Grant agreement no: 223075

Project Acronym: MedCHAMPS

Project Title: Mediterranean studies of Cardiovascular disease and Hyperglycaemia: analytical Modelling of Population Socio-economic transitions

Funding scheme: SICA

Deliverable: D5.1 and D5.2

Work Package 5 (WP 5):
National situation analyses of current policy and health system contexts

Start date: 1st September 2009
End date: 28th February 2011

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March 2011

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Part A

1. Overall Executive Summary

1.1 Introduction

The WP5 Report to the EC comprises two parts: Part A, the Overview of the work package, including an account of the overall research design; and Part B, by far the larger, made up of the four country reports by partner teams.

The overall aim of Work Package 5 (WP5) within MedCHAMPS has been twofold, firstly to undertake a situation analysis of current CVD and diabetes policy in the four partner countries (namely Palestine, Tunisia, Turkey and Syria), and secondly to analyse the contexts in which health systems manage CVD and diabetes in these countries, at a regional and sub-regional level. To achieve these aims WP5 has been designed around three distinct 'levels' of data collection: documentary analysis; key informant interviews; and clinic fieldwork. We have sought in this design to reflect the relationship between policy and practice in terms of a level of conceptualization (by analysis of various policy and strategy documents), a level of awareness (by interviewing key informants who had a significant stake in, or overview of, current health policies and the policy-making process), and a level of practice (by conducting fieldwork in a series of clinics, reflecting different levels of medical provision). Our purpose has been to link national, regional and local perspectives to provide an up-to-date insight into CVD and diabetes policy and health services and treatment in one area of each country.

These aims and this design are intended to partner the work of MedCHAMPS WPs2-4, and together with these other work packages feed into the analysis to take place in WP6, which follows. This WP represents an ambitious programme of work for the four partner teams, reflected in the scope and length of the four country reports submitted in Part B. The research conducted has involved considerable data collection within a primarily qualitative paradigm. That has been relatively new to most partners, and completely new in one case (Syria). The challenge has been considerable, both in terms of organising and completing data collection to a high standard, and in analysing the findings. These challenges have been met, and all four teams have completed the same tasks in the same depth, as reflected in their country reports. We highlight here in particular the linguistic challenge this has involved, for four teams for whom English is not the first language. Despite close editing by the Newcastle team, we hope that this will be borne in mind when reading the country reports. As is to be expected, this report at the end of the WP5 period, is a first stage in analysis of the data collected; publications will follow as our analysis, in individual teams and collectively, develops.

1.2 Methodology

In order to conduct the situation analysis mentioned above we have drawn on and adapted elements taken from the approach known as Rapid Assessment Procedures (RAP), including also elements of an ethnographic approach. Time necessitated that we draw on rapid assessment techniques; the relative inexperience of WP5 researchers also made it more suitable than a more extended form of fieldwork. The broader aim of WP5 was divided into specific research objectives and questions. The choice of data collection methods was then guided by these research questions. The data collection tools included: Document review, Key Informant interviews, Health Provider interviews, Observation of clinic practice, Record review, Patient exit interviews, Patient in-depth interviews, and Family member in-depth interviews. Clinic fieldwork was done in order to track how national policies for CVD and diabetes were transmitted down the health system and translated into practice. Because the research questions identified in WP5 were new to the MedCHAMPS partner countries, and involved unfamiliar methodological skills and perspectives, various forms of training were organized. Two main training workshops were held in qualitative research methods to introduce the relevant WP5 researchers to the techniques and conceptual basis of the chosen approach. There were country specific challenges in terms of finding the relevant documents, contacting key informants and carrying out the clinic field work. However, each partner organized their task in the way best suited to the staff available and produced the country report on time and with great enthusiasm, and we in Newcastle wish to underline here the considerable achievement this has been in each case.

1.3 Summary of key Country Report Findings

Following are the key findings and conclusions from each country's WP5 research.

(a) Palestine

The available policy documents demonstrate that there is an acknowledgement of the current epidemiological and demographic transition in the oPt and of the consequent burden of NCD. Comprehensive and intersectoral approaches to tackle the NCD burden have also been emphasized in policies. Policy makers, health managers and implementers also show a considerable commitment towards controlling the NCDs. However, no clear plan for implementing the policies and coordination between different sectors is evident. The health management system also appeared to be highly centralized with a lack of referral system. The health information system was found to be poor. There is a severe lack of data concerning NCD risk factors, financing and so on which hinders evidence-based decision making. Shortage of skilled personnel is also a problem. Although the supply of funds and equipment seems to be adequate, the sustainability and development of the available resources appeared to be threatened.

Apart from the public sector, various non-governmental organizations (NGOs) play an important role in delivering health care services in oPt. Findings indicate that patients linked their prognosis, their ability to control their illness and the risk of complications to the level at which they face more social, economical and environmental stressors exceeding their adaptive capacity. It was also found that family members play an important role in managing NCDs. Satisfaction and perception of quality from the patients' angle were highly influenced by the level of trust and the type of relationship that connected them to the clinic setting and its staff along with medications availability. On the other hand, providers had a different opinion and conceptualized their views about quality around biomedical standards that basically required financial resources more than anything else. Other challenges emerged from clinics investigations were: absence of an integrated health care services, lack of clarity for patient flow through the continuum of care within the system, the absence of complementary roles within health professional teams; and the over-vague, non-specific medical advice provided regarding life style changes advised.

The findings indicated that the challenges of effective NCDs care lie both within and outside the health sector. This is to note that Palestinians only got control over their own health services in 1994, with the establishment of the Palestinian National Authority and there is constant presence of war and insecurity in the area, which has a profound effect on people's health and health care. Cultural, environmental and economic factors dominated and seemed to influence exposure to risk factors and people's ability to manage their illness. Specific recommendations have been suggested to improve the situation.

(b) Syria

Although some documents point to the epidemiological transition from communicable to non-communicable diseases in Syria, there is no indication of prioritising such health interventions and tuning health care towards the growing problems of non-communicable disease. The document review reveals that there is no national level comprehensive policy or strategy to control NCDs, except a Diabetes Mellitus network care model. Health sector management was also found to be highly centralized and the key informants indicate a lack of coordination, conflicts, corruption and bureaucratization within the health sector. There is a serious shortage of data concerning NCD.

Although there is not major shortage of medicine and equipment these are unequally distributed between urban and rural areas. There is also a real shortage of skilled human resources to tackle NCDs. Moreover the dual practice of the doctors in both private and public sector pose a special problem. There is a specific shortage of nurses in Syria, which has resulted from the low social image attached to nursing. The relationship between patient and provider was found to be very hierarchical. In the health facilities there is a lack of privacy and insufficient counselling, long waiting times, and no referral system. It was found that various social and familial influences worked against the motivation to obtain early diagnosis by the patients. Although patients generally adhere to the medicine they find it very difficult to adhere to the advice regarding food and physical activity.

(c) Tunisia

Tunisia had a sustained and integrated economic, social and health development until the recent political transformation at the turn of the year. The dramatic increase in NCDs in recent years is well documented in Tunisia. The review of policy documents reveal that there are clear strategies and programs for the major NCDs. A standard set of integrated clinical management guideline is also drafted and adopted at national level for implementation. There is also ongoing monitoring and feedback mechanisms regarding the implementation of clinical guidelines at national, local, health centre and individual health care provider level. Although a comprehensive multisectoral approach to tackle NCDs is mentioned in the documents, no clear plan to implement this is elaborated. However, despite the important progress made in recent years regarding the policies and strategies on controlling the NCDs, the key informants asserted that the health system in Tunisia is still oriented towards fighting infectious diseases and unable to face the burden of NCDs. They also indicated that the strategies are focused mainly on treatment issues, while prevention of risk factors is neglected. The problems of funds, equipments, human resources constitute obstacles to the effective implementation of strategies and programs.

A significant disparity was also found in terms of the distribution of specialized staff and equipment between the capital Tunis and other regional cities, as well between urban and rural areas. It was revealed that patients explain NCDs primarily in biomedical terms and rely primarily on biomedical treatment. It was also found that treatment adherence was mainly determined by financial resources and patients from a low socio-economic level reported more interruptions in their treatment because of lack of money. For patients, private sector health facilities were satisfying because of their environment and the greater receptiveness of the health providers, whereas it was complained that public sector health providers lack communication skills and focus only on treatment issues, neglecting the impact of the disease on a patient's life. Observation confirms the crowdedness, short time for consultations and poor organization in public health facilities. Because of a lack of universal health insurance coverage there is an inequity in the access to health services. The health providers on the other hand felt that they lack competence to handle chronic disease like CVD and diabetes. The lack of a systematic management structure and treatment protocols are also considered to be the main challenges by the health providers.

