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Abstract

In this paper we intend to demonstrate the close links between social and spatial inequalities, on one hand and the health conditions and access to health services, on the other hand. Although the available statistics on the social aspects of health in Morocco is still not of a satisfactory level, the analysis we were able to carry out did lead to some interesting results. The constant and complex interrelationship between social and spatial factors and the scale of resulting inequalities in terms of health is one of the most fundamental conclusions. The heavy weight of gender-based relations on health of Moroccan women in specific contexts is another. The excessive vulnerability of women and children's health to the social conditions that characterize their daily existence is another noteworthy conclusion. The critical role played by poverty, lack of education, isolation and remoteness of basic health facilities in conditioning the health status and opportunities to access to medical care for these categories of population in the event of illness can be added to the list of important conclusions reached in this study.

Keywords

Health, social inequalities, spatial dimensions, poverty, gender, children, women, Morocco

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Introduction

It is widely accepted these days that close links exist between a country's level of social and economic development and the health status of its population. Health is an integral part of development, as individuals both contribute to and benefit from the development of the country in which they live. On one hand, economic and social progress has a positive effect on the health of the population. On the other, human energy generated by improvements in the population's health contributes to social and economic development.

These causal links are widely recognized on a macro or national level and even more so on a micro level, that of the individual. As early as the Alma-Ata Conference on Primary Health Care in 1978, the 'social' nature of health was unanimously recognized. According to the Declaration adopted at the end of the Conference, health is not merely the absence of disease or infirmity. Rather, it is a state of physical, mental and social well-being – the threshold under which individuals cannot enjoy a physical condition that enables them to lead a socially and economically productive life.

The 1978 Declaration underlined the point that health is dependent on social issues and emphasized the degree to which the two are interlinked. The scientific literature and reports written on the subject during the years since then have all confirmed the inextricable nature of these links. In developing countries such as Morocco, with its striking social inequalities and obvious regional differences, the links between health and social issues take on even greater proportions.

It is these proportions that we intend to study in this report. Such a task is bound to come across a number of difficulties linked, *inter alia*, to the availability and reliability of statistical data on indicators that could provide insight to our study. For this reason, the first part of this report is dedicated to the assessment of existing data concerning this issue. After revealing the strengths and weaknesses of these data, we analyse the social and health inequalities on a macro level. Area and region of residence serve as spatial vectors to illustrate these inequalities and forward explanations as to their existence.

In the third and fourth parts of this report, we examine similar inequalities that concern two specific groups of the population: children and women of childbearing age.

It is not by chance that these two categories take priority in our analysis and interpretation of the assumed links between social and health issues. There are two reasons for this. First, the health of these two sub-populations is prone to the insidious impact caused by social problems. It is, indeed, well-known that women and children suffer more greatly from a lack of resources in poor and deprived areas. It is common practice in families coming from a socially and economically underprivileged background to distribute resources according to family status rather than biological needs, with men coming before women, boys before girls, adults before children and the old before the young[1]. This makes our two target populations the most affected by social exclusion and the most dependent on the prevailing socio-economic context. It also reveals 'gender' as a fundamental social dimension in the collection and analysis of information on social inequalities in health, as Moroccan society continues to be marked by mass poverty and the significant marginalization of its female population[2].

Second, more statistical data are available for these sub-populations than any other and they have been the subject of the most frequent field surveys. We should, however, note that whether in terms of information or research and study, it is the health aspect of these two populations that seems to attract the most attention. Purely social issues, whether tackled individually or in conjunction with health issues, continue to be of less general interest.

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[1] See Gage A.J. and Njogu W. (1994): "Gender inequalities and demographic behavior" the Population Council. See also Toubia N. et al (1994): "Arab women: a profile of diversity and change" The Population Council and Obermeyer C.M. (1995): "Family, gender and population in the Middle East, policies in context" The American University of Cairo Press.

[2] One look at the indicators that measure the influence of gender on the right to education, work, decision-making, etc. is enough to realize the degree to which this marginalization exists. The position in which it continues to place Moroccan women in nearly all the sectors listed above is considerably more backward than that suffered by their Tunisian or Algerian counterparts.

We end this report with a series of recommendations on a number of levels from conceptual to analytic. These include the data collection system and the political and institutional components. Our recommendations have two goals: to increase knowledge of this subject and improve the performance of future actions.

Source data and their limits

In Morocco, compared with some countries that are very similar in terms of culture, history and development potential[3], theoretical studies and health surveys undertaken from a social point of view are still scarce. This scarcity is in large part due to the country's persistent lack of statistical information capable of shedding a sufficiently broad and convincing light on the subject. On one hand, we still lack information on many social and health aspects. On the other, the existing information on the few indicators relating to these aspects is flawed by a number of gaps resulting notably from the fact that it is not fully representative, is often unreliable, and regularly lacks sufficient detail to be of real use. .

When we consult, for example, the Annual Statistical Book published by the Directorate of Statistics every year, or the "Santé en chiffres" (Health Figures) also published yearly by the Ministry of Health, we cannot fail to note that the only information available is the number and cause of deaths in urban areas and that these are only broken down according to sex and place of residence. No indication of age or socio-demographic characteristics is given.

In addition to the limited nature of this information—which severely restricts the use to which it can be put—one must underline the fact that it is unreliable and far from representative. A case in point is routine hospital records. Cause of death is not always correctly diagnosed due to the fact that it is most often transcribed by paramedical staff who are under-qualified for this task. Medical records only provide information on morbidity in urban areas. Information on morbidity in rural areas—home to nearly half the Moroccan population and experiencing the highest levels of poverty and poor social and health conditions—remains unknown.

These weaknesses, as undesirable as they are restrictive, continue to mar the Moroccan health statistics, thereby reducing their significance and range of use. Given the obvious failings of the routine record-keeping system, one has no choice but to settle for the field survey data collected to date. Whether focused on health issues or aimed at a better understanding of the socio-economic profile of the Moroccan population, these surveys remain, at present, the source from which is derived most of the statistical information on social and health indicators.

