.
- 5.3.2 Prevalence according to age group.
- 5.3.3 Respiratory diseases and damages to living quality, work and school absenteeism.
- 5.3.4 Challenges posed to the knowledge about etiopathogenesis and treatment.
- Study on the efficacy and efficiency of non-conventional 5.3.5 outpatient therapeutic care practices.
- 5.3.6 Impact of environmental interventions (fires, deforestation, etc.) on the damages to respiratory organs and life quality.

- 5.3.7 Efficacy and efficiency of therapeutic practices.
- 5.4 OSTEOARTICULAR arthritis, non-specified arthrosis and column disorders (specifically lumbar and cervical column)
- 5.4.1 Prevalence according to age group.
- 5.4.2 Impact of osteoarticular disease on outpatient care services and the hospital network nationwide.
- 5.4.3 Recurring episodes of temporary disability.
- 5.4.4 Osteoarticular diseases as cause of early retirement.
- 5.4.5 Effectiveness of therapies available, including acupuncture and cellular therapy.
- 5.4.6 Efficacy and efficiency of preventive practices and those of physical and psychosocial rehabilitation.
- 5.4.7 Researches on neoplasias of muscle-skeleton system and alternative therapies to preserve the patient's function with no need for mutilations.
- 5.5 NEOPLASIAS
- 5.5.1 Morbimortality, socio-economic cost and life quality.
- 5.5.2 Lethality.
- 5.5.3 Regional differences.
- 5.5.4 Risk factors.
- 5.5.5 Research on physiopathological mechanisms of the development of neoplasias.
- 5.5.6 Development of methods for early diagnosis and treatment, including those of cellular therapy.
- 5.5.7 Cancer etiology: genetic and environmental risk factors, including toxic residues, their interactions and the influence of socio-geographic factors.
- 5.5.8 Evaluation of primary prevention programs, early detection and care to patients "out of therapeutic possibilities" (palliative care).
- 5.5.9 Clinical research of most prevalent neoplasias in Brazil, by establishing integrated national networks.
- 5.6 ACCUTE NEPHROPATHIES AND CHRONIC RENAL DISEASES
- 5.6.1 Morbimortality and socio-economic cost.

- 5.6.2 Early diagnosis, proper treatment and potential changes in the disease development.
- 5.6.3 Studies on the disease mechanism.
- 5.6.4 Technological evaluation to improve the Renal Replacement Therapy.
- 5.6.5 Pharmaceutical surveillance of long-term medications.
- 5.7 **HEMOPATHIES**
- 5.7.1 Morbidity and economic cost.
- 5.7.2 Lethality.
- 5.7.3 Regional differences.
- 5.7.4 Physiopathological mechanisms.
- 5.7.5 Development of methods on early diagnosis and treatment.
- 5.7.6 Early detection and disease evolution.
- 5.8 RHEUMATIC DISEASES
- 5.8.1 Valve changes resulting from rheumatic diseases.
- 5.9 COMMON PRIORITIES TO THE SET OF NON-TRANSMISSIBLE DISEASES RELEVANT TO PUBLIC HEALTH
- 5.9.1 Physiopathological, cellular and molecular mechanisms.
- 5.9.2 Identification of genetic polymorphisms and their interaction with environmental risk factors.
- 5.9.3 Studies to identify social determinants, risk factors and vulnerable population groups.
- Studies on the impact of tobacco use and alcohol consumption 5.9.4 on the development of non-transmissible diseases.
- 5.9.5 Studies on temporal trend of non-transmissible diseases in the different regions of Brazil.
- Epidemiological studies of non-transmissible diseases at 5.9.6 different age groups.
- 5.9.7 Studies on interventions in different regions of Brazil to evaluate the impact of preventive and control actions.
- 5.9.8 Construction and selection of epidemiological indicators to monitor and inspect factors of risk, morbidity and mortality from non-transmissible chronic diseases.
- 5.9.9 Development of new diagnosis and therapeutic methods, employing bio-engineering, cellular and genic therapy,

- transplantations, natural medicine, complementary therapies and rehabilitation techniques.
- 5.9.10 Development of new medications, compounds and formulations, including homeopathic and phytotherapeutic ones, aiming at improving treatment, reducing the high-cost and external dependence.
- 5.9.11 Evaluation of models of adherence to the treatment and social support networks to carriers of non-transmissible diseases.
- 5.9.12 Study on cost-effectiveness of diagnosis methods and therapeutic interventions.
- 5.9.13 Evaluation of policies, programs and services
- 5.9.14 Studies concerning the dynamics of life of chronic disease carriers.
- 5.9.15 Evaluation on the implementation of transplant services.

# 6 ELDERLY HEALTH

- 6.1 DIMENSION, DYNAMICS AND UNDERSTANDING OF ELDERLY HEALTH ISSUES
- 6.1.1 Studies on the impact of population's aging on the health system.
- 6.1.2 Studies on family organization in face of aging and intergenerational relationship:
  - 6.1.2.1 Study of elder's role as care deliverer.
  - 6.1.2.2 Studies on the contribution of retirement benefits in the composition of the family income.
- 6.1.3 Determinants of the elders' living conditions, with emphasis on environmental, family, nutritional, physical and psychosocial aspects:
  - 6.1.3.1 Aging in poor communities.
- 6.1.4. Identification, distribution and vulnerability of elderly population.
- 6.1.5 Development of indicators to follow-up aging and STD/Aids prevalence in the third age.
- 6.1.6 Evaluation of the elderly quality of life.
- 6.1.7 Studies on alternative care to improve the elder population's quality of life, pursuant to the National Elderly Policy.

- 6.2 UNDERSTANDING THE MECHANISMS OF DISEASES ASSOCIATED TO THE AGING PROCESS.
- 6.2.1 Genetic-environmental interaction in the prediction and prevention of chronic-degenerative diseases associated to aging.
- 6.2.2 Genetic-molecular predictive markers of fragility (dementia, cardiovascular and cerebral-vascular diseases, osteoporosis, Parkinson's disease, Alzheimer's disease, deglutition disorders, hearing disorders and others).
- 6.2.3 Etiopathogenic mechanisms of diseases associated to aging.
- 6.2.4 Immunity mechanism in elderly.
- 6.3 EVALUATION OF POLICIES, PROGRAMS, SERVICES AND **TECHNOLOGIES**
- 6.3.1 Evaluation of the Implementation of the National Elderly Policy (Política Nacional de Saúde do Idoso - PNSI) and of the Statute of the Elderly:
  - 6.3.1.1 Identification of health promotion and disorders prevention actions;
  - 6.3.1.2 Evaluation of the impact entailed by care models and the use of health services: Family Health Program and Community-based Health Agents Programs;
  - 6.3.1.3 Development of indicators to monitor public policies.
- 6.3.2 Regular evaluation of care to elderly in the hospital and asylum system of SUS and of private health plans.
- 6.3.3 Evaluation of programs and strategies aimed at providing quidance to families and deliverers of care to dependent elderly.
- 6.3.4 Evaluation of practices and policies of prescription, acquisition and use of pharmaceutical products by the elderly.
- Development and evaluation of elderly population's health 6.3.5 surveillance mechanisms.
- 6.3.6 Development and evaluation of rehabilitation strategies:
  - 6.3.6.1 Assisted gerontechnology;
  - 6.3.6.2 Universal accessibility;
  - 6.3.6.3 Functional rehabilitation concerning fragility, immobility, instability, iatrogenics, incontinences,

cognitive dysfunction, infections, malnutrition, edentulism and other oral health disorders.

- 6.3.7 Development and validation of tools for measuring elderly individuals' health and quality of life.
- 6.3.8 Development of self-care technology.

# 7 CHILD'S AND ADOLESCENT'S HEALTH

- 7.1 DIMENSION, DYNAMICS AND UNDERSTANDING OF CHILD'S AND ADOLESCENT'S HEALTH ISSUES
- 7.1.1 Perinatal period and the first year of life:
  - 7.1.1.1 Determinants of the child's living and development conditions, with emphasis on environmental, family, biological, nutritional and psychosocial aspects;
  - 7.1.1.2 Determinants and dimension of fetal, perinatal, neonatal morbimortality and characterization of congenital anomalies, using multi-centric studies;
  - 7.1.1.3 Vertical transmission of diseases like syphilis, hepatitis, infection by HIV and other retroviroses;
  - 7.1.1.4 Prevalence of oral, perioral diseases, craniofacial deformities and hearing losses;
  - 7.1.1.5 Elaboration of routines on diagnosis and therapeutic treatment of diseases and disorders resulting from prematurity.

## 7.1.2 Childhood:

- 7.1.2.1 Nutritional status: malnutrition, obesity, deficiency of micronutrients:
- 7.1.2.2 Basic mechanisms, clinic and epidemiology related to arterial hypertension, hypercholesterolemia, overweight/obesity, bronchial asthma, neoplasias, mental health, oral health, falciform disease, other Hemoglobinopathies, hearing health and obstructive respiratory alterations, rheumatic fevers;
- 7.1.2.3 Disability, violence and accidents, with emphasis on those resulting from child labor;
- 7.1.2.4 Study on factors of risk and protection of health and quality of life of disabled children;

- 7.1.2.5 Conditions of life and survival of children with special needs and their process towards being adjusted to the domicile;
- 7.1.2.6 Prevalence of osteoarticular diseases, with emphasis on the impact of early initiation in sports and quality of life;
- Effects of social exclusion and racial discrimination 7.1.2.7 on the child's health:
- 7.1.2.8 Impact of family relationship and social support networks on the development and handling of health issues:
- 7.1.2.9 Impact of morbidity on child's development and neuropsychomotor development delay.

