

Domain Thirty One

Health Research and Studies

**Vision: An Efficient Health Information and Research System to
Meet the Needs of Health System
Goal: Strengthening the System of Statistics,
Health Information and Research
Domain: Health Research and Studies**

INTRODUCTION:

Health research is an investment for development and health improvement. It is an essential source of evidence-based information that cannot be provided through routine sources that are required for the process of planning; implementation; monitoring and evaluation. Research is an essential tool for formulation of solid information system and database.

Therefore, the Ministry of Health (MoH) had established the Department of Research and Studies under the Directorate General of Planning since 1991 which draws the research policy and sets the research priorities from the "fifth 5-Year Plan for Health Development, 1996-2000" and onward. The research policy aims at spreading of research culture; promotion of the scientific approach; development of research skills & infrastructures at different levels of health sectors and utilization of research findings in planning and improving the effectiveness and efficiency of health system and decision making.

In this respect, the Research and Studies department, during this eight 5 year plan, focuses on the availability of well-trained and competent researchers at the central and regional levels who are capable to conduct researches and training.

To have accurate and reliable data, there should be a commitment to the standard regulations of scientific methods & ethical considerations of researches. Hence, ethical approval should be obtained from the Ethical and Review Committee as to yield good quality of research and good output.

In addition to have high quality of researches, it is also important to get use of the available data and information from the previous researches and surveys as these researches provide evidence base for the health policy and decisions makers in their implementation plans. Furthermore, It is also important to narrow the gap between the "knowledge and action" through appropriate communication and interactions between the decision makers and the researchers as this will lead to appropriate use of evidences from the researches for policies formulation.

However, the success of any research should not only be measured by the number of researchers or number of published papers, but also by implementation and appropriate utilization of research findings.

Conducting researches require collaboration between different sectors and institutions, as this Multidisciplinary approach will lead to study the problem from different aspects; mobilization of resources and solutions, which are beyond the single sector. Furthermore, links are important between researchers (supply side), research users (demand side) and funding agencies in addition to partnerships with the community, NGOs and the private sector.

Worldwide, less than 10% of health research budget each year is devoted to the health problems of 90% of the world population. The so called "10/90 gap" leads to many international conferences which recommended helping correct or narrowing the gap and

focusing research effort on the research priorities, improving the allocation of the research funds and by facilitating collaboration between partners.

The general aim of the Eight "5- year Plan for Health Development" is to achieve more development & progression in researches & studies by managing the problems & obstacles that identified through analyzing the health situation. These obstacles are:

- The available qualified manpower and financial resources cannot meet the demands of the researches.
- There are no enough trained persons to train others for research methods and ethics and for statistical analysis, especially in the regions.
- Poor verification of researches and studies priorities at regional levels.
- Poor obligation and commitment to the planned priority proposals/researches and this causes deficiency in the needed data and information for planning and monitoring processes at the levels of both the centre and the regions
- Poor documentation and follow up to the steps of some researches that affects the utilization of research findings for planning, policy formulation and decision making..
- Lack of obligation of some researchers with regard to submission of their proposals to the Research and Ethical Review Committee at the central or regional levels. This led to execution of research by unqualified researchers and to duplication of researches in many times.
- Lack of longitudinal; projection; interventional and evaluative studies and inadequate secondary/advanced analysis of available data.

OBJECTIVES:

1. Provision of data and information that are required by health system through conducting researches and studies by the domains.
2. To develop technical capabilities and skills of Health Research Teams on research design, methodology and other skills.
3. To develop and improve the capacity of research users at different levels to utilize information as a tool for evidence-based planning and management.
4. To develop and strengthen the infrastructure of Health Research System (HRS) and ensure its high quality.

OBJECTIVES' INDICATORS:

| Indicators | | Past situation 2005 | Current situation 2010 | Targeted situation 2015 |
|---|--|------------------------|---------------------------|----------------------------|
| First Objective's Indicators: Provision of data and information that are required by health system through conducting researches and studies. | | | | |
| 1. | Percentage of health and health related domains in the eight 5 - Year Plan for Health Development which conducted research to provide required information for the process of monitoring and evaluation. | 50% | 70% | 85% |
| 2. | Percentage of conducted researches to the total number of the targeted researches. | 50% | 65% | 75% |
| Second Objective's Indicators: To develop technical capabilities and skills of Health Research Teams on research design, methodology and other skills. | | | | |
| 1. | Percentage of researches that been approved by MoH Research & Ethics committee, to the total number of the conducted researches. | NA | 65% | 80% |
| 2. | Percentage of trainees who conducted researches to the total trainees on research design and methodology. | NA | NA | 50% |
| Third Objective's Indicators: To develop and improve the capacity of research users at different levels to utilize information as a tool for evidence-based planning and management. | | | | |
| 1. | Percentage of researches utilized for planning and improving health services to the total researches. | NA | 60% | 80% |
| Fourth Objective's Indicators: To develop and strengthen the infrastructure of Health Research System (HRS) and ensure its high quality | | | | |
| 1. | Availability of updated and well established research data base. | NA | NA | Available |
| 2. | Percentage and number of published researches to the conducted researches (<i>Scientific conferences & workshops – Local, regional or international Journal</i>). | NA | NA | 60% |

STRATIGIES:

Strategies to Achieve 1st Objective: Provision of data and information that are required by health system through conducting researches and studies by the domains

1.1 Identification of the research priorities and direct the researches towards the priority health problems, towards vulnerable groups and health system problems.