One must highlight the fact that socio-economic issues and concerns as to how to measure the health of specific categories of the population are themes that have been the subject of a number of surveys. Concerning health matters for instance, Morocco has implemented a whole range of surveys, most of which have been carried out as part of an international programme. Such was the case for the World Fertility Surveys (WFS), Demographic and Health Surveys (DHS), Pan Arab Project for Child Development (PAPCHILD), and Pan Arab Project For Family Health (PAPFAM) surveys carried out by the Ministry of Health in collaboration with one or other international organization. Social or socio-economic themes such as poverty, standard of living, housing, consumption, employment or the status of women have also been the target of field operations, usually led by the Directorate of Statistics. Among these operations, let us note those dealing with information that is particularly relevant to this report: the National Survey on the Standard of Living of Households (1990/91 and 1998/99) and the National Survey on the Time Budget of Women (1997/98).

Although these surveys have gone a long way in reducing the lack of statistics related to social and health indicators, they are far from flawless. A number of problems still remain and a great deal remains to be done before the various elements that make up the Moroccan statistics services are in a position to produce data of a high enough standard to satisfy the needs of researchers and address priorities required for knowledge generation and action. Of these gaps and weaknesses, it is worth pointing out the following:

- The limited scope of the surveys carried out by the Ministry of Health. Whether it be the DHS surveys in 1987 and 1992, the 1997 PAPCHILD survey or the 2003/2004 PAPFAM survey,

[3] Let us cite the example of Tunisia, amongst others.

they all systematically gave priority to investigations on maternal and child health and those aspects directly or indirectly linked to reproductive health. In doing so, they irremediably limited the knowledge of health problems to two categories of the population which they continually targeted: children and women of childbearing age. Health problems concerning female populations under or over childbearing age consequently remain little documented and largely unknown. Even the health of women of childbearing age is only studied from a reproductive angle. Little or no information exists on the subject of health issues unrelated to reproduction.

- The infrequency of the surveys. This allows only periodical follow-up of the social and health indicators these surveys are the only one to produce - and thus renders regular analysis of trends hardly possible to perform. It should be noted that almost all the indicators relating to maternal and child health, and to any given social aspect of Moroccan society, come respectively from surveys conducted on an irregular basis either by the Ministry of Health or the Directorate of Statistics.

- The static manner in which most relevant variables are dealt with by those surveys. As most of the surveys are retrospective, they only take into account the characteristics of the population, especially those of a socio-economic nature, at the time of the survey, when it is well known that these characteristics usually evolve in time. As a result, any changes in these are not and cannot be taken into account, simply because questions as to the form they may take and their meaning still do not figure on the questionnaires that make up these surveys.

- The constant relegation of qualitative information to a secondary role. The last decade has certainly witnessed a growing awareness of the usefulness of this type of information, along with genuine improvements in the manner in which it is collected and analysed. However, investigations carried out from this point of view remain limited both in scope and subject matter. Most of them only consider the reproductive aspect of the health issue, something for which quantitative surveys have already been criticized. And they are (for the most part) still few and far between, lacking depth in their view of health from a social viewpoint.

- Description still remains the dominant characteristic in scientific literature on health and its social determinants. The majority of research studies published on the question continue to limit themselves to a merely descriptive vision based on the presentation of a series of figures and survey results. While this is not wholly useless, description alone is not enough. One must also explain and highlight the relationship, interrelationship and interaction between health indicators and the social factors on which they directly, or indirectly, depend.

Health and social inequalities: intertwinement of the social and spatial

A summary indicator of the average lifespan in a given population, life expectancy at birth can also be seen as a general barometer of the health status and well-being of the population as a whole. Any progress in terms of life expectancy is a direct result of efforts made to improve the health conditions of the population and reduce the incidence of specific or endemic diseases. We examine change in this indicator in order to assess the results achieved by Morocco in its attempt to ensure wider and more equitable access to a better level of health for all segments of its population. The following table summarizes the information base for making the assessment.

Table 1. Change in life expectancy at birth by sex and area of residence (1987-2001)

	1987		1994		2001	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**
Urban	67.8	71.8	69.4	73.7	71.0	75.4
Rural	61.1	63.0	64.0	65.9	66.2	68.1
Both	63.7	66.4	66.3	69.5	68.0	72.1

Source: Directorate of Statistics (2003)

The table shows official estimates of life expectancy at birth by sex and place of residence for 1987, 1994 and 2001. The differences shown by the two sexes are in keeping with universally established and

generally observed figures. At all times and in all places female life expectancy is greater than that of men. The difference is, however, twice as great for women living in urban areas than for their rural counterparts. The former can expect to live on average at least four years longer than men living in an urban area. The latter have a life expectancy that is only two years longer than rural men. These differences do not seem to diminish with time, but remain unchanged from one year to another.

The contrast between rural and urban areas does not concern women alone. The differences that penalize rural men compared to their urban counterparts are equally considerable. While the differences between rural and urban areas have diminished slightly, they remain substantial. According to the estimates reported in the table below, urban men who lived in the average seven years longer than their rural compatriots in 1987 still lived five years longer in 2001. During the same period, urban women who enjoyed a life expectancy nearly nine years longer than their rural counterparts continued to outlive them by at least seven years, 14 years later.

This is evidence indeed of the influence of the living environment on the length and quality of life of Moroccan people and how much the numerous disadvantages that go with living in rural areas still weigh heavily on the living conditions and health of those who live there. These disadvantages include not only problems of access to basic services, but also a number of discriminating socio-economic factors.

The lack of health facilities and poor access to basic services remain distinctive features of rural life in Morocco. Data on average distances to the nearest health facility do show the extent to which rural Morocco is under-equipped. According to the findings of the latest survey on the standard of living of households (ENNVM 1998/99), more than 30% of the rural population in Morocco has to travel at least 10 kilometres to reach the nearest health facility. Of all the areas that the health system is supposed to cover, meeting health needs of rural women remains the least provided for. Whether in terms of maternity beds (1 bed for 2770 women of childbearing age) or the number of midwives (there are only 65 midwives and birth attendants for the entire rural population), the shortfall is painfully obvious. This goes a long way to explaining the high price paid by the Moroccan countryside in terms of maternal mortality: 267 deaths per 100 000 live births, according to a recent PAPFAM survey (2003/2004).

