

## Summary: The destruction of young people's right to comprehensive health coverage

## 1 The effect on the right to appropriate healthcare

42% of young people aged 18-39 across the five delegations do not have a treatment card, nearly twice the percentage of 15-59-year-olds (22%) in 2014. The figures for unemployed jobseekers, 25-29-year-olds and men are even higher, ranging from 56-58%, and the figure for those with a household income of between 500 and 800 DT a month sits at 50%. These particular groups of young people are the most vulnerable to losing their right to healthcare.

It is also notable that some 46% of young workers do not have any health coverage. What is worse, of the 54% who do, only 31% have social security – that is, a treatment card in their own name that forms part of the social security system – something that all workers are supposed to have. The rest are either secondary beneficiaries of a spouse or parent's card (17%) or have a "free" or "reduced-rate" treatment card in their own name (6%). The percentage with no health coverage is even higher among day workers (61%), craftspeople, independent workers and small traders (57%), and businesspeople and investors (52%).

Even those groups that have high levels of coverage may face obstacles in accessing appropriate healthcare. Some 73% of young women have access to healthcare, a relatively high percentage.<sup>2</sup> But only 17% of these young women have a card in their name. The other 83% are secondary beneficiaries of a spouse or parent's card. This may not seem problematic, but in practice it often makes using the card difficult, preventing young women from accessing the care that they need either temporarily or entirely.<sup>3</sup>

Overall, no more than a quarter of treatment cards held are linked to the social security system.<sup>4</sup> Instead, they are part of the "Social Safety Program": "free" (9.5%) or "reduced-rate" (16.3%) treatment cards. Another 5% have access to healthcare through one of the social security organisations, outside the framework of the medical insurance system,<sup>5</sup> provision similar to that of the reduced-rate treatment card but paid for out of the National Medical Insurance Fund (CNAM), which provides its own treatment cards.<sup>6</sup>

The breakdown of those who do have health coverage differs a great deal from delegation to delegation. Although the differences are complicated, <sup>7</sup> it is possible to say with confidence that El Mourouj is an outlier compared to the other areas:

<sup>&</sup>lt;sup>1</sup> General Census of Population and Housing.

<sup>&</sup>lt;sup>2</sup> Compared to the 43% of men who have a card.

<sup>&</sup>lt;sup>3</sup> 34% of young men are secondary beneficiaries of a card in someone else's name, in almost all cases a parent's.

<sup>&</sup>lt;sup>4</sup> Whether in the young person's name or that of a spouse or parent.

<sup>&</sup>lt;sup>5</sup> Limited-income social security (3.5% of cards) or student provision (1.8%).

<sup>&</sup>lt;sup>6</sup> For treatment in the public healthcare system without the "additional benefits" provided by public medical insurance

<sup>&</sup>lt;sup>7</sup> Discussed in the footnotes below.



 Fewer inhabitants have health coverage outside the medical insurance system (with the exception of students), whether through the Social Safety Program<sup>8</sup> or through limited-income social security.<sup>9</sup>

More inhabitants hold the special treatment cards available to immediate family members of
employees of the armed forces, security forces and health ministry. <sup>10</sup> Similarly, more
inhabitants are covered exclusively <sup>11</sup> by the two private-sector medical insurance systems, <sup>12</sup>
and more specifically the reclamation of costs <sup>13</sup> system. <sup>14</sup> The area also has more students. <sup>15</sup>

There are far more significant disparities in healthcare provision, however, between different household income groups. The vast majority of young people whose monthly household income is no more than 200 DT (94%) or between 200 and 500 DT (89%) have a form of coverage limited entirely or almost entirely to public sector healthcare. <sup>16</sup> Of those whose monthly household income is greater than 2000 DT, however, some 69% enjoy coverage that is primarily private-sector orientated <sup>17</sup> or allows access to both. <sup>18</sup>

Alongside these significant data on the state of health coverage and its particularities, the study also looked at young people's experiences with healthcare. The information provided in these sections may be even more important.