(d) Turkey

Turkey has gone through a range of historical and political changes in the last few decades and there have been a number of health reforms. The document review shows that there are well developed policies and strategies in the MoH to deal with NCDs. There are also a considerable number of research projects done by universities, international institutes and NGOs about CVD-DM. There is a clear policy for tobacco taxation, legislation as well as smoking cessation support. The number of staff, equipment and drugs were found to be adequate. The documents also indicate sufficient financial resources in the health sector. However, despite this progress there are specific gaps in NCD management. It was revealed that there was no specific unit for the prevention and control of CVD-DM within the ministry and not much evidence of adoption of a multi-sectoral national policy for CVD-DM. None of the documents mention country-wide early detection and screening programs for CVD-DM risk, and the associated issue of patient adherence to treatment plans.

Although some good research work has been done in relation to NCD, there is a lack of reliable standardized data on the major non-communicable diseases as well as a lack of good medical record system. It was also found that although Turkey is generally equipped to deal with NCDs, there is disparity in services between the provinces and regions. Key informants highlighted the lack of coordination between different sections of the government which they think hamper the implementations of policies. They also indicated that the newly introduced Performance Based System (PBS) will obstruct team work between different levels of health services. Although financing of the CVD-DM was considered adequate by the key informants, it was mentioned that the money allocated for early diagnosis and prevention was not adequate. In addition, key informants mentioned that despite the fact that a specific treatment protocol has been developed for NCDs, its implementation is still weak. Patients explained CVD and DM in biomedical terms, and they were found to be well aware of the causes and risk factors of NCDs.

The awareness of health providers about the importance of CVD and DM was not fully reflected in health services available. Uncertainty in patients’ minds about the role of the primary health clinic is one issue: a tendency was noted above for patients to see this first level as a place to get a prescription written out, and little more, with limited expectations of much of a role beyond that. But it does not help that monitoring and follow-up is limited and erratic, and this in turn is compounded by the lack of standard procedures or protocols related to chronic diseases, or a failure to follow them. As a consequence, the onus falls heavily on the secondary and tertiary levels. Here also the lack of a standard referral system causes problems. People know that it makes most sense for them to go to hospitals directly, circumventing the primary level and any kind of referral. And with no referral system there is also no information-sharing, which makes monitoring that much harder.

Except in first level health centres or in private health institutions, all public hospitals were problematic in terms of appointments. Patients have to reach hospitals early and wait long hours in queues to get an appointment. The clinics in public institutions are very crowded and time for examination is rarely enough. If not paying extra, patients cannot see the same doctor, which increases patients’ concerns that they will not get integrated and consistent treatment. This in turn fuels patients’ doubts or unease about the treatment they are getting, with conseqences for the adherence which health providers seek and expect of patients, and the tendency for families to keep looking around for a different doctor or a different clinic/ hospital, adding to the overall burden that chronic disease management creates.

In-depth interviews with patients and their relatives highlighted the public desire to be treated differently by health staff in public facilities. That was a key reason why patients or relatives opted to pay for private treatment, where they were guaranteed friendlier treatment, instead of the indifferent or imperious attitudes too prevalent in the public sector. This insistent problem is reinforced by the lack of specialist training of staff in public health facilities in the management of chronic diseases like CVD and DM. These are diseases which need to be managed together, by health professionals and patients/ families. Patients’ complaints about the lack of time they receive in consultations, and their confusion about the advice they are given (seen as unclear, complicated, perhaps contradictory) is not a small matter; in fact, it is crucial to successful medical treatment, given the importance of joint clinic-family co-management of chronic ill-health. The evidence suggests that in public health facilities patients’ smoking history is not asked about adequately, and that patients are not advised with sufficient care about diet or physical activities. Health staff mostly focus on medical treatment instead. An unhelpful cycle is created, with patients consequently adhering to medical treatment better than to other parts of the overall treatment regime. There is evidence to show that the nurses are under-used and under-valued in the management of NCDs like CVD and DM. They were rarely used to their full potential.

1.4 Summary Conclusions and Recommendations

It is evident that there is a formal recognition about the increased burden of non-communicable diseases in the partner countries. However, they are placed differentially in terms of planning and managing this emerging situation. While Turkey and Tunisia have developed some policies and strategies concerning CVD and Diabetes, Syria is lagging well behind in this regard. Despite the unique political context, Palestine is making good progress in this regard. However, it is also apparent that none of these countries has developed a comprehensive, multi-sectoral, well defined policy to deal with non communicable diseases.

The health management system was found to be highly centralized in all the partner countries and there is a lack of coordination between different departments. There is a major lack of information on CVD and Diabetes in all the four countries, as well as a shortage of skilled and specialist health personnel to manage these NCDs. Although the supply of medicine and equipment did not appear as a key problem, there is evidence of unequal distribution between regions, as well as between urban and rural areas. While the degree varies between countries, our research shows that awareness regarding the risks of NCDs among patients is patchy and incomplete everywhere. At the same time, health facilities and treatment processes were generally experienced by patients as unfriendly, with widespread complaints about the time given by health staff to explain the causes and consequences of their condition, and the reasons for the steps stipulated to manage it. Controlling NCDs is a complex challenge and it demands interventions both within and outside the health sector. Although each country has come up with specific recommendations to combat these challenges, the following were common in all four country reports: population-based intersectoral, comprehensive policies to control NCD risk factors by legislative, regulatory and health promotion measures; steps to improve staff numbers, staff accessibility and staff training; and empowering the public in the clinic treatment context as a necessary means to strengthen patients' self management. These broad recommendations are broken down into specific interventions as well as into core, expanded and desirable plans.

2. WP5: Purpose and Context

2.1 Overall Research Aims & Rationale of Work Package 5

Work Package 5 (WP5) entailed the largest collection of original data in MedCHAMPS, primarily data of a qualitative kind (in other words, narrative and not statistical). The overall aim of WP5 has been twofold:

(a) To undertake a *situation analysis* of current CVD and diabetes policy in the four partner countries;

(b) To analyse the *contexts in which health systems manage* CVD and diabetes in the four partner countries.

The former aim has meant a national overview of policy, obtained by a combination of *documentary analysis* and *interviews with key informants* who had a significant stake in, or overview of, current health policies and the policy-making process. To address the latter aim we also drew on these interviews with key informants, but more particularly gathered data from the levels at which health services are provided. Key to the analysis of health system contexts has been data collection based on *fieldwork in a series of clinics*, reflecting different levels of medical provision: some in primary health centres, others in tertiary clinics in major hospitals; some in rural, others in urban contexts; and some in public facilities, others in private. A major task of this work package has been to connect policy and practice. Our purpose has been to link national, regional and local perspectives to provide an up-to-date insight into CVD and diabetes policy and health services and treatment in one area of each country.

To achieve these aims WP5 has therefore been designed around the three ‘levels’ of data collection indicated above: documentary analysis; key informant interviews; and clinic fieldwork. We have sought in this design to reflect the relationship between policy and practice in terms of a level of conceptualization (as indicated by analysis of key documents), a level of awareness (as indicated primarily in key informant interviews), and a level of practice (as illuminated in clinic fieldwork). This is not a hard and fast set of distinctions, but it nevertheless has provided a guiding framework for designing the research and its analysis. Inevitably, practice is more complex than policy, and has required more time, which will be reflected in the account below.

The inclusion of an element of local data collection (the clinic fieldwork) calls for special comment in research whose overall purpose is to recommend policy measures and health interventions which are appropriate and realistic in each partner country. After all, why not limit ourselves to analysis of documents supplemented by interviews with key stakeholders? There are two principal reasons.

The first is that, while there are generic recommendations and guidelines concerning the clinical management of CVD and diabetes, a big challenge is how these interventions may work in different clinical and cultural contexts. We decided that it was important to track how national policies for CVD and diabetes were transmitted down the health system and translated into practice. What, for instance, gets lost in translation from central ministry to local clinic? What kinds of established local clinical practices exist, and how do these accord with or hinder national policy initiatives for these conditions? The second reason for local data collection in WP5 relates to the health system context, and the need to balance concerns with primary and secondary prevention. Crucial as a focus on risk factors and primary prevention is for MedCHAMPS' overall aim, it is also vitally important to keep in mind the challenge for health systems which have to manage the treatment of those who already have CVD or diabetes. What are the pressures on services? How well trained are staff to deal with the particular demands of these chronic health problems? How do patients access services? These are illustrative of the kinds of question we sought to answer through brief fieldwork in a number of clinics in each country. Moreover, while such questions have been asked in other national contexts, these are new topics of research in the countries in question, involving methodological skills and perspectives which are still relatively novel and unfamiliar.