Along with the shortage of social and health facilities, poor access to basic services makes life even more difficult for rural families and increases their exposure to a number of health risks. For example, drinking water supply remains a privilege of a small minority of rural households. According to the latest census carried out in Morocco in September 2004, only 18.1% of rural households have access to drinking water (Table 2). As a result, many rural families are obliged to cover varying distances daily in order to obtain their household water supply. This arduous and energy-consuming task is usually left to women and, added to their numerous other responsibilities (childbearing, children's education, housework, collecting wood, etc….), it increases their vulnerability and damages their health.

Table 2. Percentage (%) of households having access to some basic facilities according to their area of residence in 2004

	Urban	Rural	Both
Running water	83.0	18.1	57.5
Electricity	89.9	43.2	71.6
Sewage disposal system	79.0	1.7	48.6

Source: Census (2004)

If, in addition to being scarce, water is contaminated, the people using it, women in particular, run the risk of contracting waterborne diseases. The critical role played by this vital source in terms of spreading disease has repeatedly been highlighted by the World Health Organization, according to whom 80% of diseases are linked to an inadequate water supply and storage conditions. For example, trachoma affects more than 500 million people around the world and causes blindness among many of them. In Morocco, although the National Programme for the Prevention of Blindness, initiated in 1991,

has significantly reduced the prevalence of this endemic disease, it continues to strike the hardest in areas where the water supply is most difficult and to affect more severely women than men[4].

Overcrowding, insalubrity, lack of comfort and hygiene, etc., are other large-scale, socio-economic factors which continue to have negative effects on health. Cramped housing conditions, combined with more and more people living under the same roof, have led to a constant increase in occupancy rates. This increase in the density of households is a well-known factor in the spread of communicable diseases. As the results of the 2004 census indicate, this situation is worsened by the fact that many households are still without electricity and not connected to a sewage disposal system.

Once again, it is in rural areas that theses shortcomings are the most prevalent and without doubt the most dangerous for the health of the population. More than half of all rural households still do not have electricity and less than 2% are connected to a sewage disposal system. This kind of situation can only lead to an increase in health-damaging risk factors.

The situation concerning urban households, although definitely better overall, is not without a number of shortcomings that put the population's health at risk. The shanty towns are still home to 8% of the urban population (as of 2004) and more than a third of all city-dwelling families live crowded into two-room dwellings at best. In addition, one urban household in ten does not have electricity and nearly two in ten are not connected to the sewage disposal system and have no access to drinking water.

These examples clearly confirm that the socio-economic inequalities that govern the right to healthy living conditions and adequate health care services depend, above all, on the surrounding environment. Whether one lives in the countryside or in town, in a suburban area or modern housing development, the hygiene conditions and health care opportunities vary to a great extent. These differences are even greater when the region of residence is taken into account.

The extreme centralization that has characterized development plans and policies implemented in Morocco since its independence has irreversibly led to uneven regional development from which the health sector has not remained unscathed. The decentralization efforts and community/local development approaches that have taken place on a large scale during recent years are still far from making up for the huge shortfalls that the neglected areas have accumulated to date. Up to 2002, the number of inhabitants per physician, measured on a national scale at 2123, dropped to a mere 380 in Rabat, whereas it reached 6362 in Taounate. In the same way, the number of public hospital beds for 100 000 population, estimated in the same year at 87 for the whole of Morocco, rose to 444 in Rabat and was only 31 in Berkane.

These figures illustrate how the uneven development that took place over a long period only served to accentuate the marginalization of certain regions of the country, resulting in the unfair exclusion of the populations of these regions from the benefits of that very same development. This exclusion is not only felt at the level of basic health care. It is, above all, experienced in terms of quality of life and the socio-economic factors that make it possible for the population to have a level of well-being that conforms to basic survival needs.

Nothing illustrates this subject better than the continuous struggle of populations living in the provinces that suffer the most from exclusion. Identified by the Social Priorities Programme (Programme de Priorités Sociales)[5] and targeted for the most part by the National Human Development Programme (Initiative Nationale pour le Développement Humain – INDH)[6], these provinces are home to more than

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[4] For more on this subject, see: Ministère de la Santé (2000): 10 années d'épidémiologie au service de la santé. Direction de l'Epidémiologie et de la Lutte contre les Maladies, p 59

[5] This programme, commonly referred to as the BAJ programme (Barnamaj Al Aoulaaouiyat Al Ijtimaiya), covers the fourteen most deprived provinces in the Kingdom: Al Hoceima, Al Haouz, Azilal, Chefchaouen, Chichaoua, Essaouira, El Kelâa des Sraghna, Ourzazate, Safi, Sidi Kacem, Taroudant, Taza, Tiznit and Zagora. It is based on priority actions on three levels: basic education, health and national development. Its aim is to bring the targeted populations up to an acceptable standard of living.

[6] Launched by His Majesty King Mohamed VI on 18 May 2005, the INDH was an initiative that signalled a break with accepted public policies on poverty and exclusion. It was based on a programme of economic and

a quarter of the Moroccan population. According to the 1998/98 survey on the standard of living of households, they suffer from a level of poverty far higher than the national average: 26.6% as opposed to 19% for Morocco in general. Nearly all these provinces are situated in the extreme north and south of the country – regions that are the most economically deprived and suffer the most from isolation and a lack of facilities and basic services. The populations living there are mainly rural, with 75% living in the countryside.

All these unfavourable social and economic conditions have turned these provinces into the largest and most prolific pockets of poverty and social exclusion in the country. In addition to socio-economic marginalization, the serious lack of health facilities and medical personnel serves to worsen the situation by increasing the health risks to the population living there and depriving them of medical care. The average distance to the nearest medical centre for 42.1% of this population is estimated at 10 kilometres with a journey time of 47 minutes[7]. Added to this, only 11% of the country's registered doctors practise in these provinces and only 16.1% of the nation's hospital beds are to be found there. These constraints, made worse by the lack of roads and means of communication, force many of the population to give up any idea of medical care when they are ill and seriously hinder evacuations in emergency cases.