# 7.1.3 Adolescence:

- 7.1.3.1 Determinants, repercussions and risk of motherhood and fatherhood in adolescence and studies on the circumstances of the first pregnancy:
- 7.1.3.2 Determinants on the adherence to safe and unsafe sexual practices, and behavioral studies about Sexually Transmitted Diseases (STD/Aids) and the early starting of sexual activity;
- 7.1.3.3 Cross-sector research about the sexuality of adolescents, with emphasis on body changes and sexuality exercise;
- 7.1.3.4 Effects of child's and adolescents' commercial sexual exploitation on their biopsychosocial development;
- 7.1.3.5 Risks associated to the use of legal and illegal drugs, Sexually Transmitted Diseases/ HIV, violence and disability;
- 7136 Violence, criminality, access, use and manipulation weapons, mechanisms to recuperate adolescents in conflict with law;
- 7.1.3.7 Study on the impact of the Statute of the Child and the Adolescent on the protection of the rights of children and adolescents in situations of risk;
- 7.1.3.8 Impact of family relationship and social support networks on the development of health conditions;
- 7.1.3.9 Nutritional status and body composition with biochemical alterations in the different stages of sexual maturity;

- 7.1.3.10 Determinants of anorexia, bulimia and obesity;
- 7.1.3.11 Effects of social exclusion and racial discrimination on the adolescent's health;

# 7.2 EVALUATION OF POLICIES, PROGRAMS, SERVICES AND TECHNOLOGIES

- 7.2.1 Perinatal period and childhood:
  - 7.2.1.1 Studies on the quality, effectiveness and humanization of pre-natal care and care to newborn babies in high risk, including nutritional guidance;
  - 7.2.1.2 Effectiveness of new techniques to render care to newborn babies in high risk;
  - 7.2.1.3 Development of technologies in mother's milk bank in order to guarantee the quality of products and processes;
  - 7.2.1.4 Technological development to produce immunobiological products against childhood diseases;
  - 7.2.1.5 Development of new technologies to reduce child mortality;
  - 7.2.1.6 Elaboration and validation of the growth curve for premature babies;
  - 7.2.1.7 Development and validation of tools for measuring children's and adolescents' health and quality of life.
  - 7.2.1.8 Primary and secondary prevention of diarrhea, acute respiratory infections and malnutrition;
  - 7.2.1.9 Studies on health promotion at schools, residences and communities, and on the impact of the mass media on children's behavior;
  - 7.2.1.10 Development and evaluation of prevention and rehabilitation strategies oriented to disabled children;
  - 7.2.1.11 Studies on the efficiency and efficacy of therapeutic practices aimed at the prevention and rehabilitation of children's health and quality of life;
  - 7.2.1.12 Studies on the multi-disciplinary evaluation and approach of rehabilitation of mouth-breather children.

# 7.2.2 Adolescence:

- 7.2.2.1 Studies on the impacts of preventive campaigns against risk behaviors and for individual behavior changes;
- 7.2.2.2 Studies on the media impact on the adolescents' behavior:
- 7.2.2.3 Evaluation of health services concerning lost opportunities of guidance, information and prevention of risk factors during adolescence;
- Determinants of poor access of male adolescents 7.2.2.4 to health services:
- 7.2.2.5 Studies on health promotion in schools, homes and communities:
- 7.2.2.6 Development and evaluation of prevention and rehabilitation strategies oriented to disabled adolescents:
- 7.2.2.7 Studies on the efficiency and efficacy of therapeutic practices aimed at the prevention and rehabilitation of adolescent's health and quality of life;
- 7.2.2.8 Studies on the multi-disciplinary evaluation and approach of rehabilitation of mouth-breather adolescent.

## 8 WOMEN'S HEALTH

8.1 DIMENSION, DYNAMICS AND UNDERSTANDING OF WOMEN'S **HEALTH ISSUES** 

#### Abortion: 8.1.1

- biological and socio-cultural 8.1.1.1 Studies on determinants of the abortion; recurrent abortion; repetitive abortion in celiac patients and violence;
- 8.1.1.2 Comparative studies on Manual Intrauterine Aspiration and traditional curettage methods.

# 8.1.2 Contraception and conception:

- 8.1.2.1 Prevalence and determinants of infertility, including the action by toxic residues;
- 8.1.2.2 Usual and alternative contraceptive methods;

8.1.2.3 Studies on biopsychosocial impact of sterilization in women.

# 8.1.3 STD/Aids among women:

- 8.1.3.1 HIV/STD among adolescents and women of more than 50 years old;
- 8.1.3.2 Reproduction, sexuality and HIV;
- 8.1.3.3 Study on the prevalence in the vertical transmission of HIV;
- 8.1.3.4 HIV/Aids in marriage;
- 8.1.3.5. Prevalence of *Chlamydia*, gonorrhea, HPV and uterus cancer;
- 8.1.3.6 Determinants on unprotected sex practice.

# 8.1.4 Pregnancy, childbirth and puerperium:

- 8.1.4.1 Serious obstetrical morbidity;
- 8.1.4.2 Suicide during pregnancy;
- 8.1.4.3 Mother mortality and vulnerability factors;
- 8.1.4.4 Implications of the breastfeeding process on the women's quality of life: repercussions on mental health, labor and sexuality;
- 8.1.4.5 Morbimortality associated to the use of technologies during the childbirth;
- 8.1.4.6 Study on pregnancy and implications to the productive process;
- 8.1.4.7 The impact of media on women's behavior;
- 8.1.4.8 Study on the prevalence and incidence of mental disorders among pregnant women;
- 8.1.4.9 Pregnancy hypertension and pregnancy in adolescence;
- 8.1.4.10 Effectiveness of humanization in the care to childbirth and puerperium;
- 8.1.4.11 Evaluation of pre-natal quality;
- 8.1.4.12 Evaluation of determinants and treatment of postpartum depression;
- 8.1.4.13 Prevalence and incidence of transmissible diseases during pregnancy;

8.1.4.14 Cultural determination in the selection of kind of delivery (position, diet and medicalization).

# 8.1.5 Sexuality:

- 8.1.5.1 Behavioral determinants and diversity of sexual orientations:
- 8.1.5.2 Women with disabilities:
- 8.1.5.3 Women in adolescence.

#### 8.1.6 Health care:

- 8.1.6.1 Medicalization of female body in different stages of life;
- 8.1.6.2 Feeding disorders;
- 8.1.6.3 Socio-economic unbalances, ethnical-racial and gender dimension;
- 8.1.6.4 Biological and socio-cultural determinants of health conditions associated to climacteric:
- 8.1.6.5 Health care practices to women in reproductive phase and in climacteric;
- 8.1.6.6 Study of complementary practices and natural medicine (such as homeopathy, acupuncture, phytotherapy and others) to provide care to different stages of the women's life.

# 8.1.7 Race, ethnics and health:

- 8.1.7.1 Prevalence of health conditions and mortality in different racial and ethnical groups;
- 8.1.7.2 Prevalence of falciform anemia and its implications to the physical and psychological development in different stages of life.

#### 8.1.8 Mental health:

- 8.1.8.1 Prevalence of legal and illegal drugs consumption and gender determination:
- 8.1.8.2 Prevalence of depression, suicide and violence against women.

## 8.1.9 Labor and health:

- 8.1.9.1 Links among sexual, child, rural, domestic labor and health;
- 8.1.9.2 Agricultural chemicals and reproductive health disorders;
- 8.1.9.3 Environmental pollutants, breast cancer and reproductive health;
- 8.1.9.4 Ergonomic and sensorial factors and occupational problems;
- 8.1.9.5 Determinants of the women's health status, with emphasis on environmental and family aspects:

## 8.1.10 Violence:

- 8.1.10.1 Mortality;
- 8.1.10.2 Sexual, domestic, institutional, during pregnancy, related to STD/Aids and to Disability.

# 8.1.11 Aging:

- 8.1.11.1 Quality of life;
- 8.1.11.2 Biological and socio-cultural determinants of chronic-degenerative diseases and disabilities;
- 8.1.11.3 Sexuality in the third age.

#### 8.1.12 Breast cancer:

- 8.1.12.1 Strategies of early diagnosis adjusted to social reality and socio-economic cost;
- 8.1.12.2 Economic impact of programs on breast cancer early diagnosis;
- 8.1.12.3 Cost-effectiveness of propaedeutic and therapeutic methods;
- 8.1.12.4 Evaluation of the effectiveness and cost-benefit relation of early diagnosis actions and treatment;
- 8.1.12.5 Evaluation of the treatment impact on women's professional reinsertion.

# 8.2. EVALUATION OF POLICIES, PROGRAMS, SERVICES IN REPRODUCTIVE HEALTH

8.2.1 Study on care provided to legal, illegal, incomplete abortion and that due to fetal malformation.

- 8.2.2 Impact of the use of contraceptive and conceptive technologies on women.
- 8.2.3 Comparative studies during the prepartum, childbirth and post-
- 8.2.4 Morbidities related to the use and non-use of technologies during the childbirth.
- Studies on users' satisfaction concerning care delivered during 8.2.5 pregnancy, childbirth and puerperium.
- 8.2.6 Quality of care provided to obstetrical urgencies and emergencies.
- 8.3 EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 8.3.1 Access to and quality of health care delivered to women in the prison system and women with disabilities.
- Effectiveness of STD/HIV control actions. 8.3.2
- 8.3.3 Adverse effects of hormonal replacement therapy.
- 8.3.4 Access to and quality of care delivered to aged women.
- 8.3.5 Access to and quality of care delivered to women who have sex with women, homosexuals, bisexuals, lesbians, transsexual and of other sexual orientations, and sex professionals.
- 8.3.6 Differentiated impacts of worker's health action on women and men.
- 8.3.7 Evaluation of the effectiveness of cross-sector network serving women in situation of violence.
- 8.3.8 Quality of data on post-abortion curettage in the existing information systems.

# 9 HEALTH OF INDIVIDUALS WITH SPECIAL NEEDS.

- 9.1 THEORETICAL-METHODOLOGICAL FOCUS
- 9.1.1 Social representation;
- 9.1.2 Prejudice, citizenship and rights of individuals with special needs.
- 9.1.3 Disability, gender and sexuality.
- 9.1.4 Family context of individuals with special needs.

- 9.2 DIMENSION, DYNAMICS AND UNDERSTANDING OF HEALTH-RELATED ISSUES
- 9.2.1 Health indicators, disabilities prevalence and quality of life of individuals with special needs;
- 9.2.2 Epidemiological study on general causes of disabilities.
- 9.2.3 Vulnerability and prevention of health conditions.
- 9.2.4 Health and rehabilitation
- 9.2.5 Mental health.
- 9.2.6 Links between the use of legal and illegal drugs and the production of deficiencies in fetuses.
- 9.2.7 Analysis of psychotropic substances' consumption by individuals with special needs.
- 9.2.8 Impacts of violence on the generation of disabilities.
- 9.2.9 Importance and validity of neonatal hearing screening in the prevention and early diagnosis of deafness.
- 9.2.10 Oral health
- 9.2.11 Autoimmune diseases
- 9.2.12 Prevalence of STD and Aids.
- 9.2.13 Reproductive health and gender in individuals with special needs.
- 9.2.14 Effects of environmental factors on health and quality of life of individuals with special needs.
- 9.3 EVALUATION, DEVELOPMENT AND EMPLOYMENT OF TECHNOLOGIES
- 9.3.1 Development of low-cost rehabilitation technologies.
- 9.3.2 Development of communication technologies (cassette tape, floppy disk, CD-Rom, etc.) in Braille, Brazilian signal language (Libras), and alternative and/or supplementary communication to visually, hearing, physically/motor disabled individuals.
- 9.3.3 Production of accessories suitable to the disable individual's daily life.
- 9.4 EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 9.4.1 Awareness-building techniques and human resources qualification to provide care to individuals with special needs.
- 9.4.2 Accessibility of health services

- 9.4.3 Evaluation and impact of rehabilitation policies and practices on health programs.
- 9.5 VALIDATION STUDIES CONCERNING THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH (CIF)

## 10 FOOD AND NUTRITION

- 10.1 FOOD SECURITY
- 10.1.1 Nutritional evaluation of regional food.
- 10.1.2 Study on family food production for own consumption and local species management.
- 10.1.3 Development of methods and techniques of food consumption evaluation.
- 10.1.4 Food consumption and nutritional value, quality and contamination of eating habits with priority to families below the poverty line.
- 10.1.5 Impact of public policies on food security of socially vulnerable families, ethnic groups and specific populations.
- 10.1.6 Food knowledge and practices at different stages of life and among different social classes.
- 10.1.7 Promotion of healthy food and physical activity.
- 10.1.8 Development of national and regional table of food composition:
- 10.1.9 Institutional food (at daycare nurseries, schools, shelters, prisons, hospitals, workplaces and others) and food supply to individuals with special food needs.
- 10.1.10 Food technology: quality and contamination control; nutritional, market and bio-security aspects.
- 10.1.11 Biodiversity prospecting to identify species with nutritional interest.
- 10.1.12Impact of the use of synthetic chemical products in livestock raising over human health.
- 10.1.13 Ways of producing and conserving food free of agriculture chemical products, conservant products and chemical dyes.
- 10.1.14Impact and nutritional quality of transgenic products.