2.2 Meeting our stated aims: plan for WP5 in MedCHAMPS research proposal

We summarise here the plan outlined for WP5 in the research proposal. Under the heading 'WP5: National situation analyses of current policy and health system contexts', relevant parts of the proposal stated (pp.14-15):

> Three main methodological approaches will be used to collect data on the situation within each country on the policy and health care interventions listed within the schematic framework. These approaches entail a review of national documentation, interviews with key informants in relevant organisations (both governmental and non-governmental), and interviews and focus groups to elicit relevant views and health beliefs of potential target groups. Using these different approaches we aim to build up a rounded picture of the situation within each country and to identify opportunities for and barriers to implementing change. A further, crucially important, aspect of this approach is that it engages stakeholders in the assessment process, and also therefore helps to ensure their commitment to change.
>
> Using standard data collection guides, we will search documentary materials on national policy over the previous 10 years and abstract relevant information. We will include policy relevant to smoking, diet, physical activity and alcohol use. Our review of policy will be multi–sectoral and include, for example, where relevant, pricing and taxation, agricultural and transport policies. The review will include policy on national and local health service provision, prescribing, prevention and risk factor management. It will include both official public and private sector publications as well as grey literature. They will be identified though a variety of approaches, including direct contact with relevant organisations, library and internet searches and asking key informants.
>
> Key informants will be identified initially through members of the study team within each study country. They are likely to include key personnel within the government and the health system, and leading members of relevant NGOs, including patient groups. A semi-structured interview schedule will be used to gather information on the policies relevant to the prevention of CVD and diabetes and on the coverage and

> provision of relevant health care. Keys informants will be asked to identify any relevant documentation and to suggest any other key individuals to interview on aspects of policy and health care. This policy analysis aims to identify both gaps in policies as well as the perceived level of commitment to existing policies. This latter is important as enforcement of existing policies (e.g. smoking restrictions) may be low.
>
> Health beliefs and household health-management practices relevant to the prevention of diabetes and CVD will be assessed using in depth interviews and focus groups amongst purposively chosen samples of the general population. Which specific socially and geographically defined groups are chosen, and which particular topics are covered, will be informed by review of the available epidemiological data and from information gathered in the key informant interviews. Possible topics on which health beliefs and practices may be sought include: (a) what is perceived as a desirable and healthy body size and shape, (b) beliefs around physical activity and approaches to exercise, (c) beliefs around smoking, (d) beliefs about what it means to live with these particular chronic conditions, and (e) the realities of gender differentials in managing the health needs of family members. Additionally, we anticipate that these topics may lead us to elicit public beliefs about the role of healing practitioners outside the formal health system.

The three-level methodological framework described here is substantially the one followed. The main difference has been that the third level as identified in the proposal – "in depth interviews and focus groups amongst… the general population" – in practice got expanded to become a larger task, including a mix of in-depth and survey-type interviews with patients, in-depth interviews with staff, and observations of clinic practice. This has proved a considerable challenge, but one which all partners have been able to meet.

2.3 How WP5 articulates with other MedCHAMPS work packages

Along with WP2, 3, 4 and 6, WP5 is one of the empirical cornerstones of MedCHAMPS. The overall design of MedCHAMPS brings together epidemiological mapping and modelling of CVD and diabetes disease trends (WP2-4) with WP5's emphasis on what we call a situation analysis of (a) national health policy relevant to these chronic diseases, coupled with (b) the workings of the particular health systems charged with responding to patient healthcare needs in partner countries. Taken together these two strands should provide the empirical basis for testing policy interventions and then producing costed recommendations which could be realistic and feasible in the partner countries (WP6). In methodological terms, this design is premised on a kind of triangulation between the data derived from the two strands mentioned above, to ensure the robustness of the analysis and the soundness of our conclusions. In policy terms, WP5's 'situation analysis' may be seen as a means to ensure that the national and sub-national context is properly understood, to guard against the possibility of 'one-size-fits-all' recommendations made in ignorance of national circumstances.

Although WP5 formally comes to an end with the submission of this Report, its findings and analysis continue to contribute to the work of WP6 for the duration of MedCHAMPS.

2.4 Context and Background

WP5 has posed many challenges for the partner teams responsible for its conduct. Two main reasons may be mentioned. First, the three levels of data collection each in themselves proved a considerable challenge. Take, for instance, the analysis of documents which provides the first 'level' of WP5 data collection. In some cases there was a plethora of documents, and the problem lay in seeking to identify those which were relevant to our focus on NCD, and specifically CVD and diabetes. In other cases it was no easy task to seek access to documentation. In relation to interviews with key informants, partners likewise had differing experiences: in some cases it was a matter of selecting a balance of interviewees who were broadly willing to be interviewed; in other cases it was not straightforward to identify potential interviewees. In Turkey and Syria it was possible to interview a specialist health journalist well placed to offer an independent commentary on health policies; that was not possible for the other partners.

Second, WP5 called on methodological skills new to our partners, notably those of medical anthropology/ sociology. WP5 has been led by two social/medical anthropologists, and a major part of their task has been to provide the methodological guidance and mentoring sufficient to support the four teams in their work on this work package, for there were no team members with graduate level backgrounds in the qualitative social sciences. The steps taken to teach and support these new methodological skills will be outlined below, but here we want to highlight the scale of the task for each team, orchestrating short but intensive data collection in four different clinics, integrating different interview schedules and data collection guidelines. Each partner organised this task in the way best suited to the staff available, and for reasons of practicability no single model of data collection was set: we judged it more important that the requisite data should be collected, than that it should be collected in one specific way. These different approaches to the third 'level' of data collection will be evident in the country reports which follow. What is worth stressing at this point is the interest and enthusiasm among all four teams for the potential of qualitative data and analysis.

3. WP5 Methodology Overview

3.1 Design issues

In order to conduct the situation analysis mentioned above we have drawn on and adapted the approach of Rapid Assessment Procedures (RAP), including also elements of an ethnographic approach. Time necessitated that we draw on rapid assessment techniques; the relative inexperience of WP5 researchers also made it more suitable than a more extended form of fieldwork. The main principles of Rapid Assessment are:

> Speed: the methods are intended to provide relevant information quickly, upon which decisions about health care interventions can be made;

Use of multiple data sources: different methods are used to access different sources of data to get a balanced overview;
Pragmatism: the methods should provide adequate information, without necessarily being 'scientifically perfect'. Triangulation, or cross-checking between different sources of data is used to establish the validity and reliability of the data collected;
Cost-effectiveness: the focus is on research instruments that provide information relatively cheaply, and for the most part are not labour and time intensive. Where possible, use is made of existing data.

This approach has been used extensively in various fields including public health for the purpose of developing interventions particularly in the low and middle income countries. Researchers at the Institute of Health and Society at Newcastle University have used this approach in Cameroon and Tanzania to assess non-communicable disease services in those countries. One of the WP5 coordinating researchers also has extensive experience of using RAP in Bangladesh. Their experiences were utilized to develop the study design of WP5.

3.2 Formulating research questions

In order to decide on the methods we outlined the main objectives of WP5 and decided which specific questions need to be answered. As mentioned earlier we have divided the situation in three different levels and formulated the questions accordingly as follows:

Situation on the level of conceptualization
Aim: To know how the combating of CVD and diabetes is currently conceptualized in national health policies, strategies and organization of health systems.
Research questions:

- What are the policies for treatment and prevention of CVD and diabetes in each country?
- What are the strategies undertaken to fulfill the policies?
- What are the types of health sectors functioning in the country and their relative prominence (Formal, Informal, Biomedicine, Traditional Medicine)?
- Who are the stakeholders/interest groups, and what are their roles in delivering health services (Public, Private, NGO, Donors, Insurance Companies)?
- How are CVD and Diabetes prevention and intervention integrated within the wider health care system?
- What is the role of non health sectors in preventing CVD and Diabetes?