#### 2 The effect on the right to access healthcare when needed

16% of young people<sup>19</sup> in the five delegations who reported needing to access healthcare provision within the last year<sup>20</sup> – whether an in-patient stay (in a hospital or other facility) and/or a medical

<sup>&</sup>lt;sup>8</sup> 13%, compared to an average of 29% in the other four delegations taken together and 38% in North Tataouine and Sidi Hassine. Note that the equivalent figure in North Kasserine is less than 15%.

<sup>&</sup>lt;sup>9</sup> 0.5%, compared to an average of 4.2% in the other four delegations taken together and more than 5% in North Tataouine and North Kasserine.

<sup>&</sup>lt;sup>10</sup> 14%, compared to an average of 6% in the other four delegations taken together, 1% in North Tataouine and 2% in North Tataouine. Note, however, that the equivalent figure is 11% for Douar Hicher.

<sup>&</sup>lt;sup>11</sup> Not counting beneficiaries of the treatment cards provided to employees of the armed and security forces and of the health ministry.

<sup>&</sup>lt;sup>12</sup> 38%, compared to an average of 26% in the other four delegations taken together, 18% in Douar Hicher, 19% in Sidi Hassine. Note, however, the very high figure of 43% in North Kasserine, where around 31% of people are covered by the "private sector family doctor" programme.

<sup>&</sup>lt;sup>13</sup> 22%, compared to an average of 13% in the other four delegations taken together and 11% in Sidi Hassine. Note that in North Tataouine, however, the figure is 19%.

<sup>&</sup>lt;sup>14</sup> For the "private sector family doctor" programme, we have to exclude the uniquely high figure for North Kasserine (around 31%) in order to see that the figure for El Mourouj is also unusually high (16%) when compared to those for the other three delegations (which range between 5% and 7%).

<sup>&</sup>lt;sup>15</sup> 3.7%, compared to an average of 1.3% in the other delegations.

<sup>&</sup>lt;sup>16</sup> "Public care" paid for by medical insurance, low-income and student social security which falls outside the medical insurance system (despite the treatment cards being issued in the name of the Medical Insurance Fund), and free and reduced-rate treatment cards (and treatment cards issued to those injured during the revolution and the families of those killed).

<sup>&</sup>lt;sup>17</sup> "Private care" and "reclamation of costs" within the medical insurance system.

<sup>&</sup>lt;sup>18</sup> Members of the armed and security forces and employees of the health ministry and their family members have access to their choice of the three medical insurance systems. Spouses who do not qualify as secondary beneficiaries also, unusually, have access. As an additional benefit, they can apply for special cards allowing them to make use of healthcare facilities belonging to the relevant ministry without charge. Members of the armed and security forces can also use health ministry facilities for free, and their families can do likewise in exchange for a limited contribution (the "fixed adjustment").

<sup>&</sup>lt;sup>19</sup> "Young people" here refers to those between 18 and 39 years of age.

<sup>&</sup>lt;sup>20</sup> The 12 months preceding the study, which was conducted in October 2022.



appointment (regular or emergency) – said that they had not been able to access it. <sup>21</sup>

Some 22% of those who were prescribed a stay in hospital by a doctor had not been able to access a bed. <sup>22</sup> Although only 9% of those who had needed an emergency appointment said they had not been able to get one, <sup>23</sup> the figure rose to 13% for non-emergency appointments. <sup>24</sup>

In total, some 27% of young people who reported needing to access medical care had not been able to. This figure includes those who had taken medication without consulting a doctor, <sup>25</sup> whether for financial reasons or because of other obstacles to getting an appointment (lack of provision, lack of appointments, transportation difficulties). <sup>26</sup>

How frequently young people were able to access the necessary healthcare services differed from region to region, in particular between Douar Hicher, where 24% of young people reported successful access (34% if we include self-medication), and the other delegations (between 15% and 23%). There were further differences between the three services, albeit with different levels of significance, <sup>27</sup> and less pronounced and variable disparities between the other delegations.

The differences between different age groups, meanwhile, were small, and for the most part were limited to the 35-39 age group, who were less likely to have accessed an emergency appointment (less than 10% compared to 14%).