These facts are, without any doubt, responsible for the obvious under-reporting that distorts the levels of morbidity recorded in these provinces (see Table 3). The level of morbidity in these deprived areas is surprisingly low (13.8%) when compared to that of the provinces supposed to be relatively well-developed (17.5%). The equally low level of medical consultations in deprived areas (56.7% versus 68.5% in the other provinces) gives further proof of the obvious lack of medical facilities in these regions and explains the above-mentioned under-reporting concerning their level of morbidity.

As we can see in the table below, the areas where social insecurity and lack of information are the most prevalent also suffer from poor medical facilities and a lack of social services. Provinces targeted by the Social Priorities Program or the Program of Social Priorities (BAJ) programme – those whose populations are the least well-off on a number of levels – not only have the highest levels of poverty and illiteracy, but also poor social and health coverage and have less access to health services.

Table 3. Selected social and health indicators for provinces targeted by the BAJ social priorities programme and provinces not covered by the programme.

Indicator	Provinces targeted by the BAJ programme	Provinces not covered by the BAJ programme	National
Proportion of rural population (%)	74.5	34.7	44.5
Proportion of illiterate people in the population over 15 years (%)	68.2	47.5	52.4
Poverty rate (%)	26.6	16.3	19.0
Reported morbidity rate (%)	13.8	17.5	16.5
Social & medical coverage rate (%)	8.5	15.2	13.5
Rate of medical consultation (%)	56.7	68.5	66.0
Rate of coverage of pregnant women with antenatal visits (%)	38.4	62.7	55.0
Average yearly expenditure on hygiene and medical care per person (in Dirhams)	300.5	618.9	535.8

Source: ENNVM (1998/99)

social development in a number of fields (employment, education, health, housing conditions, basic services, etc.) and targeted isolated and/or poor communities.

[7] For more on this subject, see: Directorate of Statistics (2002) :"Accessibilité aux soins de santé et niveaux de vie "(Accessibility to heath care and living standards), p.42

On the other hand, in the provinces that were not included in the BAJ programme, those where the population is supposed to be better-off overall, social and economic insecurity is considerably lower and social and medical services by far the most accessible.

With more than two thirds of the population illiterate and over a quarter living under the poverty line, the provinces that suffer from the highest degree of marginalization find themselves with the lowest levels of social and medical coverage and medical consultation (8.5% and 56.7% respectively). More than six out of ten women living in these areas receive no antenatal care whatsoever during pregnancy. In addition to this, spending on hygiene and medical care is at its lowest level in these provinces, with the average yearly expenditure per person being less than half that recorded in other provinces.

On the other hand, in the provinces that were not covered by the BAJ programme, less than half the population suffers from illiteracy (47.5%), 16.3% live below the poverty line and the health indicators are considerably more favourable. Social and medical cover is nearly twice as widespread (15.2%), medical consultations are far more frequent (68.5%), antenatal care during pregnancy definitely more common (62.7%) and spending on hygiene and medical care far greater.

The figures concerning social and health matters shown above reflect the extent to which social issues are inextricably linked to the spatial context in modern-day Moroccan society. The eternal dualism that opposes a progressive Morocco against a stagnant Morocco is once again shown to be the source of inequality and contrast on all levels. Health and social issues are just two areas in which these contrasts and inequalities come to light, underlining the two-tier system that has governed the country's progress since its independence. Whilst the highest authorities have recently expressed their will to consider the country as one state in an attempt to bridge the gap that separates the two Morocco, the fact remains that years of exclusion will be hard to make up for.

The vast majority of the country (74.5%) remains rural and handicapped by isolation and lack of facilities. Bringing this rural Morocco in line with its urban counterpart (65.3%) requires urgent and concrete action in a number of different sectors. Developing rural areas, expanding the basic service network, improving social and medical facilities and living conditions, raising hygiene standards and creating sources of income, etc., these are but some of the areas in need of priority action. Without effective action programmes in these fields, we cannot hope to free large portions of the population from the insecurity and economic and social vulnerability in which they find themselves and even less from their unenviable conditions of health and medical care.

Social inequalities and their effect on the health of young children

Over and above the constraints imposed by living conditions, there can be no doubt that the effects of social and economic context vary according to age and gender. The first years of a child's life are those during which its health and chances of survival are the most directly dependent on the social and economic status of its parents. It is also the age when the effects of different treatment according to gender are felt the most in terms of child health, especially that of girls.

Often considered as one of the indicators of socio-economic development and well-being, infant mortality is also frequently used as one of the best indicators of the health status of a population at large. Variations according to the parents' socio-economic profile indicate the degree to which children's health and chances of survival depend on the conditions in which they are born and raised. As the following table indicates, being born in the countryside or in town of an illiterate mother or one with a decent education in needy conditions or relative comfort are socio-economic factors that weigh heavily on a child's chances of enjoying good health for its survival.

Table 4. Child mortality rates according to specific social and economic characteristics

Socio-economic characteristics	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Infant and child mortality
Sex of the child					
- Male	33	18	51	9	59
- Female	23	14	37	11	48
Area of residence					
- Urban	24	9	33	5	38
- Rural	33	22	55	15	69
Mother's level of education					
- Illiterate	33	19	52	11	63
- Primary	21	11	33	10	42
- Secondary or higher	17	6	23	4	27
Well-being quintile					
- Poorest	38	24	62	16	78
- Middle	25	12	37	10	47
- Richest	19	5	24	2	26

Source: PAPFAM (2003-2004)

The socio-economic influence on infant and child mortality in Morocco is best seen when the latter is broken down into its main components. Of these, post-neonatal mortality shows the greatest inequalities resulting from social and economic causes. This is further evidence of the influence of social and economic context on Moroccan children's health and chances of survival. Of almost exclusively exogenous origin, linked to a number of reasons including hygiene, food and care, the causes of post-neonatal mortality are, in fact, of an essentially socio-economic nature. If we are to believe the findings of the latest health survey (PAPFAM 2003-2004), the level of this mortality is multiplied by nearly five when one passes from the richest category (5‰) to the poorest (24‰). The differences between the same two categories are, however, much less striking in terms of neonatal mortality. Here the risk of death during the first month of life is only twice as likely for children born into the poorest 20% of the population than in the richest 20%. Less striking, but nonetheless considerable inequalities come to light when other social and economic factors are taken into account.