Expected results:

- Provision of enough data on priority health problems aiming at decreasing of morbidity and mortality; improving the quality of life; better utilization of resources, assuring health care equality; understanding reasons of diseases spreading and performing appropriate intervention.
- Provision of detailed information to meet the needs of health planning and policy making.

2.1 Introducing "Package of Periodic Training" on research that supporting the domains and the different health programmes.

Expected results:

- Improvement of quality of writing research proposal as this will facilitate the approval of Research and Ethics committee.
- Availability of appropriately conducted researches according to the plan, which are adherent to the scientific standards of the research.

1.3 Involvement of private sector, NGOs and community in different stages of research.

Expected results:

- Availability of researches that are directed to accommodate the community needs.
- Ensure different resources of finance.

1.4 Coordination among research stakeholders inside and outside the Ministry of Health and international organizations.

Expected results:

- Availability of "**memorandum of understanding**" between the concerned research authorities agreed and signed by all of them , such as (academics; scientific research council of Oman; other ministries and international organizations) and the Ministry of Health in order to be adherent to research priorities which should be an area for collaboration and support to each others.
- Availability of high quality joint researches from the domains to be used for planning.

Strategies to Achieve 2nd Objective: To develop technical capabilities and skills of Health Research Teams on research design, methodology and other research skills

2.1 Training for developing the skills in research methods, research ethics, in addition to the other skills of research.

Expected results:

- Empowerment of the researchers' capabilities as to conduct high standard researches. This

includes research ethics; follow up of research conduction; statistical analysis; appropriate research writing for publication in scientific journals, and utilization of results for evidence-based policies and decisions making.

- Promotion of research culture and increase trust on quality research results as this will encourage the users to utilize the findings.
- Developing and improving the capacity of Research and Ethics Review Committees.
- Avoid wastage of resources allocated for studies conducted on unscientific basis.
- Encouragement of the researchers to cooperate together and to be adherent to the research ethics, publications and authorship credits.

2.2 Availability of trained & qualified research staff who are capable to train others on research methods and ethics.

Expected results:

- Availability of trained researchers at the central and regional levels who capable to conduct researches and studies in accordance with the research standards.
- Improvement of quality and efficiency of the Research and Ethics committees in the regions.

Strategies to Achieve 3rd Objective: To develop and improve the capacity of research users at different levels to utilize information as a tool for evidence-based planning and management.

3.1 Training of the health planners and decision makers on how to use the research results.

Expected results:

- Capacity development of the directors, policy makers and health care providers on use of research findings for planning and improvement of health services.
- Implementation of the research findings and formulation of polices.
- Enhancement of the process of planning and decisions making based on knowledge and evidence.
- Encouragement of the second line leaders to use the evidence-based knowledge on their practices.

3.2 Promotion of evidence- based medicine for clinical research and health management.

Expected results:

- Clinical practices of health care providers, managers and researchers based on evidence.
- Improvement of the health care services.

Strategies to Achieve 4th Objective: To develop and strengthen the infrastructure of Health Research System (HRS) and ensure its high quality

4.1 Formulation of plans for recruiting of adequate number of qualified staff for the Department of Research and Studies through coordination with Human Resources Department.

Expected results:

- Provision of adequate number of research specialists, statisticians and information technology specialists and coordinator to carry out the health research plan activities in order to achieve the objectives of the plan.
- To send a number of research specialists abroad to have higher studies in research methods and ethics as to be able train the others.

4.2 Establishing Data Base for research activities, results and research necessary for planning and decision making.

Expected results:

- Avoidance of double and repetitive researches.
- Dependence on evidence based knowledge when making decisions.

4.3 Facilitation for the MoH researchers to have access to scientific references through subscriptions to medical periodicals.

Expected results:

- Available information from different sources.
- Availability of full text published papers of other countries and in Oman.
- Easy and in depth analysis of data and its interpretation.
- Facilitate decisions making based on evidence from the research.

4.4 Revision and expansion of the functions of the "Research & Ethical Review Committee" centrally and activating the committees in the health regions.

Expected results:

- To have an upgraded rules for reviewing and approval of research proposals and revision of the final reports.
- Coordination with other sectors, ministries, research and academic institutes, and international organizations.
- High quality researches that following the scientific research guidelines; avoiding repetition or duplication and with highly reliable findings that can be used for planning, decisions making and policies formulation.