Situation on the level of awareness
Aim: To know whether the implementers and practitioners of health services are aware of and committed to the existing policies and strategies concerning CVD and Diabetes.
Research Questions:

- Are the implementers and practitioners of health informed about existing CVD and Diabetes policies and strategies of their country?
- What are their views about these policies and strategies? Are they committed to what has been recommended in these policies? What influences do local stakeholders respond to?
- Do they have suggestions for acceptable and feasible policy options?

Situation on the level of practice

To know how these policies and strategies concerning CVD and Diabetes are practiced in reality, and how practitioners and patients understand these practices.

Research Questions:

- What are people's experience of living with CVD and Diabetes, and how do they seek and access treatment?
- What cultural values regarding diet, physical activity, and body size influence these practices, and do these differ according to demographic, gender, and socio-economic stratifications?
- What is the level and quality of CVD and Diabetic care provided in formal or informal medical settings, and what do patients and practitioners say about the treatment regimes and care provided?

3.3 Levels linked to Methods

The choice of data collection methods was guided by the research questions mentioned above. As discussed earlier it is usual to use a combination of several methods in a rapid assessment. An overview of methods used in WP5 is presented below:

Document review

Document review method was used to assess the situation at the level of conceptualization. Document review is a valuable method to assimilate existing information, such as health service activity data, reports of research projects, policy documents etc. and reduces the risk of replicating the collection of existing data. Utilisation of existing documents allows information to be included in the rapid assessment that it would not be possible to collect within the time and resource restrictions of the study. In order to gain an understanding of the structure and functioning of the health care service in general and of how the detection and management of NCDs operates within the service information were obtained on the following:

Health care strategies/protocols: any general health care policies, and any policies specific to NCDs, in particular noting any protocols on where and how patients should be diagnosed and managed, screening, diagnostic criteria, treatment, follow-up and patient compliance.

Facilities: the number of clinics, hospitals, laboratories, pharmacies, beds, and ambulances available;

Management structure: the levels of management and key administrators within the health care system, including attitudes of senior decision makers in the health service to NCDs;

Staff: the number of doctors, nurses, auxiliary and non-medical staff working in the health care system and their pay and conditions;

Funding: sources and distribution of funds within the health care system and costs to patients of consultations, drugs and investigations;

Equipment and drugs: distribution, availability and funding of equipment and drugs;

Patients: numbers of patients treated and patient flow (i.e. how the patient referral system should operate)

Documents were identified through discussion with the project team and key informants, scanning the reference lists of documents that have already been collected in the respective organization as well as identifying a central source where documentation is stored (e.g. University or NGO library). Documents were collected from national, regional and provincial/district level. The amount of documentation available varied among the countries and depended on the amount of research that has been done and the amount of health data collected on NCDs in the study setting. Detail experience of document review has been discussed in the respective country report.

Key informant interviews

Key Informant interview method was used to explore the situation at the level of awareness and commitment. The term 'key informant' is used to mean anyone with specialised knowledge, ideas and insights of the issue being researched. The advantages of Key Informant Interviewing is that it provide information directly from knowledgeable individuals and the opportunity to clarify ambiguous meaning, allow new ideas that were not anticipated during planning stage of the study to be investigated and often can lead to other valuable information sources. However, the quality and usefulness of the data obtained from key informant interviews is dependent not only on selecting the right interviewees, but also on the interview skills of the interviewer. Moreover, people who make good key informants are often very busy individuals, with whom it can be very difficult to make appointments.

As per the principle of qualitative sampling key informants were selected purposively to include those who understand what information is wanted and why and are happy to give it to the interviewer. Attempt was made to select diverse key informants to cover a range of viewpoints. Key informants from national, regional and provincial/district level were selected including persons from health ministries, private and NGO sector as well as pharmaceutical and media personnel. Detail experience of key informant interviewing has been discussed in the respective country report.

Level of practice

In order to assess the situation on the level of practice 4/5 health care facilities where cardiovascular disease and diabetes care is provided were chosen purposively in each country. In order to maximize the variations of the facilities we have categorized the facilities in terms of their geographical location and types. Facilities were chosen from urban and rural as well as primary and tertiary level. In each level both public and private facilities were chosen. Because of prominent role of NGOs in health delivery in Palestine NGO health facilities were also included. At least four facilities were chosen from each country. Health activity data and local knowledge was used to identify these facilities. Detail of the selection of the health facilities are discussed in the country report. The researchers visited each facility in turn and assessed the situation of practice using the methods discussed below. The methods used were intended to yield information on screening and detection, diagnosis, initial assessment, treatment and follow up, Patient's views, family member's views and health provider's view. These items reflect the key features that should be part of an NCD management system. Patients' and their family members views were sought as these provide valuable information about the patients' experience of the health care system for NCDs. This was used also to triangulate reported staff practice and health service policy. This is particularly relevant in an assessment of the quality of NCD care because of the importance of patients being fully involved in the management of their condition and being aware of the need to comply with both non-pharmacological and pharmacological treatments. Five methods have been used to collect data on the aspects listed above are presented below:

3.3.1 Health Provider interviews

Interviews with staffs who care for people with NCDs provide useful information on staff knowledge of screening, diagnosis and management of NCDs and their reported behaviour. Staffs are also a source of information on availability of facilities for diagnosing and managing patients and on local policy and practice on charges to patients for drugs, consultations and investigations. Suitable health providers were indentified from the selected health facilities who are involved in undertaking the care of cardiovascular diseases and diabetes. Both doctors and nurses were selected for interviews in order to get the variation of their experiences.

3.3.2 Clinic inspection

Clinic inspection was used to check the availability of basic equipment and drugs for delivering care for the treatment of cardiovascular diseases and diabetes. This included, for example, the number and functional condition of sphygmomanometers, weight scales and height measures and the availability of materials for testing urine and blood glucose. A structured check list was used for the inspection. The team members of the respective countries ensured the co-operation and trust of the health providers of the facilities to facilitate the clinic inspection.

3.3.3 Observation of clinic practice

Observing clinic staff during consultations with patients is an effective way to learn about what actually happens during a clinic appointment. Data collected during observation can be cross-tabulated with that of reported staff behaviour from both staff and patient exit interviews to either corroborate or bring into question these data. A criticism sometimes levelled at observation of staff practice as a method of data collection is that the presence of the observer in the consultation will affect health staff behaviour. However, it was felt that this is not a serious problem as in a busy clinic doctors and nurses soon forget about the presence of the observer and do not have time to substantially change their normal behaviour anyway. A checklist was used to collect information on which clinic staff the patient sees during their visit to the clinic and the time spent with each member of staff; drugs and non-drug (e.g. lifestyle change) treatment prescribed; items that the patient was asked about during the consultation; examinations, investigations and referrals that were conducted or ordered; and whether or not another appointment was arranged for the patient. In addition observation was also made outside the health facilities to assess the overall environment and physical facilities of the clinic.

3.3.4 Record review

Where they exist review of clinic records is a useful means of collecting information on how conditions are managed. It is of interest and worthy of note in itself if records are either not available or are poorly kept as the fact that procedures are not recorded has implications for the quality of NCD care provided. As with observation of practice data, data from record review can be cross-tabulated with staff and patient exit data on reported practice. A standard checklist was used for record review.

3.3.5 Patient exit interviews

Interviews with patients immediately following their consultation provide the opportunity to assess the functioning of the health care service from the patients’ perspective and also to assess the level of patient knowledge about their condition, which gives an indication of the quality of patient education that clinic staff are giving. Patient exit interviews also offer the opportunity to triangulate the data from staff interviews, observation of practice and record review on the procedures that are carried out during a consultation. Ideally all patients who are observed and/or whose records are reviewed should also be interviewed. In practice this was not possible as some patients were unwilling to be interviewed and some did not have time to stay after their appointment to take part. As a result interview was conducted through opportunistic sampling using structured protocol.

However, we found that data obtained from exit interviews with the patients indicated an extremely high level of satisfaction regarding the quality of care while data from in-depth interviews does not reflect the same. The underlying reason might be that the exit interviews were conducted in the health facility premises which have influenced their responses.

3.3.6 Patient’s In-depth Interview

In depth interviews with the patients suffering from cardiovascular diseases and diabetes was conducted to explore their beliefs about the causes, experience, and management of those diseases. Information were collected about the health seeking behaviour of the patients, their views about the quality of the health services as well as the impact of the disease on their social, psychological and economic life. These interviews were aimed at identifying some general aspects of existing public knowledge, perceptions, and experiences. This helped to point out areas where the illness beliefs of lay people and the medical knowledge of clinicians may lead to misunderstandings or hamper effective treatment; it also elicited general descriptions of disease management in order to illuminate how health resources are used. Patients having cardiovascular disease and diabetes were selected from the respective health facilities. In order to capture range of experiences and views patients were selected across gender and socio economic background.