- 10.1.15Techniques on food storage and nutritional quality preservation.
- 10.1.16Use of prohibited substances (nocive) in the formulation of industrialized foods.
- 10.2 BREASTFEEDING AND COMPLEMENTAR FOOD TO CHILDREN
- 10.2.1 Breastfeeding: typologies, duration and conditioning factors, ideologies and behaviors related to breastfeeding and the child's food, evaluation of promotion activities in health services.
- 10.2.2 Social and biological conditioning factors in complementary food during the weaning.
- 10.2.3 Child's health and nutrition status during breastfeeding and weaning complementary food, with special attention to gluten-based food.
- 10.3 ENERGY-PROTEIN MALNUTRITION
- 10.3.1 Analysis on the distribution of determinants and risk factors.
- 10.3.2 Predictive models.
- 10.3.3 Information systems.
- 10.3.4 Evaluation of health policies and programs.
- 10.4 NUTRITIONAL NEEDS OF MICRONUTRIENT (IRON, VITAMIN A, FOLIC ACID, IODINE AND OTHERS)
- 10.4.1 Distribution and cartographic analysis of determinants and risk factors.
- 10.4.2 Predictive models.
- 10.4.3 Information systems.
- 10.4.4 Evaluation of health policies and programs.
- 10.4.5 Diagnostic tracking of celiac disease in anemic patients.
- 10.5 OVERWEIGHT AND OBESITY
- 10.5.1 Analysis on the distribution of determinants and risk factors.
- 10.5.2 Metabolic and systemic complications.
- 10.5.3 Distribution in time and space of food consumption and physical activity.
- 10.5.4 Predictive models.

- 10.5.5 Information systems.
- 10.5.6 Evaluation of policies and programs in the Health sector.
- DEVELOPMENT AND VALIDATION OF METHODOLOGIES 10.6
- 10.6.1 Tools, methods and indicators of nutritional surveillance.
- 10.6.2 Methods of information, communication and education.
- 10.6.3 Methods to evaluate actions, programs and public policies.
- 10.6.4 Evaluation of energy expenditure.
- 10.6.5 Clinical management of nutritional issues.
- 10.6.6 Development of methods and indicators of nutritional evaluation in the family context.

#### 11 BIOETHICS AND ETHICS IN RESEARCH

- THEORETICAL-PRACTICAL ASPECTS OF BIOETHICS WITHIN THE 11.1 BRAZILIAN SCIENTIFIC-TECHNOLOGICAL AND SANITARY CONTEXT (EPISTEMIOLOGICAL, METHODOLOGICAL AND NORMATIVE)
- 11.1.1 Exercise of citizenship and basic rights.
- 11.1.2 Benefits and damages of health processes.
- 11.1.3 Sense of equity, universality, gratuity and social control in SUS.
- 11.1.4 Challenges posed by bioethics worldwide application of knowledge to the Brazilian context, taking into consideration the regional peculiarities.
- 11.1.5 Bioethical aspects of alternative therapies existing in Brazil.
- 11.1.6 Autonomy and vulnerability factors of research volunteers within SUS scope.

#### 11.2 BIOETHICS AND ETHICS IN RECURRING PROBLEMS

- 11.2.1 Ethical dilemmas related to abortion, reproductive and sexual rights, use of stem cells and embryos in research, child mortality, mother mortality, life terminality - palliative care, violence in interventions, in cross-ethnical relationships.
- 11.2.2 Identification of moral dilemmas in health care.
- 11.2.3 Prospecting studies on bioethics in the following themes: health care in Brazil, SUS management, epidemiological surveillance, sanitary surveillance, environmental surveillance,

pharmaceutical care, nutrition and food security, health production complex, health technologies assessment and audits.

- 11.3 STUDIES ON THE STRENGTHENING OF SOCIAL CONTROL IN RESEARCHES WITH HUMAN BEINGS
- 11.3.1 Study on how the Committees of Ethics in Research (*Comitês de Ética em Pesquisa CPE*) and the National Commission of Ethics in Research (*Comissão Nacional de Ética em Pesquisa CONEP*) system works.
- 11.3.2 Professional relationship health/researchers, user/research subject; vulnerability; exclusion and citizenship.
- 11.4 STUDIES ON ETHICAL ISSUES IN COMMUNICATION AND INFORMATION IN HEALTH
- 11.4.1 Ethics and information privacy.
- 11.4.2 Citizen's right on the inputting of their data in the information systems.
- 11.4.3 Right of access to information.
- 11.4.4 Individual right and collective right.
- 11.5 STUDIES ON CARE-RELATED ETHICAL ISSUES
- 11.5.1 Processes of death, dying and palliative care.
- 11.5.2 Intensive use of medical technology (therapeutic obstinacy)
- 11.5.3 Prejudice and abandonment of elderly persons.
- 11.5.4 Citizenship of elderly persons.

# 12 CLINICAL RESEARCH

- 12.1 GENERAL DEVELOPMENT OF CLINICAL RESEARCH
- 12.1.1 Evaluation on diagnosis methods performances.
- 12.1.2 Evaluation of therapeutic interventions.
- 12.1.3 Evaluation of new technologies and their applicability.
- 12.1.4 Clinical trials of diagnosis and therapeutic procedures, products of national research.
- 12.1.5 Studies to elaborate and validate clinical protocols, including homeopathic and acupuncture treatments.

## 12.2 SPECIFIC THEMES

- 12.2.1 Study to the population characterization and clinical diagnosis of congenital diseases with kinship analysis.
- 12.2.2 Identification of genes, genetic polymorphism and elaboration of genetic database.
- 12.2.3 Clinical evaluation of new generic medications.
- 12.2.4 Clinical trials of substitutes to high-cost imported inputs.
- 12.2.5 Clinical trials of complementary therapeutic practices.
- 12.2.6 Clinical evaluation of the use of long-term medications for the most prevailing conditions.
- 12.2.7 Pre-clinical and clinical research of medicinal plants, phytotherapeutic and bioactive products typically used by the population.
- 12.2.8 Cell therapy, stem cells, pharmacogenetic.
- 12.2.9 Molecular biology techniques to the diagnosis and serum test.
- 12.2.10 Clinical evaluation of effects ensued by interventions of physical therapy, occupational therapy and speech therapy.

### 13 HEALTH PRODUCTION COMPLEX

- 13.1 PRE-CLINICAL, CLINICAL AND THERAPEUTICAL INTERVENTION TRIALS - VACCINATION
- 13.1.1 Development of clinical trials of vaccinations (Phases I, II, III and IV).
- 13.1.2 Development of animal experimental models to pre-clinical trials of vaccinations.
- INNOVATION AND TECHNOLOGICAL DEVELOPMENT -13.2 **VACCINATIONS**
- 13.2.1 Development of new vaccinations using the existing ones and the technology transfer as platform.
- 13.2.2 Research and development (R&D) of veterinary vaccination as form of technological platform.
- 13.2.3 Research on new adjuvants and forms of application.
- 13.2.4 R&D of vaccinations for children under 5 years old to prevent many diseases in one single application.
- 13.2.5 Priority vaccinations.

Vaccination	Strategic Interest	Epide miological Interest	Adverse Reactions
DENGUE		Х	
DPT/HBV/ Hib (new combination)			
DTPa			X
SCHISTOSOMIASIS		X	
BETA-HEMOLYTIC STREPTOCOCCUS			
YELLOW FEVER	X		Х
HBV/HAV			
HEPATITIS A		X	
HEPATITIS C		X	
Hib (reduce the number of doses)			
HIV		X	
HPV		X	
INFLUENZA (new technology of production)	Χ		
IPV		X	Χ
LEISHMANIASIS		X	
LEPTOSPIROSIS		X	
MALARIA		X	
MENINGITIES Conjugate		Χ	
MENINGITIS B/C + Hib			
MENINGITIS B/C Conjugate	X	X	
MENINGITIS C Conjugate		X	
PNEUMOCOCCUS Conjugate 7-valent		X	
RABIES (reduce the number of doses)			Х
ROTAVIRUS		Х	
ТВ		Х	
TOXOPLASMOSIS		Х	
TRIPLICE VIRAL (Jeryl-Lynn mumps)			Χ
TRIPLICE VIRAL + CHICKEN POX			
SMALLPOX	X		

# 13.3 BLOOD DERIVATIVES

13.3.1 Research and development of blood derivatives.

- 13.4 EQUIPMENT AND APPLIANCES FOR HEALTH CARE
- 13.4.1 National industries developing equipment used to produce medications (chemicals for pharmaceutical purposes, phytotherapeutic ingredients) and biotechnological inputs.
- 13.4.2 Technological development of health care materials and/or equipment to replace imports.
- 13.4.3 Production of portable equipment and products to render itinerant services to needy populations at remote regions.
- 13.4.4 Development, production and improvement of equipment and appliances in the following strategic areas: Biomaterials; tissue engineering; orthesis and prosthesis; Health area tools; high, medium and low complexity equipment for Health; articles and materials for hospital use; technology in rehabilitation; technology in bioinformatics; and, hospital technology.
- 13.4.5 Evaluation of new technologies and their applicability.
- 13.5 INTELLECTUAL PROPERTY
- 13.5.1 Identification and incentive to the development of patentable products and processes.
- 13.5.2 Evaluation of the management efficiency of strategic inputs production.
- 13.5.3 Evaluation of the impact of the Patents Act and Intellectual Property Policy on Health Policy and on the cost of SUS pharmaceutical care.
- 13.6 DIAGNOSTIC PRODUCTS
- 13.6.1 Research, development and innovation of diagnostic products.