4.5 Encouragement of publications of the researches results through:

- **Creating electronic websites.**
- **Training in how to formulate policies that based on evidences, and training in scientific writing of articles and publication.**

Expected results:

- Increase of interactions between decision makers and managers from one side and the researches from the other side for the purpose of decision and policies formulation based on knowledge and evidences that obtained through the research.

STRATEGIES' INDICATORS:

| Indicators | Follow up timing | Current situation 2010 | Targeted situation 2015 | |
|---|---|------------------------|----------------------------------|---|
| Indicators of Strategies of the 1st Objective | | | | |
| 1.1a | Availability of priority list of research (central and in every region). | Annually | Central & Regional priority list | Updated Central & regional priority lists |
| 1.1b | Percentage of research & studies conducted to total targeted research in the 5 y. plan. | Annually | 65% | 75% |
| 1.2a | Number of trainings including the periodic training package (<i>after meeting with the focal pionsots of the different domains at central and regional levels.</i>) | Annually | Not applied | 4 trainings |
| 1.2b | Number of trained persons in the training package of the research. | Annually | Not applied | 25 trainees / workshop (100 in the plan) |
| 1.2c | Number of protocols that been applied to and approved by the Research & Ethics Committee. | Annually | NA | 15 protocol per year |
| 1.3a | Percentage of researches that conducted by MoH in collaboration with and participation of private sectors, NGOs or community. | Annually | 10% | 30% |
| 1.4a | Number of meetings between the concerned people of the research after signing the memorandum of understanding. | Annually | Not applied | 4 meetings (once per year) |
| Indicators of Strategies of the 2nd Objective | | | | |
| 2.1a | Number of training workshops held for developing research capabilities and skills. | Annually | Two workshops annually | One workshop annually (in total 5 in the 8 th plan) |

| Indicators | | Follow up timing | Current situation 2010 | Targeted situation 2015 |
|--|--|------------------|-----------------------------|---|
| 2.1b | Number of trainees for developing research capabilities and skills. | Annually | 60 trainees annually | 30 trainees annually |
| 2.1c | Number of trainees sent abroad to study research methodology and ethics. | Annually | Not applied | 5 |
| 2.2a | Number of training workshops held to qualify researchers in order to be capable to train others (TOT) (2-3 months). | Annually | Not applied (new indicator) | Two trainings workshops per the 8 th plan |
| 2.2b | Number of trainees who are capable to train others (2-3 months). | Annually | NA (new indicator) | 25 trainees per workshop (50 persons during the whole 8 th plan) |
| Indicators of Strategies of the 3rd Objective | | | | |
| 3.1a | Number of workshops held to train in how to implement the researches findings and use them for policies formulation and decision making. | Annually | One workshop | Two workshops/ the 8 th plan |
| 3.1b | Number of trainees on the above mentioned workshops. | Annually | 40 trainees | 30 trainees/workshop (60 in total/plan) |
| 3.2a | Number of workshops held in favor of Evidence-based Medicine. | Annually | 1 | Once per year |
| 3.2b | Number of trainees in Evidence-based Medicine- in the fields of clinical practice and health management and administration. | Annually | 30 trainees annually | 30 trainees annually |

| Indicators | | Follow up timing | Current situation 2010 | Targeted situation 2015 |
|---|--|------------------|---|---|
| Indicators of Strategies of the 4th Objective | | | | |
| 4.1a | Presence of central plan for sanctioning the required manpower/human resources. | Annually | Presence of central plan | Presence of updated central plan |
| 4.1b | Number of research specialists/experts in the Department of Research and Studies. | Annually | 3 | 5 |
| 4.1c | Number of statisticians in the Department of Research and Studies. | Annually | 3 | 5 |
| 4.1d | Presence of supporting manpower (<i>information technology persons, coordinators etc.-.</i>) | Annually | NA | 2 |
| 4.2a | Presence of well established & updated database for different research activities. | Annually | NA | Available |
| 4.2b | Number of subscriptions in websites and/or electronic journals. | Annually | NA | 2 websites |
| 4.3a | Numbers of regions that have active research committees (<i>conduct at least 3 meetings/year.</i>) | Annually | 4 | All regions |
| 4.3b | Presence of annual timed work plan for research activities at the beginning of each year in each region. | Annual | Presence of annual work plan for every region | Presence of annual work plan for every region |
| 4.3c | Presence of periodic reports from Research Committee /Research Coordinator in each region about their annual achievements. | Annually | Presence of annual report for every region | Presence of annual report for every region |

| Indicators | | Follow up timing | Current situation 2010 | Targeted situation 2015 |
|------------|--|--------------------------------|------------------------|-------------------------|
| 4.3d | Percentage of reviewed studies by Research & Ethics Review Committee to the total number of conducted studies. | Annually | 60% | 90% |
| 4.4a | Percentage of published studies to the total number of the conducted studies. | Annually | NA | 60% |
| 4.4b | Conduct a study to assess the performance of the Health Research System in Oman. | By the end of the current plan | NA | Presence of the study |