3.3.7 Family Member’s In-depth interview

Patient’s treatment adherence is a major problem in non communicable disease care. It is acknowledged that chronic conditions can be managed more successfully with patient and carer participation. There is growing recognition that the social context in which the patient’s are treated and live are all important for health outcome. In order to have an understanding of the social and familial context of the patient we decided to interview the family members. In depth interviews were conducted with family members of the patients suffering from cardio vascular disease and diabetes to explore their beliefs about the causes of the diseases, their views about the quality of the health services as well as the impact on the family of having a NCD patient among the kin. In case when family members of the patient's in-depth interviewee were not found alternative respondents were selected who has a member in the family suffering from CVD or diabetes.

3.4 Written protocols

Detailed written protocols for each of the methods mentioned above were prepared. Protocols included semi structured guidelines and check lists for document analysis, key informant interviews, patients in depth interviews, patient exit interview, family members in depth interview, health providers interview, clinic observation, and observation of practice. We modified the exiting protocols used in the rapid assessment for NCD done in Cameroon referred earlier according to our project objectives. The protocols are attached in the annex.

3.5 Research team

A core research team was formed in each country early in the research process to carry out WP5 activities. A focal person was selected from each team who was mainly responsible for conducting the WP5 works and maintaining liaison with the WP5 coordinating researchers at Newcastle University. The focal persons were supported by 1 or 2 other researchers. The leads of each partner country supervised the WP5 activities in their respective countries. The overall coordination of the WP5 was done by Newcastle researchers. The research team was formed with the existing staff members of the partner institutions. The team comprised mainly of mid career researchers and they were from both medical and social science background. All the researchers had considerable experience of doing quantitative research, and except two research others didn't have experience in qualitative research. A special training workshop was organized for all the research team members on qualitative research methodology as discussed below.

3.6 Training in qualitative methods

Because rapid assessment was conducted mainly using various qualitative research tools, it was crucial to train the relevant researchers on the theoretical and practical aspects on qualitative research methodology. Accordingly a training workshop on qualitative and ethnographic research methods was organized before the data collection started. The workshop was held in Aleppo, Syria during 3-11 October 2009. WP 5 coordinating researchers from Newcastle conducted the workshop. WP5 researchers from three of the MEDCHAMPS participating countries were present for this workshop: from Syria, Tunisia and Turkey. Unfortunately researchers from Palestine could not attend the workshop due to visa complications. A separate intensive workshop was organized exclusively for the Palestinian researchers in Newcastle during 30 November to 4 December 2009. Purpose of the workshops both in Aleppo and Newcastle was twofold, to train those researchers who will have responsibility for conducting and organising WP5 in their own country on qualitative methodology and to plan the timetable and practical organisation of a programme of data collection with several interlocking parts, and ensure that each of those involved was familiar with the range of research activities entailed.

The workshop covered both theoretical and practical aspects of qualitative and ethnographic research methodology, oriented to WP5 activities. The sequence of sessions was as follows:

1. The purpose and challenges of WP5 within MEDCHAMPS

2. The principles of qualitative methods and ethnographic approaches
3. How to conduct an in-depth interview
4. Practical exercise: doing an in-depth interview and transcribing it
5. How to observe systematically
6. Practical exercise: doing a clinic observation and recording it
7. How to store and handle qualitative data for analysis
8. Practical exercise: initial steps in coding and analysis using in-depth interviews
9. Reviewing protocols/guidelines and detailed planning

As per the evaluation of the participants the training was highly successful.

3.7 Data collection

Data were collected according to the level of inquiry mentioned earlier. The process started by collecting documents for document review which was followed by key informant interviews. The data on level of practice was collected at the end. Data collection started from November 2009 and ended in August 2010. The WP5 research team members were mainly responsible for data collection. However, the Turkish team hired additional interviewers mainly to conduct exit interviews. A brief training was organized for the interviewers to familiarize them with the exit interview protocol. Because a structured protocol was used for exit interviews it was easier to delegate the responsibly to their quantitatively oriented junior staff. Tunisian team hired an experienced qualitative researcher mainly to conduct the health provider's interviews. Finding appropriate documents and getting access to the documents were problem in most of the countries. Except some minor difficulty key informant interviews and data collection at the level of practice went well. Two coordinating researchers from Newcastle University visited the partner countries during the data collection period and provided on the spot support to the involved researchers. In addition special tele-conference was organized with all the researchers involved in WP5 to clarify issues arising during the data collection.

3.8 Data handling and analysis

As per the practice of qualitative research method data collection and data analysis went simultaneously to some extent. The initial analysis was mainly to revise and improvise the research protocols and data collection plan. However, a full fledged data analysis started after all the data collection was over in August 2010.

Except for a few instances, all in-depth interviews were tape recorded and transcribed in their respective languages (Arabic, French and Turkey). However, the first transcribed interview in each partner country was translated into English and sent to Newcastle coordinating researchers for quality check and feedback. Apart from tape recording the interviewers also maintained a memo which included the interviewer's impressions of the interview as well as anything of relevance about the interview situation. These memos were also used during data analysis. Simple tables were used to analyze patient's exit interview data, clinic inspection and observation of practice data. All tapes, transcripts and memos were dated and stored carefully in the respective partner institutions. Documents collected for document review were given a unique identifying number and were systematically filed.

Data were analysed both manually and using qualitative data analysis software. Initial orientation on qualitative data analysis software Atlasti was done during the Aleppo workshop on qualitative and ethnographic research. One of the coordinating researchers of Newcastle University is familiar with Atlasti and provided the orientation training to the researchers. Refresher training was also organized for Atlasti when the coordinating researchers visited the participating countries during data collection phase. One Atlasti licence was purchased for each partner research team, except for Turkey where two licences were purchased as the main two researchers involved lived in two different cities.

Once the data collection was over in all the countries a special training workshop on qualitative data analysis was organized in Istanbul, Turkey during 14-17 September 2010. The aim of this workshop was twofold.

The primary aims of the workshop were to:

- To train the participants in purpose and scope of qualitative analysis
- To gain practice in doing analysis and reflecting/justifying choices
- To identifying the initial patterns of the findings and make a preliminary comparison
- To discuss the data integration and policy implications

Additional aims:

- To update each other on WP5 progress in each country
- To get feedback from the teams on the experience of WP5 data collection

In the workshop a general coding list for data analysis was finalized. The apriory codes were formulated based on research objectives of each level of data, as well as some new codes were generated from the collected data. Exercise was conducted on how to move from general codes to sub codes and to indentify patterns. Each research team started analyzing their data after returning from the workshop to their respective countries. Researchers within the team shared responsibilities of analyzing different parts of the data. The research team received continuous support regarding the analysis from the Newcastle University coordinating researchers through email communication and tele conferences.

3.9 Report writing

The focal persons of each research team were responsible for writing up the country WP5 report. However, all the other team members also provided support. Report write up took place through the overall guidance of Newcastle coordinating researchers. All the focal persons except Palestine made a special visit to Newcastle University during their report write up phase to get direct feedback and support from the coordinating researchers. Syrian and Tunisian focal persons stayed in Newcastle for four weeks during October to November' '10 while the Turkish researchers stayed for a week in December '10. A reporting format was given to the research team during the Istanbul data analysis workshop. Each team was asked to present the country profile, results from each level and finally to integrate the result of different levels with policy implications. The Newcastle coordinating researchers wrote the overall methodology part of the report and the part on the comparative insights of the results between four participating countries.

3.10 Ethics

Before staring the rapid assessment we obtained ethical clearance from the appropriate body of each participating country. We addressed the issues around informed consent of the respondents, confidentiality and anonymity of the respondents and the facilities in reporting. We also wish to share the final report of WP5 with the relevant people of the respective countries. The ethical approval letters are enclosed in the annex.

3.11 Limitations

Although in the initial proposal it was indicated that FGD will be used as a data collection tool, the research team of the partner countries suggested that given the time and the resource of MedCHAMPS it would be very difficult to arrange FGDs for patients or providers. It was also realized that we have ensured enough triangulation of tools, so it was not absolutely necessary to include FGDs. We have therefore finally abandoned the idea of using FGD. Because of the time and resource constraint we also could not review policy documents or interview key informant outside health sector which could have been relevant for NCD care.