### 14 HEALTH TECHNOLOGIES ASSESSMENT AND ECONOMIC **EVALUATION**

- 14.1 LIFE CYCLE OF HEALTH TECHNOLOGIES (INNOVATION, INCORPORATION, USE AND OBSOLESCENCE)
- 14.1.1 State's role in the regulation of health products and services:
  - Technology assessment prior to commercialization 14.1.1.1 and post registration at university services and other research institutions;

- 14.1.1.2 Regulatory process and the health system necessities: analysis of the role played by institutions, Inmetro, Ipem, Anvisa and others.
- 14.1.2 Development of models of technology incorporation (specifications and homologations).
- 14.1.3 Studies on the transferability of health technologies developed in other countries.
- 14.1.4 Studies on the transfer of technologies from universities and research institutes to national industries.
- 14.1.5 Mapping of technologies within SUS scope and international context.
- 14.1.6 Study on the capacity of technologies production, competitiveness and prospecting of technological innovations, according to SUS necessities.
- 14.1.7 Conformity and quality of health technologies prior to and after commercialization:
  - 14.1.7.1 Analysis and development of methodologies to conformity-quality certification;
  - 14.1.7.2 Metrology and consumer's defense;
  - 14.1.7.3 Evaluation of referenced materials;
  - 14.1.7.4 Gauging and calibration of health equipment;
  - 14.1.7.5 Evaluation of the quality of procedures, services and products;
  - 14.1.7.6 Iatrogenics resulting from the use of technologies.
- 14.1.8 Innovation and technological development in high-complexity therapeutics.
- 14.2 HEALTH ECONOMICS EVALUATION AND COSTS ANALYSIS
- 14.2.1 Analysis and development of methodologies to measure the costs by procedure, by kind of patient, by center of responsibility, level of care complexity and by activity.
- 14.2.2 Studies on costs of diseases.
- 14.2.3 Studies on pricing and price variation in the Health field.
- 14.2.4 Studies on investments in the productive health complex.
- 14.2.5 Validation of technologies and economic evaluation of neonatal screening.
- 14.2.6 Study on costs and economic evaluation of anti-retroviral therapies.

- 14.2.7 Studies on the performance and economic impact of the HIV/ Aids control program.
- 14.2.8 Studies on the economic evaluation of diagnostic methods and therapeutic interventions, as well as socio-economic cost of transmissible and non-transmissible diseases.
- 14.2.9 Econometric evaluation of breastfeeding practices and children's complementary food.
- 14.2.10 Analysis of socio-economic costs of violence in the States and in Brazil.
- 14.2.11 Study on the economic evaluation and effectiveness of preventive actions and bio-security.
- 14.2.12 Analysis of the need for importing pharmaceutical products.
- 14.2.13 Technologies assessment: comparative study on cost-benefit related to the introduction of a new technology and the existing one, prior to the replacement.
- 14.2.14 Economic evaluation of school programs on health education and promotion, and those on prevention of overweight/ obesity, besides other risk factors to non-transmissible chronic diseases (cardiovascular, diabetes mellitus, cancer).
- 14.2.15 Studies on the costs of pre-clinical and clinical trials for new medications.
- 14.2.16 Socio-economic impact of falciform diseases care programs.
- 14.2.17 Evaluation on the efficacy, efficiency, effectiveness and economic analysis of renal replacement therapy.
- 14.2.18 Economic evaluation of actions for hospital infection control.
- 14.2.19 Economic evaluation of transplant of organs.
- 14.2.20 Analysis on economic cost of "hospital-day" to patients after organs transplants.
- 14.2.21 Economic evaluation of domiciliary enteral and parenteral nutrition.
- 14.2.22 Evaluation of cost-effectiveness, cost-benefit and efficacy of high-complexity procedures in cardiovascular, orthopedics and oncological diseases.

#### HEALTH SECTOR FINANCING'S ECONOMIC ANALYSIS 14.3

14.3.1 Analysis of financing sources in the public sector: evaluation of resources intake; alternative sources of financing and strategies to maximizing resources available, and effects of the Constitutional Amendment # 29 enforcement.

- 14.3.2 Criteria of resources allotment: articulation among defrayal and investment, geographic allotment and equity.
- 14.3.3 Ways to remunerate different modalities of health care.
- 14.3.4 Diagnosis and prospective studies on expenditures in health.
- 14.4 POLITICAL ECONOMICS OF HEALTH
- 14.4.1 Comparative analysis of health systems: baselines, structure, working and financing.
- 14.4.2 Analysis of SUS as factor of economic and social development

   the economic meaning of services and benefits.
- 14.4.3 Studies on public-private relationships (estimate public expenditures with financing to health insurances and plans, incentives and fiscal waiver).
- 14.4.4 Studies on the impact of SUS purchases of imported appliances and equipment over the national industry.
- 14.5 STUDIES ON HEALTH TECHNOLOGIES ASSESSMENT AND HEALTH ECONOMICS APPLIED TO PUBLIC HEALTH POLICIES
- 14.5.1 Analysis on the use of technologies and economic evaluation in the incorporation of technologies to health.
- 14.5.2 Analysis of the impact of researches on technologies assessment and health economics on the formulation of guidelines, decision-making processes and results achieved by the health system.
- 14.5.3 Analysis of the economic/financial impact of SUS managerial tools.
- 14.5.4 Elaboration of explicative models of demand and supply by health actions and services.
- 14.5.5 Health technologies assessment and economic health technologies assessment as subside to elaborate clinical guidelines and policy on purchase of diagnostic and therapeutic equipment.
- 14.6 STRATEGIES ON THE STRUCTURING AND SUSTAINABILITY OF HEALTH TECHNOLOGIES ASSESSMENT AND HEALTH ECONOMICS
- 14.6.1 Systematization of primary and secondary data collection processes and recovery/use of studies previously developed, in articulation with academics and health services.

14.6.2 Development of methodologies of health technologies and health economics evaluation.

#### 14.7 PHARMACEUTICAL ECONOMICS

- 14.7.1 Market analysis: economic feasibility study for medications (individual and collective high cost); production, distribution and consumption; official laboratories; phytotherapeutic and homeopathic medications, and medicinal plants:
  - Approach existing information systems in class associations and/or federations, speeding up the process and results.
- 14.7.2 Prospective studies of pharmaceutical products technologies, according to SUS necessities.
- 14.7.3 Evaluation of programs related to the production of phytotherapeutic and homeopathic products to public service.
- 14.7.4 Analysis on economic and social effects of pharmaceutical products on the patents regime.
- 14.7.5 Economic evaluation of the incorporation of high-cost medications into SUS.

### 15 **EPIDEMIOLOGY**

- CONCEPTUAL AND METHODOLOGICAL DEVELOPMENT OF 15 1 **EPIDEMIOLOGY**
- 15.1.1 Studies on models to establish the health-disease process incorporating new techniques of analysis and interpretation.
- 15.1.2 New models of and approaches to events adverse to health and emerging diseases: development of new technologies to epidemiological surveillance of health conditions, such as: surveillance, syndromics, pharmaceutical surveillance, specific monitoring, and scenarios studies, among others.
- 15.1.3 Use of secondary database to analyze and monitor health status: elaboration or selection of indicators, analysis techniques and monitoring processes to analyze the health status and evaluate sensitiveness, specificity, predictive value and verisimilitude ratio of selected processes.
- 15.1.4 Validation, consistency and integration of secondary databases: validation and analysis of data consistency in each database and in different databases; development of ways

- to integrate the databases and regular national surveys, such as the National Households-Based Survey (*Pesquisas Nacionais por Amostragem de Domicílio PNAD*).
- 15.1.5 Evaluation of strategies to produce primary data on health status: inquiries and cohort-based studies.
- 15.1.6 Studies to develop new gauging tools, data analysis techniques, concepts and theories, involving the methodological interface between epidemiology and molecular biology, social sciences, statistics, mathematics and computer sciences.
- 15.2 STUDIES ON HEALTH AND QUALITY OF LIFE
- 15.2.1 Studies on morbidity and mortality, not limited to specific diseases.
- 15.2.2 Studies on the occurrence, conditioning elements and social responses required to face disabilities, survival and functionality.
- 15.2.3 Development and validation of tools and methods to measurement, self-perception and social representations on health among different population's groups.
- 15.2.4 Evaluation of compound indicators, such as disease burden, vulnerability rates, municipal human development, social exclusion, living conditions, among others, and development of new indicators.
- 15.2.5 Studies on global health and aspects of international regulation ensued by international displacements.
- 15.2.6 New diseases with pandemic potential and similar situations requiring international regulation.
- 15.2.7 Studies on migrations resulting from unemployment and labor restructuring.
- 15.2.8 Researches on new methodologies and techniques to prospect the epidemiological behavior of existing health conditions and likely emergence of new conditions.
- 15.3 EVALUATION OF THE EPIDEMIOLOGICAL, SANITARY AND ENVIRONMENTAL IMPACT OF HEALTH PROGRAMS AND SERVICES
- 15.3.1 Studies about the impacts of the epidemiological profile on populations, ensued by interventions (health promotion, diseases prevention and control, early diagnosis, treatment and rehabilitation, damages reduction, basic sanitation, food allowance, immunization campaigns and others).

- 15.3.2 Studies on the efficacy, effectiveness and efficiency of health technologies, considering their impacts on the health and disease profile.
- 15.3.3 Evaluation of risks associated to the use of health technologies, including high-complexity exams performed by SUS.
- 15.3.4 Evaluation of the consensual tool on indicators and follow-up of epidemiological, environmental and sanitary surveillance actions (PPI - Health Surveillance).
- 15.3.5 Study on the impact of social and economic policies on the Brazilian population's epidemiological Profile.

## 15.4 HEALTH UNBALANCES

- 15.4.1 Studies to measure social, economic, ethnic and gender unbalances.
- 15.4.2 Theoretical and conceptual development of processes to determine and elaborate indicators to measure social unbalances.
- 15.4.3 Longitudinal studies on life path and health unbalance (parents' general social class, cross-generation social mobility and current situation).
- 15.4.4 Evaluation of social policies' effects on health unbalances.

#### 16 DEMOGRAPHY AND HEALTH

- 16.1 DIMENSION AND UNDERSTANDING OF THE POPULATION'S DYNAMICS IN THEIR RELATIONSHIP WITH HEALTH
- 16.1.1 Research on health effects entailed by unbalance between population and environment.
- 16.1.2 Regular inquiries on demography and health.
- 16.1.3 Study on migratory standards and their impact on health.
- 16.1.4 Longitudinal studies on morbidity and disability.
- 16.1.5 Studies on mortality and fecundity standards.
- 16.1.6 Inquiries on prevalence of fetal losses and conditioning elements.
- 16.1.7 Studies on aging demography.
- 16.1.8 Evaluation of mortality and morbidity indicators.
- 16.1.9 Studies on demographic models to estimate transition

- probabilities, using competitive and multi-state risks model, considering vulnerability and equity.
- 16.1.10 Studies on prospective demographic scenarios that point out trends behavioral trends of population segments, with impacts on health planning.
- 16.2 ORGANIZATION AND EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 16.2.1 Development of socio-demographic indicators systems at municipal and regional level:
  - 16.2.1.1 Population estimates according to age, sex, and ethnic;
  - 16.2.1.2 Evaluation of the database coverage and quality;
  - 16.2.1.3 Development of methodologies to estimate demographic standards in small areas.
- 16.2.2 Study on family demography and its link to the family health care strategy.
- 16.2.3 Studies to improve the quality of demographic information systems.
- 16.2.4 Impact of men and women sterilization on population's growth.