These inequalities, seen as indicators of mortality, reveal even greater differences regarding the health care available to children and infants. The death of a child is nearly always the result of a morbidity process that starts with malnutrition or hygiene problems and is made worse by the lack of access to appropriate care. The table below brings together the latest information on these aspects with a set of indicators.

Table 5. Immunization, medical treatment and nutrition of children under the age of five according to specific socio-economic characteristics

Socio-economic characteristics	% of children having received all vaccines*	% of children having received no vaccines	% of children with ARI** symptoms or fever having had treatment	% of stunted children	% of children with chronic malnutrition
Sex of the child					
- Male	86.8	1.6	36.0	19.1	6.7
- Female	91.2	1.2	33.0	17.1	6.2
Area					
- Urban	93.5	1.0	43.3	12.9	3.8
- Rural	84.1	2.0	24.5	23.6	9.2
Mother's level of education					
- Illiterate	86.0	1.9	30.1	21.8	8.2
- Primary	91.8	0.8	38.7	14.3	4.0
- Secondary or higher	95.9	0.6	44.1	10.5	3.4
Well-being quintile					
- Poorest	80.7	2.8	18.0	29.1	12.0
- Middle	90.6	0.4	31.9	16.1	4.5
- Richest	97.4	0.7	50.7	10.2	3.3

Source: PAPFAM (2003-2004)

* BCG, measles, three doses of DPT and polio vaccines

** Acute Respiratory Infection

Whether for preventive measures such as immunization against specific diseases or curative treatment involving the health care services when needed, the social status is shown to be a determining factor. Similarly, in the case of stunting or acute malnutrition, children from deprived backgrounds are those whose health is the most frequently threatened by these conditions. In the poorest families, only 18% of children under the age of five are likely to see a doctor if they have a fever or symptoms of acute respiratory infection, whereas more than half (50.7%) of children from the richest families will do so. Similarly, where one in three children from the poorest 20% of the population suffers from stunting, only one in ten from the richest 20% is prone to the same condition.

We can see that a child's chances of survival and a healthy life are conditioned from the outset by the social inequalities that characterize the environment in which he or she is born. Other inequalities of a more behavioural nature add to the effect of these social drawbacks, with gender discrimination being the most common in certain situations. According to the available data on gender-specific mortality, in Morocco the universal advantage enjoyed by females gradually disappears with age and gives way to excess female mortality in young girls (see Table 4). As we can see, if female newborns run 31% less risk of neonatal death than their male counterparts, this advantage drops to 23% for post-neonatal death to become a 22% greater risk of death in childhood.

In view of the exogenous nature of post-neonatal and child deaths, we have every reason to believe that the gender issue must have acted against the widely observed, natural advantage enjoyed by the female sex to such a degree as to engender a slight excess in female mortality. An in-depth survey on the circumstances surrounding infant and child deaths, carried out in 1998 by the Ministry of Health, made it possible to identify this excess female mortality as occurring between the ages of eight to eighteen months. It also revealed that malnutrition was partly responsible, which implies the existence of gender-based discriminatory practices concerning the feeding of newborn children – an implication which would tend to confirm our hypothesis.

However, the latest national health survey, the PAPFAM survey carried out in 2003/2004, does not seem to go along with these findings. Whether it in terms of malnutrition or immunization, no discriminatory trends emerge from this survey (see Table 5). Two other surveys on nutritional deficiencies among children conducted by the Ministry of Health produced results that did not contradict the absence of sexual discrimination in the feeding of infants, or at least did not reveal the

existence of its effects. These surveys were the National Survey on Vitamin A deficiency (1996) and the National Survey on Iron deficiency (2000). Both these surveys came to the conclusion that there was no connection between anaemia and vitamin A deficiency and the sex of the child. However, the two surveys also clearly indicated that the socio-economic level of the family was a determining factor in the existence, or not, of these deficiencies.

Given the lack of detail in these surveys and the sometimes contradictory results obtained, we feel the question remains unanswered. To answer it will require the design and conduct of more in-depth, better documented surveys, incorporating hitherto unexplored aspects. The image we have of each sex, the roles that we tend to attribute to them, our attitudes, behaviour and selective treatment of one or the other are all grey areas that need to be clarified. Investigations into these factors and the discrimination they induce, whether in terms of nutrition or care and attention in the broader sense, are few and far between and need to be more frequent and better designed in the future.

Social factors involved in the health of women of childbearing age

If there is one tragedy that illustrates both the social insecurity and vulnerable health status of a large portion of the female Moroccan population, it is surely the continuing high incidence of maternal mortality. Although the control of this mortality has been one of the Ministry of Health's main priorities for several years, maternal mortality levels remain very high. With around 227 maternal deaths per 100 000 live births, according to the 2003/2004 PAPFAM survey[8], it is still considered as being the highest recorded rate in North Africa. In Tunisia and Libya for example, the figures are respectively 70 and 75 maternal deaths per 100 000 births, in other words, three times lower than those in Morocco.

With a similar GNP per capita, Morocco and Jordan have radically different rates of maternal mortality[9], with 41 deaths per 100 000 births in Jordan, six times less than in Morocco. Investment in women's health and interest in their social condition is of visibly greater interest to Jordanian officials than to their Moroccan counterparts. This goes to show that to succeed in the prevention and control of maternal mortality in particular and social and health vulnerability in general, it is not enough to carry out specialized programmes and actions. What is more important is for such programmes and actions to incorporate the component that determines their impact, in this case the social component.