4. WP5 Literature Review

A report such as this is not the place for an extensive review of literature. However, MedCHAMPS is taking place in countries where relatively limited amounts of empirical research on health have taken place (with Turkey as perhaps the exception); while this particular work package owes its guiding ideas to the ethnographic perspective of medical anthropology and sociology, a perspective not widely used or known in the region. For these reasons we consider it to be important to draw attention to relevant literature on the region – which for present purposes we define as the Muslim Mediterranean – in two fields. The first concerns policy analyses of health systems in region. The second concerns ethnographic analyses of health and medicine in the region. The first reflects the WP5 substantive focus on health systems and health policy; the second reflect the other major substantive focus on the situations in which ill-health is managed and the contexts of treatment, which the research proposal described as a situation analysis. Because this has entailed a methodological emphasis on the qualitative approaches of medical anthropology and sociology, we highlight other work in these disciplines which have been important benchmarks in investigating health around the Muslim Mediterranean. Before we turn to these specific literatures we provide a brief context and overview.

4.1 Regional Context and Overview

Many international reports identified the East Mediterranean Region as a hot spot for NCD, where projections of its burden exceed those of other regions (WHO 1999; Murray & Lopez 1996; Alwan 1993). In 2005, 25 millions died from NCD in the East Mediterranean Region, more than half due to CVD (WHO 2005). A recent study involving 68,000 subjects in 44 countries, shows that Eastern European and Middle Eastern patients have the highest rates of heart attacks and strokes, and the highest rates of death from those conditions (Science Daily 2006). Predictions for the next decades include a near tripling of CVD mortality in Latin America, Middle East, and sub-Saharan Africa (Yach et al 2004). These mortality trends for

NCD mirror trends in their leading risk factors. For example, 79% of women in Bahrain are obese, and 47% of women in Syria are obese (Maziak 2009). Diabetes affects >15% of adults in Oman and Syria, and more than 20% of adults in Saudi Arabia and Bahrain (Albache et al. 2010; Al Ajlan, 2007). Hypertension, affects about a third of adults in Arab societies, most of which is undetected and untreated (Maziak et al 2007). Such rates are much higher than those witnessed in the more developed countries, are higher than the world average, and are growing more rapidly.

Despite these trends in NCD in the ME, policy makers as yet show few signs of acknowledging the major implications of such developments, perhaps because robust data on incidence and mortality are still lacking. This is highly evident to us in MedCHAMPS, as we have found in that project's Work Package 2 (MedCHAMPS WP2 Report to EC). High quality population-based data on CVD are not available in many countries of the EMR. In 2003, only 3 out of 21 countries of the WHO East Mediterranean Region were deemed to have complete data about causes of death, and more than a half of these countries (12) had no recent mortality data (Mathers et al 2005). Also, most countries in the region have only limited experience with integrated approaches to dealing with chronic diseases, whereby health systems are better at providing acute care than promoting healthy lifestyles. Fewer than half of the 22 countries in this region have national policies on chronic disease, and only a minority have implemented tobacco control legislations (Nishtar S 2006). While promising initiatives to address the burden of NCD in the region are now emerging, what is still rarely addressed is the human capacity to take on the multi-dimensional task of ensuring that NCD is kept on the radar for national governments, NGOs, and indeed health professionals (Maziak 2006).

The WHO Global InfoBase (a databank of chronic disease prevalence and risk factors) reveals that most developing countries of the Mediterranean region have no population-level information or disease surveillance system for major NCD and risk factors (www.who.int/infobase/). Automatic application of NCD prevention models conceived and tested in developed countries, can be counterproductive (Ebrahim & Davey Smith 2001; McLaren et al 2007), as knowledge of the role of local factors (cultural, socioeconomic) and specificities of the health care systems is essential to tailor effective intervention to the local environment and health care system in LMICs. For example, research done in Syria and other Arab countries point to the serious and disproportionate spread of obesity among women (47% for women compared to 29% for men), and how this can be related to gender roles and cultural norms that leave little chance for women to break out of their set roles as housekeepers and child bearer/care takers (Maziak et al 2007; Beltaifa et al 2008; Tlili et al 2008). Looking into the nuances of local NCD patterns in LMICs requires local capacity that is trained in a multidisciplinary tradition of approaching NCD, and at the same time native, or familiar with, the local culture and environment, in order to be able to generate appropriate and reliable data about this burden. Analysis and policy evaluation require an approach similarly attuned to local economic and cultural circumstances and political feasibility. Most LMICs still lack local research capacity, which is mirrored by the lack of capacity in population-based health promotion and translation of health knowledge into effective policies and intervention strategies (Maziak 2006, 2009). The mismatch between the increased NCD burden in the LMICs and the availability of qualified human and technical resources necessary to manage these diseases and their consequences is globally recognized.

4.2 Literature Review on health policy and health system issues in partner countries

Although medical anthropological research from the countries in this project is sparse, there is a slightly larger literature on epidemiological as well as health policy and health system issues relevant to NCDs. With the partial exception of Turkey, however, the number of empirical research papers is small, and likewise regional overviews of the public health challenge posed by NCDs are limited (Alwan 1997; Akala & El-Saharty 2006). Among the four countries here, the numbers of relevant papers vary greatly. The literature from Turkey predictably far exceeds that from the other three countries, while at the other end of the spectrum only a handful of papers exist based on research in Syria. It is also noteworthy that a significant part of the relevant literature relating to three partner countries – Palestine, Syria and Tunisia – has involved contributions by either members of the MedCHAMPS team or their institutional colleagues. The following table summarises the results of our literature search (completed 5/10/10):

Health policy for NCD/ Turkey	106 papers
Health policy/ Palestine	25 papers
Health policy/ Tunisia	16 papers
Health policy/Syria	6 papers

We discuss the literature country by country, to give a brief overview of the main features.

Turkey

Studies show that the prevalence of cardiovascular disease is very high in Turkey (Akgun et al 2007; Manios et al 2004; Tokgozoglu & Baris Kaya 2008), and that the leading causes of mortality in Turkey are the major vascular diseases (ischaemic heart disease, stroke), which cause 35-38% of deaths (Akgun et al 2007). Risk factors for cardiovascular mortality like smoking, obesity, diabetes and hypertension are also on the rise. The authors argue that this problem is expected to become worse with increasing industrialisation, adaptation to Western diets, a sedentary lifestyle and increasing obesity (Tokgozoglu & Baris Kaya 2008). Prevalence of hypertension and diabetes was reported to be significantly higher in women than in men in Turkey. According to one study the prevalence of hypertension in women was 58%, and in men 28%, while for the prevalence of diabetes mellitus the corresponding levels were 52% and 28% (Kurtulmus et al 2007). Another study revealed a coexistence of both overweight and higher energy intake in middle/high SES children, as well as a coexistence of underweight and lower physical activity levels in low SES children in Istanbul (Manios et al 2004).

Authors have highlighted that the risk profile of Turkish people differs significantly from Western adults, and recommended adjustments of the international guidelines to control these risk factors, with an individual strategy being combined with a population strategy (Onat 2004). Preventive measures and primary health care are also emphasised as a means to control NCDs. Health system reforms in Turkey have been on the agenda for more than 40 years, and have been tried repeatedly at different times (Buken 2009). The most recent reform program was announced in 2003 under the name 'Health Transformation Program'

(HTP). This is the third wave of health reforms, and includes components like strengthening the Ministry of Health, universal health insurance, reorganizing health service delivery, human resources development, and developing a national health information system. Strategies and policies have also been advocated to tackle the problem of non communicable diseases: for instance, a 'National Heart Health Policy' (Tokgozoglu & Baris Kaya 2008); and proposals to counteract obesity, recommending changes in the physical, political, informational and social environments to facilitate a healthy lifestyle (Manios et al 2004). Ergor & Oztek (2000) have argued that the policy formulation process in Turkey is not generally linked to policy implementation, that weakness stemming from both a lack of commitment by those in a position to implement, and by over-ambitious and unrealistic targets. While primary health care is adopted as a principle, 'community participation', which is the crucial element of primary health care, is absent. It has been suggested that this is mainly because of the medical approach adopted by policy-makers (Tatar & Tatar 1997).