## 17 ORAL HEALTH

- 17.1 MODELS OF ORAL HEALTH CARE AND SERVICES AND IMPACT ON EPIDEMIOLOGICAL INDEXES.
- 17.2 DEVELOPMENT OF ORAL HEALTH PROMOTION STRATEGIES, INCLUDING CROSS-DISCIPLINARY ACTIONS BASED ON THE GUIDELINES SET FORTH IN THE NATIONAL POLICY ON ORAL HEALTH.
- 17.3 STUDIES ON RISK FACTORS AND ORAL HEALTH CARE IN VULNERABLE AND SPECIFIC GROUPS.
- 17.4 STUDIES ON ORAL DISEASES PREVENTION: USE OF ALTERNATIVE TECHNIQUES, PRODUCTS AND PREVENTIVE MATERIALS; IMPACT OF PROGRAMS ON ORAL HYGIENE AND PUBLIC WATERS FLUORIDATION.
- 17.5 RISK FACTORS TO THE OCCURRENCE OF FISSURE ON LABIAL-PALATAL SURFACES AND TO ORAL DISEASES AMONG VULNERABLE GROUPS.

- 17.6 STUDY ON THE IMPACT OF THE POPULATION'S CARIOGENIC EATING HABITS, HYGIENIC AND BEHAVIORAL HABITS OF CUL-TURAL AND SOCIO-ECONOMIC NATURE.
- 17.7 STUDY ON THE CAUSES AND CONSEQUENCES OF TOOTH LOSS, EDENTULISM, ORAL CANCER AND OTHER ORAL PATHOLOGIES.
- RESEARCH ON ORAL HEALTH INDICATORS. 17.8
- 17.9 STUDIES ON THE OCCUPATIONAL RISKS AMONG DENTISTRY PROFESSIONALS, WITH EMPHASIS ON HEPATITIS B AND C, AIDS AND EXPOSURE TO MERCURY.
- 17.10 DEVELOPMENT AND IMPROVEMENT OF QUALITY AND LOW-COST DENTISTRY TECHNIQUES AND MATERIALS AND PORTABLE EQUIPMENT AND PRODUCTS TO RENDER ALL LEVELS OF CARE AND TO SERVE HARDLY ACCESSIBLE REGIONS.
- 17.11 STUDIES ON ETIOLOGY, EPIDEMIOLOGY AND IMPACT OF CARIES AND PERIODONTAL DISEASE ON INDIVIDUAL'S AND POPULATION'S HEALTH.\*
- 17.12 STUDY ON REDUCTION OF HARMS TO ORAL HEALTH.\*
- 17.13 STUDY ON THE EFFECTS OF MULTI-DISCIPLINARY THERAPEUTIC INTERVENTION ON MOUTH BREATHERS.\*
- 17.14 STUDY ON ALTERNATIVE THERAPIES TO ORAL DISEASES HIGHLY DEMANDED BY POPULATION.\*
- 17.15 STUDY TO ASSESS THE SUPPLY OF ORAL HEALTH SERVICES.\*
- 17.16 STUDY ON THE INNOVATION IN ORAL PROSTHESIS.\*
- OF INFORMATION 17.17 DEVELOPMENT SYSTEM FOR EPIDEMIOLOGICAL DATA ON ORAL HEALTH, FREELY ACCESSIBLE TO POPULATION.\*

### HEALTH PROMOTION 18

- 18.1 DIMENSION, DYNAMICS AND UNDERSTANDING OF DISORDERS AND EVENTS
- 18.1.1 Concept of health, life quality, policies and practices of health promotion and protection and risk factors.
- 18.1.2 Psychosocial and cultural determinants of health conditions and risks distributions; social networks; social support; regional unbalance; discrimination.
- 18.1.3 Validation and synthesis of knowledge and technologies of health promotion produced in Brazil and abroad.

- 18.1.4 Differentiated exposure to risk situations (noise, sedentariness, unemployment, drug addiction, obesity, pollution, among others), according to conditions and ways of life of specific population groups.
- 18.1.5 Influences of social reproduction process as a risk factor to health.
- 18.1.6 Social, environmental exclusion and vulnerability.
- 18.1.7 Perception of users' risk in relation to side effects and contraindication of medications.
- 18.1.8 Brazilian population's education and sanitary risks.
- 18.1.9 Socio-anthropological studies about health-disease process and health care.
- 18.2 ORGANIZATION AND EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 18.2.1 Adverse effects of practices on prevention and control of risks developed by the health system (iatrogenics).
- 18.2.2 New fashions of governmental management and public policies, cross-sectorality and the redefinition of state's and society's role in promoting health and life quality.
- 18.2.3 Public policies, life quality improvement and health promotion.
- 18.2.4 Policies on production regulation, promotion and consumption of food, medications, blood derivatives and other products and technologies with effects on health.
- 18.2.5 Evaluation of health promotion and risks prevention practices in health programs.
- 18.2.6 Evaluation of the community health agent's role in developing autonomy to collective subjects.
- 18.2.7 Studies on the interrelation between health promotion policies and other national and international policies to improve life quality.
- 18.3 EVALUATION, DEVELOPMENT AND EMPLOYMENT OF TECHNOLOGIES
- 18.3.1 Evaluation of the development of technologies used in educational and health practices.
- 18.3.2 Development of strategies to promote health and prevent disorders that account for the highest morbi-mortality rates.

- 18.4 INFORMATION AND COMMUNICATION IN HEALTH/INFORMATION **SYSTEMS**
- 18.4.1 Evaluation of information publicized to population at large, dealing with health promotion activities.
- 18.4.2 Development of methodologies and tools of social communication to publicize information, knowledge and health promotion practices through all the communication means.\*

#### 19 TRANSMISSIBLE DISEASES

#### 19.1 **NEW KNOWLEDGE**

- 19.1.1 Identification of new targets to develop diagnostic procedures in transmissible diseases:
  - Development of bioinformatics methods to identify 19.1.1.1 target sites of drugs, vaccinations and diagnostic trials (arbovirosis and robovirosis).
- 19.1.2 Identification of new targets to treat transmissible diseases:
  - 19.1.2.1 Identification of targets to diagnosis and therapy using genomics, proteomics and bioinformatics;
  - 19.1.2.2 Microbiological and immunological markers of cure or recurrence: early evaluation of therapeutic response of new anti-tuberculosis therapeutic schedules;
  - Study on the physiopathogeny of chronic Hansen's 19.1.2.3 disease neuritis and evaluation of new drugs.
- 19.1.3 Identification of targets for vaccination.
- 19.1.4 Pre-clinical and clinical development of new drugs, including the phytotherapeutic ones.
  - 19.1.4.1 Studies on the use of phytotherapeutic products and derivatives of the Brazilian biodiversity with antibiotic and/or immunostimulator action to HIV and Aids;
  - 19.1.4.2 Discovery and development of new drugs, including those to be used during pregnancy and taking into consideration the resistance to medications during malaria treatment:
  - 19.1.4.3 Pharmacological study of natural resources new alternative therapies Leishmaniasis, toxoplasmosis and other diseases.

- 19.1.4.4 *In vito* trials of susceptibility to anti-fungus drugs for pathogenic yeasts;
- 19.1.4.5 Studies on new pharmaceutical products and pharmaceutical surveillance of existing medications, new drugs and Prazinguantel to schistosomiasis treatment;\*
- 19.1.4.6 Development of new therapeutic drugs to cutaneous, mucosa and diffuse forms of American Tegumentary Leishmaniasis, including those orally administered. \*
- 19.1.5 Explanation of mechanisms of resistance to drugs, insecticides and vector competence:
  - 19.1.5.1 Microbial resistance in sexually transmitted diseases:
  - 19.1.5.2 Resistance to and side effects of anti-retroviral medications:
  - 19.1.5.3 Viral kinetics; resistance to medications; virus-host interactions; new virus; experimental models to viral hepatitis;
  - 19.1.5.4 Evaluation of vector resistance to chemical and biological products used to control arbovirosis and other vector-transmitted diseases:
  - Studies on vector competence and capacity: 19.1.5.5 genetic; virus-vector interaction; parasite-vector interaction; bio-ecology; and, virus circulation;
  - 19.1.5.6 Studies on "biological war" against the mosquito that transmits the dengue virus.
- 19.1.6 Studies on environmental (including space analysis), biological and behavioral risks in transmissible diseases:
  - 19.1.6.1 Natural history of cancer-related sexually transmitted diseases
  - 19.1.6.2 Ethnographic and social studies of STD, with emphasis on HIV/Aids;
  - 19.1.6.3 Studies of ecosystems related to viral and parasitetransmitted diseases:
  - 19.1.6.4 Social representation and sexual practices of different social groups in relation to Aids;\*
  - Social representation, prejudice, stigma, social 19.1.6.5 exclusion, citizenship and rights of individuals with Hansen's disease.\*

- 19.1.7 Researches to reduce hospital infection: multi-resistant pathogens and control of the use of anti-microbial agents:
  - 19.1.7.1 Prevalence of major fungi of medical relevance as etiological agents in hospital infections;
  - 19.1.7.2 Research on molecular techniques to trace intrahospital outbreaks;
  - 19.1.7.3 Research on efficiency, efficacy and efficiency of different actions to control hospital infections.
- 19.1.8 Studies on morbi-mortality of transmissible of diseases.
  - 19.1.8.1 Unusual manifestations of dengue in its different aspects: frequency, seriousness, risk factors;
  - 19.1.8.2 Incidence and prevalence of STD, with emphasis on HIV/Aids in different age groups and vulnerable populations;
  - Research on HPV: prevention, diagnosis, treatment, 19.1.8.3 incidence, prevalence and education in health;
  - Research on Hansen's disease: prevention, 19.1.8.4 diagnosis, treatment, incidence, prevalence and education in health and psycho-social aspects of the disease;
  - 19.1.8.5 Incidence, prevalence, mortality and survival in HIV/ Aids according to age groups and among vulnerable populations;
  - Prevalence of viral hepatitis and their complications; 19.1.8.6
  - 19.1.8.7 Prognostic factors of seriousness in hantavirosis;
  - 19.1.8.8 New strategies of quick monitoring to integrated analyses of clinical-epidemiological, entomological, virological and environmental data: alert observatories for dengue and yellow fever;
  - 19.1.8.9 Distribution and prevalence of tuberculosis: sociodemographic factors and genotypic population of the pathogen;
  - 19.1.8.10 Studies on the prevalence of different clinical forms of schistosomiasis, including neuroschistosomiasis in areas of low prevalence;
  - 19.1.8.11 Research on immuno-pathology and epidemiology of tuberculosis sequels:\*
  - 19.1.8.12 Incidence, prevalence and morbi-mortality of viral mvocarditis:\*