Two surveys carried out by the Ministry of Health were directly aimed at identifying the main causes of the persistent excess of female mortality and the precarious state of health which a large number of women are forced to endure during pregnancy. These two surveys, one quantitative and on a national level and the other regional and qualitative[10], highlighted the powerful influence of a number of factors, several of which are not health-related.

One of the incriminated factors revealed by both surveys is low health care coverage. The lack of infrastructures, the remoteness of health facilities and the absence of roads and means of transport, etc. are all constraints that prevent or greatly hinder the emergency referral of pregnant mothers or delay management of such cases by health personnel. Such a situation, which has now become rather frequent, can only lead to the weakening of their state of health and an increase in the death risk.

The long distances and time required to access the nearest health facilities are not the only obstacles to access health services. There are also financial barriers related to the affordability of access to the appropriate services. The National Survey on the Time Budget of Women (1997/98) confirmed these facts. Whether it in rural or urban areas, this survey revealed the extent to which many women are deprived of health care because they cannot afford them. In that survey, almost a quarter of Moroccan women in both rural and urban areas mentioned money as the reason for not consulting a doctor when ill (see Table 6).

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8 The same survey gave a rate of 186 maternal deaths per 100 000 births in urban areas and 267 in rural areas.

9 See UNDP (2005): World Report on Human Development 2005

10 These studies were:

- Ministry of Health (1992): "Approche de la mortalité et de la morbidité maternelles au Maroc, INAS" (Approach to maternal mortality and morbidity in Morocco, National Health Administration Institute"
- Dialmy (2000): « La gestion socio-culturelle de la complication obstétricale, Ministère de la Santé-USAID »(Socio-cultural management of obstetric complications, Ministry of Health-USAID »

The inability to pay for relatively costly modern treatment appears to be the key factor in pushing many Moroccan women to resort to self-medication and traditional medicine. The same survey revealed that nearly a quarter of Moroccan women still use traditional medicine and that almost a third of them are still obliged to resort to self-medication (see Table 6). These practices, which can only compound women's ill health, are most common in poor areas where women deprive themselves, or are deprived of, health care because of their unfavourable socio-economic situation. Their incapacity to pay for medical treatment has been made worse since the structural adjustment programme that was carried out in Morocco in the 1980s. The effects of this program continue to be reflected in higher costs for health care, thus rendering it even less accessible to the poor.

Table 6. Reasons why women did not consult a doctor during their last episode of illness (%) according to area of residence

Reasons for not consulting	Urban	Rural	Both
Consultation with a fqih or clairvoyant	-	1.9	0.9
Recourse to traditional medicine	21.8	26.7	24.0
Self-medication or direct referral to a pharmacy	41.1	22.2	32.5
Transient illness or illness deemed not serious	8.0	16.8	12.0
Lack of money	24.5	2.9	24.7
Refusal by the husband	0.5	1.4	0.9
Other reasons	4.1	6.1	5.0
Total	100	100	100

Source: Survey on the time budget of women (1997/98)

The limited budget that the Moroccan government allocates to health spending is not enough to make up for the years of austerity imposed to the health sector during the decade when the structural adjustment programme was implemented. At barely more than 4% of the GNP, the health budget remains below WHO recommendations and is low when compared to that of other countries with similar economies, such as Tunisia[11]. This in a country where health insurance is still largely optional, with only 15% of the population covered, of whom the vast majority live in big cities. Social security is not widespread either, benefiting only 23% of the working population, most of those being city-dwelling men.

In addition to material constraints, problems linked to gender make it more difficult for women to seek treatment in case of illness and sometimes deprive them of the right to health care. Denial of decision-making rights concerning their health remains a major problem facing a large portion of the female population in Morocco. According to the results of the National Survey on the Time Budget of Women (1997/98), nearly half the women interviewed (47.1%) said they were obliged to go to medical consultations accompanied (see Table 7). This obligation was felt the most in rural areas, due to the much more alienating condition of women and their low status in the family. Indeed, nearly two thirds of rural women (67.8%) confirmed this obligation, compared to only one third of urban women (34.1%).

[11] See UNDP (2005): World Report on Human Development 2005

This shows how the constraints suffered by a large number of Moroccan women and the limits imposed on them by these constraints affect their most fundamental right, that of having free recourse to medical care when they need it. In such a context, one can hardly expect telling results from programmes and initiatives aimed at improving the health of Moroccan women. As long as this situation lasts and as long as lack of education and poverty continue to exist at their current levels, these programmes and actions will only achieve incongruous results with limited impact. Promoting and improving the health of Moroccan women will only be possible if the social and economic conditions in which they live are equally improved. The success or failure of future measures taken to reach this objective will largely depend on the will of those involved to integrate the social and economic dimensions affecting the health situation.

Table 7. Percentage distribution of women according to the requirement to be accompanied during medical consultations

Requirement to be accompanied during a medical consultation	Urban	Rural	Both
Obligatory	34,1	67,8	47,1
If the woman's health condition requires it	36,8	24,3	32,0
Not obligatory	29,1	7,9	20,9
Total	100	100	100

Source: Survey on the Time Budget of Women (1997/98)

In addition to the above-mentioned social and economic constraints, the weaknesses and shortcomings that continue to handicap the Moroccan health system increase the risks affecting the health of women in Morocco. In such a context, the very act of giving birth is often a danger to the health of a large portion of the Moroccan female population. The social and health conditions in which many women are forced to give birth bear witness to the serious threats to the health of both future mothers and their children. The indicators shown in the following table illustrate the magnitude of these threats, particularly for women at the bottom end of the social ladder, or those handicapped by their lack of education or living conditions.