Palestine

It is not possible to separate any discussion of health in the occupied Palestinian territory (oPt) from the larger historical context of that area and the ongoing conflict with Israel. A recurrent theme in the discussion of health and health care of Palestine is the constant presence of war and insecurity in this territory and how it has affected the health of the people. There has, however, been a recent landmark series on the Palestinian health system published by *The Lancet* (2009). This recent series of papers illustrates the unique health situation prevailing in Palestine, including the state of NCD prevalence and health care geared to NCDs (The Lancet 2009). Studies confirm the epidemiological transition which has taken place in the oPt and indicate that CVD and cancer are now the major causes of morbidity and mortality (Husseini et al 2009). The risk factors for atherosclerotic disease – namely hypertension, diabetes mellitus, tobacco smoking, and dyslipidaemia – are also found to be very high. These authors have highlighted that the role of changing lifestyles in this epidemiological transition, including urbanisation, changes in food habits from a traditional Mediterranean diet to western-style diet, as well as reduced activity (Husseini et al 2009).

However, the response of the health-care system to this epidemiological transition has been highlighted as having major shortcomings. Despite the immense structural and organisational problems facing those authorities responsible for building a Palestinian health system – Palestinians only got control over their own health services in 1994, with the establishment of the Palestinian National Authority, and have faced vast challenges in integrating the provision of the Ministry of Health with NGOs and UN agencies – a decade and a half on from 1994 these challenges remain (Mataria et al 2009). It is apparent from the literature that the authors consider the ongoing crisis in the territory and frequent curfews, closures and siege by Israeli authority as mainly responsible for the failures and deficiencies of the health care delivery in the oPt (Batniji et al 2009; Giacaman et al 2005, 2009; Hamdan & Defever 2003; Husseini et al 2009; Mataria et al 2009; Qato 2004; Rahim et al 2009). These authors argue that because of the political situation with Israel, improving public health, health services and the health system as a whole is going to remain intensely problematic; and against that background Giacaman et al (2009) have argued to incorporate indicators of human insecurity indicator and social suffering in international measures of health and wellbeing.

Tunisia

International publications on health and health care of Tunisia are relatively limited, and most are predictably in French. Among Tunisian papers indexed in Medline 1965-1999, nine out of ten were written in French (Ben Abdelaziz et al 2002). It is evident that Tunisia has been undergoing an epidemiological transition. The infectious and perinatal diseases prevailing in the 1960s have decreased whereas chronic and degenerative diseases have risen (Ben Abdelaziz 2006). Ben Hamida et al (2005) argue that while control of communicable disease has been largely successful in Tunisia, Tunisian people are now facing new problems of hypertension, obesity, diabetes and the diseases associated with tobacco smoking. Other studies confirm that cardiovascular diseases are the leading causes of death, and the level of their risk factors is increasing (Ghannem 2006; Ben Romdhane et al 2004, 2005). A recent study observed obesity and abdominal obesity in 34% and 48% of subjects respectively in Tunisia (Elasmi et al 2009). Prevalence was shown to be higher among females. Hypertension was also common (31%), especially in women (36%); while diabetes mellitus and dyslipemia were found in 15% and 21% of subjects respectively.

The need for a new national health strategy to address the challenges of the epidemiological transition, and to redefine both management system and funding procedures, was being discussed over a decade ago (Slimane & Knassi-Cheriha 1998; Cheriha & Zeribi-Benslimane 2001). Inequality in resource allocation in the health care system has also been identified (Dahmani 1989), while the implications of contracting out (of mainly non-clinical services) as a strong feature of the Tunisian health system was discussed by Siddiqi et al (2006). This outsourcing has been done mainly to secure a regular source of revenue and gain enhanced recognition and credibility. However, these authors mentioned risks inherent in this process, including poor monitoring and evaluation mechanisms, and the scope for parties with vested interests gaining control over the contracting process. In terms of epidemiological monitoring, several years ago a cardiovascular disease register was introduced for the first time in Tunisia, and its impacts have been discussed by Ben Romdhane et al (2004). At the same time the problems of secondary prevention of CVD associated with patients' knowledge and practices and the crucial issue of changes in lifestyle have also been discussed (Aounallah Skhiri et al 2005). Ghannem (2006) states that a community-based intervention program is being planned in Tunisia particularly to control CVD. This program is supposed to promote healthy living, smoke-free air, healthy nutrition, regular physical activity, and supportive living and working environments. Its ultimate goal is to reduce the burden of CVD and its related behaviours. However, no literature is available on the outcome of such plan.

Syria

Health related studies in Syria are very few indeed, and have been almost entirely associated with the pioneering role of the Syrian Centre for Tobacco Studies, the Syrian partners in MedCHAMPS and one of the few organisations to conduct empirical research on health in Syria. The few studies available show that, like the other three countries in this project, Syria is also currently undergoing a major increase in morbidity and mortality from CVD (Maziak et al 2007). This study found that more men than women died from heart disease, whereas the opposite was the case for stroke. Hypertension was detected in 41% (48% men, 35% women), obesity in 38% (29% men, 46% women), while smoking rates (for cigarettes or waterpipe) were in 39% (64% men, 19% women). In another SCTS study differentiating cigarette and waterpipe smoking, 57% of men and 17% of women were cigarette smokers, while the prevalence of water pipe smoking was 20% and 5% respectively (Ward et al: 2006). The ethnographic part of this study suggested how social and cultural beliefs promote smoking. In relation to research on the health system, a recent paper eliciting policy makers' views across the MENA region suggests that little has as yet been undertaken (including in Syria) in terms of establishing priorities for health policy and systems research (El-Jardali et al 2010).

The available literature shows that all the four countries in this project are going through an epidemiological transition from communicable diseases to non communicable diseases. However, the scenario and preparedness to handle this transition vary significantly between the countries.

4.3 Medical Anthropology Literature

The medical anthropology literature from the region, and specifically from the countries in this project, is slight (though Turkey is the one exception in this regard). It was understandable that one of medical anthropology's pioneers in the region, Soheir Morsy, should make this point in back in 1981, in an important paper berating anthropologists for their idealist approach to indigenous beliefs and practices, at the expense of attending to a wider political economy of health (1981). However, a quarter of a century later, Marcia Inhorn and Carolyn Sargent could introduce a special issue of *Medical Anthropology Quarterly* by making much the same point, stating: "To our knowledge, this is the first collection of articles specifically devoted to medical anthropology in the Muslim world…relatively little attention has been given to the Muslim Middle East" (2006: 1-2). They also echo an observation by another influential anthropologist, Lila Abu-Lughod, who had pointed out more than a decade earlier that even within this region, a few countries have received nearly all the attention (1989). Thus, Turkey, Morocco and Egypt feature strongly on this ethnographic map of the Muslim Mediterranean, and indeed Morsy, Inhorn and Abu-Lughod exemplify this point, as they have each done extensive fieldwork in Egypt. Syria, Lebanon, Jordan, Palestine, Tunisia, and Algeria are a selection of those at the other end of the spectrum, with far less written on the basis of ethnographic fieldwork (whether about health and medicine, or other topics). For several of these countries, the reasons are of course primarily geopolitical rather than in any sense a reflection of analytical interests.

The field of health and medicine scarcely features in Abu-Lughod's broad review of 'Zones of theory in the anthropology of the Arab world' (1989): whatever other topics had up till then attracted anthropologists' attention, health and medicine was not one of them. The one exception she mentions is the Egyptian medical anthropologist, Soheir Morsy, identified above, who in a series of articles may be said to have initiated the field of medical anthropology in the region: writing on 'folk illness' (1978), her advocacy of a 'political economy of health' in the region (1981), and later on Islamic clinics and biomedical hegemony (1988) Each of these articles by Morsy strikingly anticipates some of the themes of our work, her interest in clinics and the ideological significance of biomedicine being particularly relevant here. In a later review article (1993), Morsy discussed among other writing the pioneering Palestinian work by Rita Giacaman, *Life and health in three Palestinian villages* (1988). Of special interest in relation to the approach we took to this work package, Morsy comments on the way in which this analysis comes out of a "collective endeavour” by a team at Bir Zeit University (1993: 105). Among medical anthropologists writing more recently, probably the most prolific and influential has been Marcia Inhorn (already mentioned above). Her writing has resulted in numerous publications on infertility and more recently new reproductive technologies (e.g. Inhorn 1994, 1996, 2000, 2003, 2004).