- 19.1.8.13 Morbi-mortality studies among boundary populations aiming at preventing endemic and epidemic diseases;\*
- 19.1.8.14 Impact of Leprosy reaction on the morbi-mortality in cases of hospital release due to cure;\*
- 19.1.8.15 Dimension of Hansen's disease recurrence after specific polychemotherapy;\*
- 19.1.8.16 Factors and risks of Leprosy reaction and physical disability;\*
- 19.1.8.17 Epidemiological studies on factors associated to the risk of developing Hansen's disease and the endemics dissemination in space and time.\*

## 19.1.9 Clinical Trials:

- 19.1.9.1 Differentiation between primary and secondary infections in dengue;
- Factors that influence the therapeutic response to 19.1.9.2 hepatitis, life quality and treatment among special populations;
- Icteric/hemorrhagic fever syndromes caused by 19.1.9.3 arbovirus;
- 19.1.9.4 Development of animal model to hemorrhagic dengue/ Dengue Shock Syndrome: advances in studies on physiopathogeny, treatment, prevention, immuno-biological agents trials;
- 19.1.9.5 Parasite and host factors associated to the development of serious forms, particularly those related to the development of hemorrhagic pulmonary forms and central nervous system in leptospirosis;
- 19.1.9.6 Mechanisms of immunity and immuno-pathogenesis of American Tegumentary Leishmaniasis and coinfections:\*
- 19.1.9.7 Studies on Hansen's disease co-infection and immunology;\*
- 19.1.9.8 Leprosy reaction: identification of landmarks for differential diagnosis between post-release and recurrence leprosy reaction in basic health care network.\*
- 19.1.10 Studies concerning disease transmission chain:
  - 19.1.10.1 Researches and studies on transmission,

- prevention and treatment of HTLV (I and II);
- 19.1.10.2 Transmission of viral hepatitis in the Amazon region and in specific situations;
- 19.1.10.3 Risk factors to the indoor and outdoor transmission of leptospirosis;
- 19.1.10.4 Role played by different hosts in the transmission of urban leptospirosis;
- 19.1.10.5 Development of models to assess the transmission capacity of Hansen's diseases carriers;
- 19.1.10.6 Experimental models of viroses transmission, such as arbovirosis and robovirosis;
- 19.1.10.7 Role played by domestic reservoirs in leishmaniasis and other endemics;
- 19.1.10.8 Studies on schistosomiasis urbanization;\*
- 19.1.10.9 Study on space distribution of American Tegumentary Leishmaniasis and risk factors in rural areas and indoor and outdoor.\*

# 19.1.11 Molecular Epidemiology

- 19.1.11.1 Genomic and proteomic analysis of targets of therapies, diagnosis and vaccination;
- 19.1.11.2 Sequencing of Cules and Aedes aegyhpt genome and genetic manipulation to control the vector;
- 19.1.11.3 Molecular studies to the etiological characterization of parasites, fungi, viruses and bacteria;
- 19.1.11.4 Genetic of parasites and vectors; evaluation of vector capacity in low-transmission areas; and, control of outdoor vector in Chagas' disease.

# 19.1.12 Serological Inquiries:

- 19.1.12.1 Serological profiles for arbovirus (primary and secondary infections) of populations with different coverage of vaccine against yellow fever;
- 19.1.12.2 Identification of potential areas to try vaccinations against dengue through the diagnosis on the group's immunity status, cases' incidence and existing viruses.

## 19.2 NEW TOOLS

19.2.1 New methods of diagnosis of transmissible diseases, mainly quick tests to early diagnosis:

- 19.2.1.1 Development of trials, methods and criteria of diagnosis to schistosomiasis with low parasite burden and neuroschistosomiasis;
- 19.2.1.2 Recombinant antigens for the diagnosis of leptospirosis in the early stage of infection;
- 19.2.1.3 New strategies of control, early diagnosis and new diagnostic techniques for tuberculosis in special groups;
- 19.2.1.4 Dengue quick tests;
- 19.2.1.5 Expression of viral recombinant proteins in heterologous systems such as yeasts, baculovirus and probably vegetal cells, among others, to be used in the kits of dengue diagnosis;
- 19.2.1.6 Development and validation of new tests for viral hepatitis to screen blood donators;
- 19.2.1.7 Immunological markers in HIV/aids, including analysis of lymphocyte population of TCD4+ among people in different social groups, with emphasis on those in situation of social unbalance;\*
- 19.2.1.8 New strategies of early diagnosis and new diagnostic techniques in toxoplasmosis with emphasis on immunodepressed individuals;
- 19.2.1.9 Quick test for Streptococus beta hemolítico;\*
- 19.2.1.10 Validation of Hansen's disease diagnosis criteria in force for the basic care network;\*
- 19.2.1.11 Evaluation of the use of auxiliary tests to the Hansen's disease diagnosis, like the test of histamine;\*
- 19.2.1.12 Studies to the standardization, at national level, of Montenegro antigen to the laboratorial diagnosis of American Tegumentary Leishmaniasis.\*
- 19.2.2 Methods for pathogens identification and typing:
  - 19.2.2.1 Protocols to differentiate seropositive individuals and viral genotypes;
  - 19.2.2.2 Quantitative methods to establish the viral burden;
  - 19.2.2.3 Genetic variability of the HIV: genotyping and serotyping;
  - 19.2.2.4 Protocols to identify pathogenic species of leishmania sp. in the Amazon region;\*

- 19.2.3 Development of bioinformatics-based tools to analyze genomes;
  - 19.2.3.1 Bioinformatics and genomic applied to the identification of targets for drugs, vaccinations and diagnosis of malaria.
- 19.2.4 Information system and models of epidemics prediction:
  - 19.2.4.1 Studies on databases integration;
  - 19.2.4.2 Mathematical models of epidemics prediction;
  - 19.2.4.3 Predictive models to build future scenarios.
- 19.2.5 Development of clinical protocols:
  - 19.2.5.1 Methods of prevention and treatment of malaria in children and pregnant women;
  - 19.2.5.2 Therapeutic schedules for cases of tuberculosis resistant to drugs, treatment of latent forms and reduction of side effects:
  - Methods of prevention and treatment of 19.2.5.3 Leishmaniasis in immunosuppressed individuals.
- 19.2.6 Epidemiological surveillance:
  - 19.2.6.1 Development of indicators to evaluate the impact of malaria and other endemics control;
  - 19.2.6.2 New methods to build entomological and epidemiological risks indicators for dengue and other endemics;
  - 19.2.6.3 Models of active search for cases and information system in viral hepatitis;
  - 19.2.6.4 Development of indicators to monitor hepatitis at hemodialysis clinics, considering the dialysis-related transmission;\*
  - 19.2.6.5 Development of epidemiological and operational indicators of monitoring of Hansen's disease elimination:\*
  - 19.2.6.6 Study on the use of quick serological tests to the surveillance of Hansen's disease contacts in areas reporting high endemicity;\*
  - 19.2.6.7 Development of indicators for recurrence surveillance, microbial resistance and postelimination of Hansen's disease;\*

- 19.3.1 The impact of technologies and policies on prevention, surveillance and control:
  - 19.3.1.1 Adherence to and impact of anti-retroviral therapy in Aids;
  - 19.3.1.2 Impact of treatment and control on Chagas', Hansen's and other diseases;
  - 19.3.1.3 Development of health education strategies and evaluation of their impact on the prevalence of schistosomiasis, Hansen's disease and other illnesses in endemic areas;
  - 19.3.1.4 Cost/effective strategies to prevent hepatitis and on hepatitis diagnosis and treatment;
  - 19.3.1.5 Evaluation of short-term treatment to leptospirosis;
  - 19.3.1.6 Studies to evaluate the strategies and impacts of actions developed by the National Program to Eliminate Hansen's Disease (*Programa Nacional de Eliminação da Hanseníase*), including the monitoring and evaluation of SUS basic health services and old hospital-colonies;
  - 19.3.1.7 Validation of WHO criteria to define cases of hemorrhagic dengue/ Dengue Shock Syndrome used in the epidemiological surveillance;
  - 19.3.1.8 Studies on bio-equivalence and bio-availability of anti-tuberculosis and anti-retroviral drugs produced in Brazil;
  - 19.3.1.9 Studies on the efficiency and impact of actions developed by the National Program of Dengue Control;
  - 19.3.1.10 Evaluation of environmental management impact on the control of vectors and reservoirs of Tegumentary and Visceral Leishmaniasis;
  - 19.3.1.11 Study on the causes of abandonment of the treatment of Hansen's disease, tuberculosis, rheumatic fever and paracoccidioidomycosis and strategies to improve the adherence to treatment of those pathologies;
  - 19.3.1.12 Evaluation of strategies to expand the access to effective methods of treatment and prevention of malaria;

- 19.3.1.13 Evaluation of efficacy and effectiveness of actions for hospital infection control.
- 19.3.1.14 Studies to evaluate the impact of actions developed by the Directly Observed Treatment System (DOTS) in tuberculosis:\*
- 19.3.1.15 Evaluation of state programs to face vectortransmitted diseases relevant to public health (dengue, leishmaniasis, schistosomiasis);\*
- 19.3.1.16 Evaluation of human and canine vaccinations against visceral leishmaniasis;
- 19.3.1.17 Quality, impact and solution capacity of integral care to seropositive populations living in social unbalance:\*
- 19.3.1.18 Evaluation of actions on diagnosis, treatment and monitoring of patient with American Tegumentary Leishmaniasis in rural areas;\*
- 19.3.1.19 Evaluation of the quality of policies on prevention, surveillance, care and control of American Tegumentary Leishmaniasis;\*
- 19.3.1.20 Evaluation of the quality of the database of reporting on American Tegumentary Leishmaniasis;\*
- 19.3.1.21 Evaluation of access of Hansen's diseased individuals to health services;\*
- 19.3.1.22 Studies on policies on physical and psychosocial rehabilitation of Hansen's disease patients;\*
- 19.3.1.23 Evaluation of the implementation of Hansen's disease control actions:\*
- 19.3.1.24 Evaluation of the use of prophylactic medication, additionally to the BCG vaccination, on Hansen's disease informers residing in endemic areas;\*
- 19.3.1.25 Indicators to evaluate the BCG impact on the reduction of new Hansen's disease cases and multibacillary forms, prior to and after the elimination;\*
- 19.3.1.26 Adherence to and abandonment of Hansen's disease patients:\*
- 19.3.1.27 Evaluation and monitoring of leprosy reaction after release in SUS services;\*
- 19.3.1.28 Study on the prevention of physical and social disabilities of Hansen's diseased individuals:\*