Table 8. Percentage of women who had no antenatal or postnatal care and of women who gave birth at home or with the assistance of a traditional midwife among the total number of women who gave birth to live children during the last five years and according to some characteristics

Socio-economic characteristics	% of women who did not receive antenatal care	% of women who had no postnatal visit	% of women who gave birth at home	% of women who were attended by a traditional midwife during delivery
Area of residence				
- Urban	15.1	83.7	16.4	7.7
- Rural	52.1	96.4	61.1	33.8
Mother's educational level				
- Illiterate	44.5	94.7	52.4	28.2
- Primary	21.5	88.9	23.8	12.6
- Secondary or higher	6.6	79.9	7.6	3.4
Well-being quintile				
- Poorest	60.3	97.1	70.5	39.9
- Middle	29.4	89.9	31.8	14.1
- Richest	6.9	73.6	6.0	3.1
National	67.8	93.4	38.5	20.6

Source: PAPFAM (2003-2004)

Antenatal care, for example, is still far from being common practice among the female population in Morocco. No less than six out of ten women belonging to the least well-off social class never received this kind of care during their pregnancy. In rural areas, the figure is more than five out of ten. The same applies for illiterate women, with nearly half (44.5%) being deprived of such care. On the other hand, only one in ten of the better-off and better-educated population of women suffered from this form of exclusion, and only two out of thirty in urban areas.

Only a minority of Moroccan women enjoy the luxury of giving birth under medical supervision. According to the latest statistics, nearly one in every four Moroccan women still gives birth at home. This practice remains the most common among rural and illiterate women, or those living in the most difficult social conditions. Indeed, while less than one child in ten is born at home in better-off and better-educated families, this proportion is at least seven times greater for children born of mothers with the lowest socio-economic profile. The figure is 52.4% for illiterate mothers and 61.1% and 70.5% respectively for mothers living in rural areas and those from the poorest social category, clear proof of the large-scale shortcomings in health coverage affecting this most basic of health care needs and a clear indicator of the extent to which social exclusion creates a lack of coverage with basic health services. It is, indeed, obvious from these figures that mothers-to-be from deprived backgrounds run a far greater risk of complications arising from childbirth at home which often takes place in unhygienic conditions and with no supervision.

Poverty, lack of education and difficult access to basic health services are all social and economic handicaps that force a large number of Moroccan families to resort to a traditional midwife during childbirth. Again, it is among the most socially vulnerable women that this type of practice is the most widespread. Nearly one in four women (39.9%) from this category has had to seek the assistance of a traditional midwife for the birth of their child. In rural areas that suffer the most from the lack of health services in general and maternal health services in particular, more than a third of children (33.8%) are born in such conditions. As for illiterate women, their lack of education and unfavourable socio-economic situation lead 28.2% of them to seek the assistance of a traditional midwife during childbirth.

Of all the health needs linked to childbirth, those concerning postnatal care remain by far the least well provided for. On a national level, even in the best-off social categories, the postnatal visit is still uncommon practice among Moroccan women. On a national level, more than nine women in ten have never had a postnatal visit after childbirth. Seven out of ten women from the wealthiest social class have not received postnatal care and illiterate women, those living in rural areas and those at the bottom end of the social scale have, needless to say, benefited much less from such care. At best, only one in ten women from these categories had a postnatal visit.

One must, however, recognize that the lack of facilities and medical personnel and the fact that many people do not have the financial resources to meet their health care needs are not the only factors that determine Morocco's limited health coverage. Other behavioural and cultural factors would appear to be the cause of the low demand for this type of services among women of all social backgrounds. These women's perception of their health, the need for medical care at different stages of their reproductive life and the decision-making priorities they allow themselves, or are allowed with regard to this subject, are all key factors that lead to varying degrees of negligence in postpartum care.

Institutional factors linked to the quality of the services provided and the way service providers are perceived by the population also merit our attention. Many studies have shown that even when health services are free and easily accessible, it is not certain that they will be utilized. Of these studies, that carried out by Dialmy (2001) showed the existence of a number of communities that actually had adequate and readily accessible health facilities and yet still did not make use of them. We should also mention a socio-anthropological study carried out in 1996 by the Ministry of Health in the northern provinces of Morocco. This study had the merit of identifying a number of factors that caused people to back away from using the health services. Among these factors, the following are of particular interest: client selection, bad customer relations, poor treatment, disdain and even insulting clients. All these factors dissuade the already deprived social classes, further limiting their use of health services.

Conclusion and recommendations

At the end of this study, limited by circumstances to particular but nonetheless important aspects concerning the impact of social conditions on health, we can draw a number of conclusions and learn some interesting lessons for the future. These conclusions and lessons cover a variety of areas including data collection, research and action. The statistical information they produce, the analysis of causal links they permit, the progress in terms of knowledge they represent and the improved targeting of future actions they lead to are all elements that constitute a barometer which indicates the level of interest shown by the public authorities, researchers and decision-makers in the social and health conditions of the population.

Advances made in any one of these fields are bound to condition those we expect in others. As such, they are wholly interdependent and their coherence and coordination are determining factors in the success or failure of any social or health policies. Research cannot progress without access to reliable and sufficiently detailed information. It is clear that the success of future actions depends on the degree to which prior research asked the right questions and provided the clearest and most detailed answers. All this so that the measures to be taken, in both the social and health sectors, may be based on genuine knowledge that fully takes into account the target context. It must be stated that, whether in terms of quality or quantity, the information hitherto collected and disseminated on factors that might facilitate an approach to health problems from a social point of view remains limited. Considerable efforts have been made to make up for this lack of information, but these efforts are insufficient if we are to have any real chance of shedding light on the numerous grey areas that continue to cloud the subject.

It is clear that the persistent lack of information concerning basic social and health issues inevitably leads to a narrowing of the realm of investigation available to researchers. Like the sources of information on which they rely, studies and research programmes on specific Moroccan health issues are still dominated by poles of interest that have become classical and recurrent. Reproductive health and associated subjects remain the dominant themes in all of these studies. Adolescent health, the health of menopausal and older women, the health status of males above the age of infancy are all subjects for which the collection of information and research programmes are still rare and highly marginalized. Given the demographic importance of these categories, one cannot but recognize the immensity of the grey area that continues to blight so many aspects relating to the health of the Moroccan population.