## But the study also shows that:

Those who have coverage under the "social safety" program are the most likely to be unable
to access healthcare services when needed. This is true with respect to all three services
when compared to those who have other kinds of coverage. It is also true, with respect to inpatient care and emergency appointments, when they are compared to those who have no
healthcare coverage at all.<sup>28</sup>

<sup>&</sup>lt;sup>21</sup> 59% of young people in these delegations reported needing an appointment or in-patient care within this time period.

<sup>&</sup>lt;sup>22</sup> 7% of young people (across the five delegations) had received in-patient care in a hospital or another facility but 2% did not do so despite a doctor prescribing them a stay.

<sup>&</sup>lt;sup>23</sup> 20% of young people had had an emergency appointment, but another 2% had been told to go for an emergency appointment by a doctor and had not.

<sup>&</sup>lt;sup>24</sup> 42% of young people had had a regular (non-emergency) appointment, but another 7% had not had an appointment despite feeling that they needed one.

<sup>&</sup>lt;sup>25</sup> Some 54% of young people from across the five delegations had taken medication without a prescription. In order not to double-count, however, we disregarded those who had not reported needing medical attention, some 37% of the total. We also disregarded those who had taken medication without a prescription for reasons that had nothing to do with direct obstacles to accessing a consultation. As such, in order to calculate the number of people who had needed or not benefited from healthcare services, we only included those who said that financial difficulties or other factors had prevented them from consulting a doctor before taking medication. This group accounted for 30% of people who did not say that they had needed a consultation, but only 11% of the overall total of people who had taken medication without a prescription.

<sup>&</sup>lt;sup>26</sup> Note that there are many reasons why young people take medication without a prescription, including financial barriers (29% of those who had taken medication without a prescription), the difficulty of getting an appointment (20%), transportation problems (14%) and lack of provision (9%). Some 68%, however, cited "another reason", whether in combination with other answers or on its own.

<sup>&</sup>lt;sup>27</sup> There was particularly sharp variation with regard to emergency appointments (18% versus 6%) and clear disparities, too, in in-patient care (30% versus 19%). The differences are more muted when it comes to regular appointments (16% versus 12%).

<sup>&</sup>lt;sup>28</sup> Note that those who have no treatment card are a diverse group with respect to income and economic activity.



- Not having coverage doubles the risk of not being able to access non-emergency appointments.<sup>29</sup>
- The double coverage enjoyed by the (immediate) family members of security and military personnel protects them from the risk of not being able to access services when needed. 30 It allows them to benefit from a range of healthcare providers (health ministry facilities, the facilities of their own ministries, private sector facilities if they have chosen the medical insurance option).
- Those covered by the "private care" system or the "reclamation of costs" system are almost immune to the risk of not being able to access an appointment, entirely immune in the case of emergency appointments and largely so in the case of non-emergency appointments.
- The lower the household income, the higher the risk of not being able to access an appointment (whether regular<sup>31</sup> or emergency<sup>32</sup>). The small sample size means that we can only tentatively draw the same conclusion on in-patient care.<sup>33</sup>

Overall, financial difficulties were the most important reason for not accessing healthcare services when needed, cited by around two thirds of respondents with respect to both appointments (emergency or regular) and in-patient care. The next most common reason was difficulty securing a place (getting an appointment, obtaining a bed, long waiting times for emergency appointments), followed by transportation difficulties and finally a total lack of provision.<sup>34</sup>

In a majority – although not a large majority – of cases, the inability to access needed healthcare has negative consequences.<sup>35</sup> The biggest consequence is for health (symptoms get worse or do not improve), cited by 80% of those who reported negative consequences and more than 90% of those who were unable to access an emergency appointment or in-patient care. This is followed by effects on daily activities (study, work, training, housework, personal errands, etc), cited by between 46% and 77% of people.

Negative effects on health are more common among those who have healthcare coverage outside the medical insurance system than other young people, including those who have no coverage at all. The difference is particularly stark when compared with those who have private sector health coverage. Those with a household income of less than 500 DT were also more likely to report that their condition had worsened as a result of not being able to access healthcare when needed.