- 19.3.2 Cost-effectiveness, cost-benefit and efficacy of interventions:
  - 19.3.2.1 Evaluation of efficacy, efficiency and effectiveness of programs on control, diagnosis and treatment of Aids;
  - 19.3.2.2 Evaluation of morbidity burden and economic and psychosocial impact of dengue, Hansen's disease and other endemic diseases in different population groups and regions in Brazil;
  - 19.3.2.3 Efficiency and effectiveness of diagnosis through the Montenegro antigen trial and therapeutic of the American Tegumentary Leishmaniasis.\*

## 20 COMMUNICATION AND INFORMATION IN HEALTH

### 20.1 INFORMATION IN HEALTH

- 20.1.1 Evaluation of information in health: quality, consistency, reliability, validity, completeness, standards of information representation in databases, coverage, technological aspects, flows, electronic exchanges among systems.
- 20.1.2 Studies on the use of information in SUS decision-making processes:
  - 20.1.2.1 Development of indicators: health development index (HDI) data qualification; development of a minimum set of indicators to manage health systems and services; evaluation indicators; disease burden indicators; and, life quality indicators;
  - 20.1.2.2 Studies on awareness-building among health professionals concerning the purpose and relevance of health information;
  - 20.1.2.3 Development of methodologies to define parameters of use and analysis of information;
  - 20.1.2.4 Development of methodologies to univocal identification of user;
  - 20.1.2.5 Development of methodologies to the operational integration of health information systems;
  - 20.1.2.6 Evaluation of the implementation of health information systems identifying the critical factors to achieve successful health services;

- 20.1.2.7 Development of methodologies to the regionalization and hierarchy of health systems and services;
- 20.1.2.8 Evaluation of the impact entailed by the use of information and technologies to health management.
- 20.1.3 Studies oriented to information management:
  - 20.1.3.1 Information and knowledge management in SUS;
  - 20.1.3.2 Information needs and demands;
  - 20.1.3.3 Organization of the work process and information;
  - 20.1.3.4 Identification of competencies in the field of health information and informatics.
- 20.2 STUDIES TO FILL IN THE EXISTING GAPS IN HEALTH INFORMATION
- 20.2.1 Production of information to the cost-effectiveness analysis of health technologies;
- 20.2.2 Production of information oriented to cross-sectorality (environment, education, social securities, etc.);
- 20.2.3 Epidemiological profile and use of services and costs of the Private Health Insurance sector;
- 20.2.4 Integration between information provided by the Private Health Insurance and that of other SUS systems:
- 20.2.5 Diagnosis on information technologies infrastructure in the Health field in Brazil, existing information systems and portals.
- 20.3 TECHNOLOGICAL DEVELOPMENT BASED ON COMPONENTS, OPEN STANDARDS AND FREE SOFTWARE ORIENTED TO:
- 20.3.1 Support the decision-making in health systems and services.
- 20.3.2 Modeling work processes in health.
- 20.3.3 Vital statistics.
- 20.3.4 Multi-professional e-record of patients at all stages of services provided.
- 20.3.5 Indexer, classifier, automatic and generic recoverer of contents in health.
- 20.4 INFORMATION FOR SOCIAL CONTROL

- 20.4.1 Studies on access and populations' level of knowledge on health disorders and how health management bodies make that information available.
- 20.4.2 Studies on methods to transfer health information to the population.
- 20.4.3 Studies on the impact of communication's effectiveness on health councils.
- 20.4.4 Development of information and communication methodologies among health councils, their representation offices and civil society.

## 20.5 SCIENTIFIC AND TECHNICAL INFORMATION IN HEALTH

- 20.5.1 Development of methodologies to interconnect health science and technology systems, health scientific information systems and health information systems.
- 20.5.2 Development of evaluation indicators, use and impact of scientific production in health.
- 20.5.3 Diagnosis on the processes of technological transfer between groups of research and users, including the evaluation of main obstacles and mechanisms of optimization.
- 20.5.4 Development of methodology to provide information about research findings to health managers and services, users and civil society.
- 20.5.5 Development of the Internet-based information network on science, technology and innovation in health; development of indicators on the use and impact of the Brazilian scientific health journals.
- 20.5.6 Studies on the scientific dissemination in health and its impact on the constructing of knowledge and social practices, interface with scientific knowledge and other ways of knowledge.

## 20.6 COMMUNICATION, MEDIAS AND HEALTH

- 20.6.1 Development and incorporation of health communication technologies, such as telematics.
- 20.6.2 Development of the technological, aesthetical and political dimensions of the communication language in health.
- 20.6.3 Development of methodology to analyze the impact of commercial media and its effects on the population's health.

- 20.7 COMMUNICATION AND HEALTH SERVICES
- 20.7.1 Studies on communication in the everyday life of health services.
- 20.7.2 Studies on communication and logics conflict: sanitary and population's logic.
- 20.7.3 Studies on ways of expressing the population's demands.
- 20.7.4 Development of socio-ethical networks in health subjectivities and sociability.

### 21 MANAGEMENT OF LABOR AND EDUCATION IN HEALTH

- THEORETICAL-METHODOLOGICAL FOCUS 21.1
- 21.1.1 Theoretical and methodological referential for education in health.
- 21.1.2 Logics and processes of professional qualification for all levels of education and work in the SUS.
- 21.1.3 Alternative medical rationalities and their contribution to the qualification of professionals and structuring of work process.
- 21.1.4 Political-pedagogical process concerning the Health field: reformulation, insertion of proposals of Resolution # 218 of the National Health Council, humanization of work in health services and biopsychosocial model of work.
- 21.1.5 Curriculum innovations in professionals' qualification and adjustment of education methodologies to SUS' social and technical requirements.
- 21.2 ORGANIZATION AND EVALUATION OF POLICIES, PROGRAMS AND SERVICES
- 21.2.1 Ways of managing the work, knowledge and technologies, in the organizational and institutional light.
- 21.2.2 Factors of supply and demand for qualification and job posts.
- 21.2.3 Work processes and health qualification, their specificities in relation to the set of professions in face of the incorporation of new technologies, knowledge, practices and ways of professional insertion, considering basic care, medium and high complexity.
- 21.2.4 Evaluation of the use of work humanization policy in health services.

- 21.2.5 Characteristics of labor relationship: formal, informal character and work precarious conditions.
- 21.2.6 Work's and specific health professions' regulation process; regulation of qualification and permanent education.
- 21.2.7 Alignment of boundary labor markets and their integration at national level.
- 21.2.8 Educational experiences in health in services and communities - in face of the structure, pertinent laws and articulation with the education sector.
- 21.2.9 Outlining and execution of new institutional arrangements related to permanent education initiatives, emphasizing the Permanent Education Poles.
- 21.2.10 Approach of popular education in health in the qualification and permanent education at all levels.
- 21.2.11 Studies on management processes related to the work and professional education in the following fields: Mental Health, Elderly Health, Violence, Accidents and Traumas, Hansen's disease.
- 21.2.12 Migration of professionals in the health services network and its determinants.
- 21.2.13 New professions and methodologies of work for the Family Health Program's teams, considering the different work realities.
- 21.2.14 Evaluation of the impact of capacity-building actions for the Family Health Program's team in relation to the coverage of Hansen's disease.
- 21.2.15 Evaluation of professional trainings in prevention, diagnosis and treatment of Hansen's disease.
- 21.2.16 Analysis of the impact of human resources training on SUS consolidation.
- 21.2.17 Production and appraisal of popular knowledge.
- 21.2.18 Studies to subsidize the elaboration and implementation of Career Plans to the duties related to Science, Technology and Innovation at the three SUS spheres.
- 21.2.19 Impact of the Fiscal Liability Act (*Lei de Responsabilidade Fiscal*) on the allotment of human resources in health.
- 21.2.20 Impact of continuous education interventions and professional qualification in the field of pharmaceutical care.
- 21.2.21 Evaluation of medical care quality, with emphasis on clinical consultation, time and infrastructure.\*

- 21.3 EVALUATION, DEVELOPMENT AND EMPLOYMENT OF **TECHNOLOGIES**
- 21.3.1 Development of technologies to qualify health professionals to work on policies formulation, services organization, human resources qualification in health.
- 21.3.2 Development of methodologies oriented to health professional's capacity-building, with emphasis on ethic aspects and moral values related to the overcoming of nocive effects of social determinants on health.
- 21.3.3 Development and evaluation of educational contents, methods and strategies to the qualification and capacity-building of human resources to work in different health areas.
- 21.3.4 Development of methodologies and the impact of permanent education in health.
- 21.3.5 Distance education including aspects such as: models of technologies, telemedicine and use in permanent education at sites of hard geographic access.
- 21.3.6 Development of methodologies and parameters to measure the needs of professionals and experts at all levels of qualification to the health system.
- 21.3.7 Evaluation of community-based mobilization strategies to work on the program of Hansen's disease elimination.
- 21.3.8 Studies on the articulation of non-governmental organizations and civil society to outline, implement and evaluate policies to Hansen's disease.

### 22 HEALTH SYSTEMS AND POLICIES

- 22.1 THEORETICAL-METHODOLOGICAL FOCUS
- 22.1.1 Health Memory and history.
- 22.1.2 Brazilian federalism.
- 22.1.3 Globalization, regional integration, multilateral agreements.
- 22.1.4 State Reform.
- 22.1.5 Links between health system and social security.
- 22.1.6 Social policies financing structure.
- 22.1.7 Philosophy and health.

- 22.2 DYNAMICS AND UNDERSTANDING OF HEALTH SYSTEMS AND POLICIES
- 22.2.1 Studies on the basic organization of the system, integrality, decentralization, regionalization, cross-sectorality, coverage, access and continuity, quality and effectiveness.
- 22.2.2 Studies on modalities of management, managerial practices and public-private relationships; standardization, regulation and models of evaluation of health systems and actions.
- 22.2.3 Studies on the incorporation of planning in health policies and health management technologies.

## 22.3 STUDIES ON SOCIAL CONTROL IN HEALTH

- 22.3.1 Health councils and managerial councils: structure, representativeness, legitimacy, permeability, parity, impact on practice and on management and dynamics of SUS work.
- 22.3.2 Health conferences: character, impacts on SUS policy enforcement, commitments, equal representativeness of segments and involvement of participants.
- 22.3.3 Communication and media: dimension and roles in health social control.
- 22.3.4 Legislative and Judiciary Powers in SUS construction at federal, state and municipal level.
- 22.3.5 Innovation in participatory mechanisms
- 22.3.6 Users' and workers' satisfactions in relation to health policies, programs and services.