Along with the almost total lack of knowledge concerning the health problems of these categories and the fact that it is impossible to examine the social conditions in which they lie, our understanding of certain aspects of the health and social conditions of those categories that have paradoxically attracted the most attention – children and women of childbearing age – remain decidedly approximate. Indeed, it must be said that research and study conducted so far on health issues specific to the latter categories are quite often flawed as a result of their overly descriptive nature and the fact that they rarely place the target populations in their proper context.

While there is no doubt that we now have more precise figures concerning some aspects of women and children's health and their differential variations according to common variables, we are still waiting for answers to a number of questions. To what extent does each determining social factor influence a specific health risk? At what stage does this factor intervene in the causal chain that leads from a state of good health to one of vulnerability and perhaps even to the start of the morbidity process? What are the relationships and interrelationships between the factor in question and other factors and are the others of a social nature or related to other issues? In what context and social category is the impact of such a factor likely to increase or decrease? What other invisible and not always quantifiable factors are likely to accentuate or lessen this impact? These are just some of the questions that remain unanswered . Future investigations should address them as quickly as possible.

Like the research and information they rely on, the policies and action programmes carried out with the aim of ensuring the right to health and widespread access to health services are not without their weaknesses. Of these, the main one is the lack of attendant measures that need to be taken in order to support them and give them a maximum chance of succeeding. Many actions have been taken with the aim of progressing towards better quality and more equitable health care systems, but with poor results and accordingly little progress made. The main reason for this lack of results is the fact that no parallel actions have been undertaken to tackle the many social problems which continue to weigh heavily on

the health conditions of large segments of the population. The success or failure of future policies and programmes will depend on the extent to which they take into account the multidimensional nature of health and its subjection to social conditions.

The almost systematic absence of any effort to adapt to the context, along with the ineffectiveness of the attendant measures, gives the above policies and programmes little chance of succeeding. Designed for the most part on a national level, such policies and programmes are usually directed towards sub-populations with specific socio-economic profiles and, more importantly, distinct cultures and ways of life. For example, while the impact of gender on the health of Moroccan women is now obvious, decision-makers are still not concerned by the need to take this factor into account when formulating policies and developing programmes. The role of men in specific problem areas that impact women's health (family planning, for example) is starting to be recognized, but we are a long way from a gender-based health policy in Morocco.

Overall, genuine progress in Moroccan health and easy and socially equitable access to health services remain a long way off. The different steps on the road to that goal are manifold and not easily negotiated. The different aspects requiring attention and effort in the future are varied in nature. There are many shortcomings and backlogs and the problems they pose are of varying complexity; the time required to rectify them is likely equivalent to that which has already been lost to date. In health and social matters, as in all matters, knowledge comes before action and the development of a complete and powerful information system is an essential step towards a level of knowledge that will enable coherent and perfectly targeted action.

Although the available information on the social aspects of health has not been of a satisfactory level for the present study, the study leads to some interesting conclusions. The constant and complex interrelationship between social and spatial factors and the scale of the resulting inequalities in terms of health is one of the most fundamental conclusions. The heavy weight of gender-based relations on the health of Moroccan women in specific contexts is another. The excessive vulnerability of women and children's health to the social conditions that characterize their daily existence is another noteworthy conclusion. The critical role played by poverty, lack of education, isolation and remoteness of basic health facilities in conditioning the health status and opportunities to access to medical care for these categories of the population in the event of illness can be added to the list of important conclusions reached in this study.

We certainly do not claim to provide perfect answers to all the questions raised during this report. Our ambition is rather modest and consists of coming up with answers, at least partial, to the questions that concern us. The results obtained and the resulting conclusions do, nonetheless, enable us to point out substantial social inequalities affecting health. The analysis that led to these conclusions and the lines of thought and research that went along with them constitute a pertinent contribution to progress in terms of understanding and awareness of the problems caused by social and health inequalities in a society which illustrates them so perfectly. For us, this study represents an exploratory phase which we consider to be an essential base for future developments.

We cannot, however, end this report without mentioning the promising effects on the health and living conditions of those populations most subject to marginalization and social exclusion heralded by the recent National Human Development Initiative (Initiative Nationale pour le Développement Humain – INDH). Launched less than a year ago in accordance with directives from the King's speech on 18 May 2005, this initiative is both innovative and ambitious and boasts a multidimensional and multi-partner approach. Acting in response to the unsatisfactory results achieved by non-integrated and unsystematic sectoral action, its aim is to eradicate the pockets of poverty in rural and urban areas and to bring the standard of living and social conditions of the most underprivileged populations in line with rest of the country. It will concentrate on integrated and targeted action programmes that will benefit 360 rural communities housing nearly 3.5 million people, along with no less than 1.5 million people living in 250 crowded urban neighbourhoods. These communities and neighbourhoods were previously identified as being the most seriously affected by insecurity and social shortcomings of all kinds.

Similar in many ways to the BDN approach launched by WHO in the early 1990s and tested in several provinces in the Kingdom since then, the INDH is characterized by its broader geographical range and greater number of fields of intervention. As its name suggests, it is a nation-wide initiative that is not

confined to some communities like the BDN projects. Unlike the BDN approach that aims to improve health by improving quality of life, this initiative has a much broader objective: human development through different actions starting with the eradication of poverty and social exclusion as a priority.

If we ignore the differences that exist between the two programmes, the INDH and BDN are based on a precise territorial diagnosis involving those concerned and share an integrated, multi-partner and participative approach. In addition, both promote a multi-dimensional approach to health issues and give top priority to social factors that are targeted for improvement. Access to basic facilities (water, electricity, healthcare, roads, etc.), strengthening human capital (promotion of literacy, training, employment, etc.), and creating income-generating activities (microfinance, cooperatives, etc.) are just some of the means by which the INDH and the BDN approach plan to improve the living conditions and health of the target populations.

However, if the actions undertaken in the BDN programme have already born fruit, those recently put in place by the INDH are too recent for us to speak of analysis and results. The highest authority's strong will to reach the goals set for this initiative, the human and material means that have been mobilized in order to do so, and the resolutely innovative and realistic approach that has been adopted all point to assured success for this initiative. We hope that will be the case.

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