This small sample does not simply indicate the field; it more or less defines it. In Turkey, there is a slightly larger body of writing, as well as more that is beyond our capacity to review written in Turkish. As with the work already mentioned above, the medical anthropological literature on Turkey also provides us with signposts to some of our MedCHAMPS interests. Byron Good and Mary-Jo DelVecchio Good had written initially on ‘epilepsy narratives’ in Turkey (1994), significant as one of the earlier anthropological efforts to show how revealing ‘narrative’ approaches to illness could be. This followed a discussion on the meeting of biomedical ideas and local symbolic frames of reference (Good and DelVecchio Good 1992). More recently, Christopher Dole (2004) has turned to this latter topic in an exploration of the ways in which ‘traditional medicines’ (he discusses the problematic nature of this term) unsettle the state’s creation of modern biomedical citizens. Taking as a cue the challenges and dilemmas posed by the *WHO Strategy for Traditional Medicine for 2002-2005* (WHO 2002), this discussion is grounded partly in archival research on the first half of the 20th Century, and partly in ethnographic fieldwork in ‘squatter’ neighbourhoods of Ankara. Finally, a recent full scale monograph by Sylvia Onder – *We have no microbes here: healing practices in a Turkish Black Sea Village* (2007) – similarly explores the interface between local beliefs and practices and the ideological force of biomedicine.

5. Proposed recommendations

This is the summary of the proposed recommendations for probable interventions that stemmed out of the four country reports. The recommendations have been formulated in respect to WHO framework for effective prevention and control of chronic diseases.

A. Health information

Relevant health information is crucial for planning of prevention and control of CVD and DM. The country reports reveal a major gap in the information management system in the partner countries. In order to improve the system following is therefore recommended:

a. Include the NCDs related needed data, including the major risk factors- into the national HIS policies/strategy
b. Establish comprehensive and integrated national registries at all levels
c. Establish means for effective information sharing on patients between different providers and different levels of care.

B. Health care financing

It was found that there is no obvious policy regarding health care financing on NCDs. Following is therefore recommended:

- A line item for prevention and control of NCDs in general and CVD and DM in particular should be included in the annual health budget
- Where applicable donors should be encouraged to direct reasonable aid to NCD prevention and management as per the national health plans and priorities
- Current payment systems should be evaluated and changed to fit with NCD management (contribution payments, performance based systems, restrictions for prescription of DM medications by GPs etc.)

C. Legislation and regulation

It is found that in most cases there are no clear legislative and regulatory measures for preventing and controlling NCDs and where present, is not enforced properly. Following is therefore recommended:

a. Mandatory reformulation of food industry to control salt content in processed foods of high salt content
b. Mandatory labeling requirements on processed food to declare salt content
c. Reduce saturated fats and elimination of trans-fatty acids in processed food through relevant regulation
d. Introduce/enforce the existing anti-smoking law
e. Implement smoking cessation programs.

D. Health services organization and delivery

A number of gaps have been indentified in relation to health services organization and delivery in terms of use of evidence-based guidelines, prevention and management based on overall risk, resource allocation, patient self-management and competency of health work force. Following is therefore recommended to improve management and organizational of the health sector:

a. Improve the capacity of NCDs human resources:
    i. Develop training packages and use of available training packages on NCD prevention and management and incorporate them into medical and nursing academic curricula
    ii. Strengthen research capacity, as well as the capacity to implement research. Introduce training on research methodology into medical and nursing academic curricula
    iii. Develop in-service ongoing training on NCD prevention and management
    iv. Introduce training for health providers to develop competency in patient communication, counselling
    v. Improve the status of nurses and dieticians in CDV/DM management
    vi. Involve public health professionals, psychologist, dieticians, and social scientists in CDV/DM management.

b. Improve NCD control and prevention services:
    i. Introduce/strengthen screening programs
    ii. Introduce a standard set of integrated clinical management guidelines

        iii. Establish a formal clear referral and re-referral system linking primary, secondary and tertiary levels
        iv. Establish an appropriate appointment system to increase contact time of patient-providers and minimize waiting time
        v. Establish a proper system to follow up the patients
        vi. Implement a surveillance system.

    c. Ensure equity in service delivery and resource allocation:
        i. Control dual practice of doctors both in private and public sector
        ii. Introduce universal insurance coverage
        iii. Ensure equal distribution of medicine, equipment and human resources in different parts of the country including bridging the gap between rural and urban.

    d. Empower the community and strengthen patients' self management
        i. Involve communities and establish grassroots bodies in multi-sectoral health promotion activities
        ii. Engage communities in planning and provision of NCD related services and activities
        iii. Engage family members in the overall NCD management procedure.

E. Advocacy and awareness building initiative

Although in varying degree, lack of awareness regarding CVD/DM risk factors has been identified among the population. There was also a gap in the awareness among key health personnel regarding the international guidelines of NCD prevention and management. Therefore following is recommended:

a. Organize extensive media campaigns on the NCD risk factors
b. Control unhealthy food advertising
c. Promote physical activity
d. Integrate education on healthy food in the school curricula
e. Indentify opinion leaders and inform them of the current and projected problem of chronic diseases in the country and the existence of effective interventions
f. Prepare a strategic plan for DM/CVD with the participation of different sectors including private, public, NGOs.

In the WHO framework, the interventions have been further divided into three categories as follows:

Core: Interventions that are feasible to implement with existing resources in the short term.

Expanded: Interventions that are possible to implement with a realistically projected increase in, or reallocation of, resources in the medium term.

Desirable: Evidence-based interventions which are beyond the reach of existing resources.

Which among these interventions would be Core, Expanded and Desirable will very much depend on the specific country situation, but we propose the following as a general guideline:

Core:

Health information

- Include the NCD related needed data, including the major risk factors - into the national HIS policies/strategy
- Establish comprehensive and integrated national registries at all levels
- Establish means for effective information sharing on patients between different providers and different levels of care.

Legislation and regulation

- Mandatory reformulation of the food industry to control salt content in processed foods of high salt content
- Mandatory labeling requirements on processed food to declare salt content
- Reduce saturated fats and elimination of trans-fatty acids in processed food through relevant regulation
- Introduce/enforce the existing anti-smoking law.

Health services organization and delivery

a. Improve the capacity of NCD human resources:
   - Develop in-service ongoing training on NCD prevention and management
   - Introduce training for health providers to develop competency in patient communication, counseling.

b. Improve NCD control and prevention services:
   - Introduce a standard set of integrated clinical management guidelines
   - Establish a formal clear referral and re-referral system linking primary, secondary and tertiary levels
   - Establish an appropriate appointment system to increase contact time of patient-providers and minimize waiting time
   - Establish a proper system to follow up the patients.

c. Empower the community and strengthen patients' self-management:
   - Engage family members in the overall NCD management procedure.

Advocacy and awareness building initiative:

- Organize extensive media campaigns on the NDC risk factors
- Control unhealthy food advertising
- Promote physical activity
- Indentify opinion leaders and inform them the current and projected problem of chronic diseases in the country and the existence of effective interventions

- Prepare a strategic plan for DM/CVD with the participation of different sectors including private, public, NGOs

Expanded:

Health care financing

- A line item for prevention and control of NCDs in general, and CVD and DM in particular, should be included in the annual health budget
- Where applicable donors should be encouraged to direct reasonable aid to NCD prevention and management as per the national health plans and priorities
- Current payment systems should be evaluated and changed to fit with NCD management (contribution payments, performance based systems, restrictions for prescription of DM medications by GPs etc.)

Legislation and regulation

- Implement smoking cessation programs

Health services organization and delivery

- Improve the capacity of NCD human resources:
  - Develop training packages and use of available training packages on NCDs prevention and management and incorporate them into medical and nursing academic curricula
  - Strengthen research capacity, as well we the capacity to implement research. Introduce training on research methodology into medical and nursing academic curricula
  - Improve the status of nurses and dieticians in CDV/DM management.
  - Involve public health professionals, psychologist, dietician, and social scientists in CDV/DM management.

- Improve NCD control and prevention services:
  - Introduce/strengthen screening programs
  - Implement a surveillance system.

- Empower the community and strengthen patients' self management:
  - Involve communities and establish grassroots bodies in multi-sectoral health promotion activities
  - Engage communities in planning and provision of NCD-related services and activities.

- Awareness building initiative
  - Integrate education on healthy food in the school curricula.

Desirable:

Ensure equity in service delivery and resource allocation:

- Control dual practice of doctors both in private and public sector
- Introduce universal insurance coverage

- Ensure equal distribution of medicine, equipment and human resources in different parts of the country including bridging the gap between rural and urban.

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