## 22.4 STUDIES ON HEALTH CARE

- 22.4.1 Studies on models of health care responsive to populations in different conditions, emphasizing geographic, behavioral, gender and transgender aspects.
- 22.4.2 Evaluation studies on: quality and humanization in care, resolution of SUS hierarchical levels, access to health services and actions on promotion, prevention, recovery and rehabilitation.
- 22.4.3 Studies on the Family Health Program: evaluation of impacts, evaluation of care technologies, eating orientation, insertion of new professionals in the teams.
- 22.4.4 Studies on natural medicine and complementary health practices in SUS, such as: homeopathy, acupuncture,

- traditional Chinese medicine, anthroposophic medicine, phytotherapy and corporal practices.
- 22.4.5 Studies on the influence on the access, care and therapies provided by SUS, the identity of users' gender and likely impacts on the morbi-mortality and quality of life.
- 22.4.6 Identification of health system evaluation standards, in the users' light.\*
- 22.5 EVALUATION OF THE SCIENCE, TECHNOLOGY AND INNOVATION IN HEALTH SYSTEM\*
- 22.5.1 Policies of industrial and technological development: regulatory framework.\*
- 22.5.2 Intellectual Property Law, agreement on aspects related to intellectual property concerning trading - TRIPS, Bidding Law.\*
- 22.5.3 Social impact of science, technology and innovation.\*
- 22.5.4 Social impact of health research financing in Brazil.\*
- 22.5.5 Appropriation of the production process, use and dissemination of knowledge.
- 22.5.6 Social participation and public perceiving of science and technology.\*
- 22.5.7 Evaluation of public and private financing and of fomenting to health research in Brazil.\*
- 22.5.8 Evaluation of the use of researches in public health policies and programs - models and indicators.\*
- 22.5.9 Indicators of monitoring and evaluation of financial resources flow to R&D in health.\*

### 23 HEALTH, ENVIRONMENT, LABOR AND BIO-SECURITY

- 23.1 IMPACT OF ENVIRONMENTAL CHANGES OVER HEALTH
- 23.1.1 Monitoring and evaluation of major development projects to the Amazon region, semi-arid, cerrado and Pantanal, on prevention of damages to health and environment.
- 23.1.2 Replacement of urban and rural productive processes by cleaner and less dangerous production means, control of plagues in agriculture.
- 23.1.3 Effects of unbalanced powers to face environmental problems: confrontation among State, corporations and workers.

- 23.1.4 Studies on transnational risks and population exposure.
- 23.1.5 Links among environmental risk factors: deforestation, mining, gold mining, asbestos, monoculture regions, areas missing basic sanitation, regions with wild animals, among others, and the occurrence of endemics and epidemics.
- 23.1.6 Global environmental changes such as desertification, biodiversity loss, climatic changes, deforestation and impact on health.
- 23.1.7 National inquiry about the effects on health and environment ensued by unbalanced chemical elements and compounds in nature.
- 23.1.8 Continuous monitoring and evaluation of socio-economic, health and environmental impacts of big undertakings, particularly the exploitation of petrol and natural gas.
- 23.2 IMPACT OF LABOR RESTRUCTURING OVER HEALTH
- 23.2.1 Study on social perception of risk.
- 23.2.2 Risks entailed by the work in the Health field originated by the Health sector itself: chemical, physical, biological, psychosocial, bio-security, ergonomics, iatrogenics, among others.
- 23.2.3 Evaluation of prevention and monitoring programs on workers' health in civil construction, gold mining, rural settlements, informal labor, infantile-juvenile labor, under high risk, violence and others.
- 23.2.4 Studies on disorders, including accidents and diseases resulting from work overload, exposure to risk factors, neural-behavioral, endocrinology, immunological and mental disorders, cancer, disorders resulting from intangible factors of the production organization, chronic diseases, respiratory diseases (asthma), congenital malformation, diseases resulting from exposure to asbestos and aluminum.
- 23.2.5 Effects of labor precarization on workers' health and old production modalities resulting from technology transfer processes.
- 23.2.6 Evaluation of life quality in formal and informal labor.
- 23.2.7 Social exclusion and vulnerable environments.
- 23.2.8 Development and evaluation of professional rehabilitation programs targeting victims of job-related accidents and occupational diseases.\*
- 23.2.9 Survey on the working conditions for specific professional

- categories: health, education and informatics professionals.\*
- 23.2.10 Evaluation of working conditions in the fields of metallurgy, telematics, judiciary and security corporations.\*
- 23.2.11 Evaluation of the effects of occupation and environmental exposure to chemical agricultural produces on human health, emphasizing rural worker's health.\*
- 23.3 EVALUATION OF THE STATE PUBLIC REGULATORY POLICIES AND IMPLICATIONS TO THE SOCIAL CONTROL AT THE THREE GOVERNMENT LEVELS.
- 23.3.1 Modeling of complex socio-environmental and eco-sanitary issues with impact on health.
- 23.3.2 Studies on socio-environmental variables using the territory - water basins - and ecosystems as the analysis unit.
- 23.3.3 Evaluation of interventions and management of sanitary surveillance.
- 23.3.4 Evaluation of the basic sanitation policy in all of its dimensions.
- DEVELOPMENT OF MODELS, METHODOLOGIES AND 23.4 INFORMATION SYSTEMS IN HEALTH, ENVIRONMENT AND LABOR
- 23.4.1 Development of models of incorporation of workers' health care in SUS, with emphasis on the Center of Worker's Health Reference (CERST).
- 23.4.2 Development of strategies to disseminate information, communicate and notify environmental risks and accidents and labor accidents.
- 23.4.3 Development of markers/indicators taking into consideration the precaution principle, related to sanitary, environmental and health surveillance for workers.
- 23.4.4 Development of clinical-care protocols to the survey in environmental and workers' health.
- 23.4.5 Development of modalities of enforcement of precaution measures, such as new protection equipment to rural workers.
- 23.4.6 Development of methodologies to evaluate the impact of environmental licensing on the health (population's and worker's health).
- 23.4.7 Studies to implement better measurement of the variable occupation, comprising formal and informal labor market.

- 23.4.8 Development of methodologies to evaluate and manage risks entailed by the productive processes, anthropic consumption and geogenic sources.
- 23.5 DEVELOPMENT OF MODELS, METHODOLOGIES AND INFORMATION SYSTEMS IN BIO-SECURITY
- 23.5.1 Development of bio-security procedures with pre-clinical and clinical assays, comprising genetically modified organisms (GMO) and their derivatives.
- 23.5.2 Development of laboratorial procedures, involving the diagnosis of genetically modified organisms and their derivatives, to allow the effective labeling and implementation of a process of post-trading control for food products and medications.
- 23.5.3 Development of integrated systems of biological security involving emerging microorganisms, re-emerging ones and those of intentional introduction, including work processes in hospitals, laboratories and animal facilities.
- 23.5.4 Production of methodologies for field laboratory diagnosis and for quick diagnosis / screening in bio-security.
- 23.5.5 Methods of diagnosis and health status assessment in relation to products, services and technologies: risk, efficacy, security and quality.
- 23.5.6 Development of methodologies to the linking among exposure, risk and disorders, taking into consideration the set of clinical, epidemiological, laboratorial evidences, animal experimental studies and the social perceiving of the disorder.
- 23.6 DEVELOPMENT OF MODELS, METHODOLOGIES AND INFORMATION SYSTEMS IN ENVIRONMENTAL HEALTH
- 23.6.1 Review of the current model of endemics control and analysis of the impact of integrated environmental management, environmental surveillance, basic sanitation actions and health promotion.
- 23.6.2 Development of environment, sanitation and water resources management models, employing low-cost technologies, population's awareness and evaluation of impacts on health.
- 23.6.3 Production of technologies to the intervention and remedy actions in contaminated areas (environmental liability).

- 23.6.4 Development of exposure frameworks to agricultural and industrial area, and environmental liabilities with impacts on health.
- 23.6.5 Development of sentinel systems to prevent damages to health and environment.
- 23.6.6 Development of methodologies to the diagnostic and evaluation of environmental impact on health due to: agricultural chemicals, household products, veterinarian products and disposal of pharmaceutical products, residues of health services, persistent toxic substances, transgenic products, organic pollutants and solvents, heavy metals, radioactivity, industrial and household waste disposal sites (lixões), electromagnetic fields, sound pollution, atmospheric pollution, biomass burning, cemeteries.
- 23.6.7 Development of technology to the reduction and final disposal of products harmful to human health and environment, resulting from health, industrial and domestic services, such as: pollutant, toxic, chemical and radioactive debris.
- 23.6.8 Development of researches related to sanitation, with emphasis on water supply, such as: evaluation of the link between sanitation and health; impacts and implications of legislation on the population's access to quality water; use of alternate sources of water, such as small pools (cacimba) and ballast water.
- 23.6.9 Development of projects to appropriate new technologies in public health engineering and environmental sanitation.
- 23.6.10 Alternative technologies in the sanitary field, such as: selective collection, recycling and bio-remedy processes in sanitary landfills.

### 24 PHARMACEUTICAL CARE

- CHEMICAL 24.1 DEVELOPMENT AND EVALUATION OF PHARMACEUTICAL PRODUCTS AND MEDICATIONS
- 24.1.1 Studies on chemical pharmaceutical products and medications, considering their entire cycle: from research to the safe use of medications, including control of quality and populations' access.
- 24.1.2 Development of chemical pharmaceutical products and medications to the treatment of highly prevailing diseases in

- Brazil and its regions.
- 24.1.3 Exploitation, production and control of quality of phytotherapeutic products, according to regional potentialities, to treat the most prevailing diseases.
- 24.1.4 Research on active principles, development of fine chemistry and production of inputs to the public production of medications to SUS, considering legal aspects related to the registration of patents, in order to ensure autonomy to the national production.
- 24.1.5 Studies in pharmacoepidemiology and pharmacosurveillance.
- 24.1.6 Pharmaceutical care to groups of special patients, notably in SUS basic network.
- 24.1.7 Research and development of homeopathic medications and those produced with the Brazilian flora.

### 24.2 EVALUATION OF POLICIES, PROGRAMS AND SERVICES

- 24.2.1 Development of evaluation tools and indicators to processes of pharmaceutical care organization and management.
- 24.2.2 Studies on the evaluation of pharmaceutical care efficacy and effectiveness.
- 24.2.3 Evaluation of the efficacy, efficiency and effectiveness of the exceptional medications' program.



(Standardization, review, desktop, printing, finishing and issuance)
SIG Qd. 08 Lote 2265 - CEP: 70.610-480
Telephone: (61) 3344-2112 - Fax: (61) 3344-2077

E-mail: comercial@idealgrafica.com.br
Brasilia - DF, October 2006

The institutional collection of the Ministry of Health can be accessed for free at the Virtual Library of the Ministry of Health: http://www.saude.gov.br/bvs

The content of this work and other works published by the Editora do Ministério da Saúde may be accessed for free at: www.saude.gov.br/editora