#### 3 The effect on ease of accessing health services and completing treatment

<sup>&</sup>lt;sup>29</sup> We found no differences with respect to emergency appointments, and only limited differences with respect to in-patient care.

<sup>&</sup>lt;sup>30</sup> We did not record a single case of failure to get an emergency appointment or secure an in-patient stay. The rate was only 5% for regular appointments.

<sup>&</sup>lt;sup>31</sup> The percentage who did not get a regular appointment ranged from 32% for those with a monthly household income of less than 200 DT and 3% for those with a monthly household income of more than 200 DT.

<sup>&</sup>lt;sup>32</sup> 13%, compared to 0% of the same two strata.

<sup>&</sup>lt;sup>33</sup> We cannot go beyond a comparison of those whose household income is below or above 800 DT per month.

<sup>&</sup>lt;sup>34</sup> Difficulties in accessing services were cited in between 28% and 50% of cases, transportation difficulties in around two fifths of cases pertaining to emergency appointments and a fifth of in-patient stays and regular appointments.

<sup>&</sup>lt;sup>35</sup> Negative consequences were reported by 70% of those who said they had not accessed a regular appointment when needed, 93% of those who said they had not accessed emergency care when needed or when instructed to by a doctor, and 82% of those who said they had not accessed in-patient care when needed or when instructed to by a doctor.



Being able to access a healthcare service does not mean that it is easy to pursue and complete all the necessary treatment. The study found that 49% of those who had had an ordinary appointment, 33% of those who had had an emergency appointment and 49% of those who had received in-patient care experienced difficulties in the course of treatment or did not complete it:

- 35% of those who had had a regular appointment experienced difficulties in completing treatment, and 16% did not take the prescribed medication. Another<sup>36</sup> 19%<sup>37</sup> obtained the prescribed medication, in exchange for money, but still faced difficulties.
- 16% of those who had had an emergency appointment were unable to obtain prescribed medication, <sup>38</sup> and another 17% <sup>39</sup> obtained the prescribed medication, in exchange for money, but still faced difficulties.
- 37% of those who had experienced in-patient care found it difficult to complete the
  recommended course of treatment. In all cases, <sup>40</sup> this was because they struggled to pay for
  the whole stay. 21% <sup>41</sup> were unable to complete the post-discharge treatment prescribed by
  their doctor <sup>42</sup> (buying medication, having tests done, getting scans, attending a specialist
  appointment or follow-up clinic). <sup>43</sup>

Whatever the service or aspects of a service that individuals face difficulties in using, the difficulties themselves are primarily financial, cited by 78% of those who were unable to complete the necessary follow-up after in-patient care and 61% of those who faced difficulties in completing a regular appointment.<sup>44</sup> Other reasons and factors also played a part to different extents with different services and components: the difficulty of getting appointments<sup>45</sup> and/or other "procedural" obstacles (registration, timing, waiting), <sup>46</sup> alongside other factors.<sup>47</sup>

 $<sup>^{36}</sup>$  19% of those who had an appointment and 29% of those who had paid for medication.

<sup>&</sup>lt;sup>37</sup> It is worth noting that 21% struggled to access an appointment and then either failed to access medication entirely or struggled to obtain it even while paying.

<sup>&</sup>lt;sup>38</sup> Representing 20% of those who received a prescription.

<sup>&</sup>lt;sup>39</sup> 17% of those who had had an appointment, 33% of those who had paid for medication.

<sup>&</sup>lt;sup>40</sup> 29% of those who had received in-patient care, 45% of those whose in-patient care was not free.

<sup>&</sup>lt;sup>41</sup> Of all those who had received in-patient care.

<sup>&</sup>lt;sup>42</sup> It is worth noting that 9% simultaneously struggled to complete and pay for the prescribed course of inpatient treatment and to complete the recommended post-discharge care.

<sup>&</sup>lt;sup>43</sup> Note that this is a partial summary inasmuch as our survey did not ask about all possible difficulties. We did not ask about difficulties in completing emergency treatment, which explains the lower rate than for regular treatment and in-patient care. We did not want to complicate the study by asking the extent to which those in in-patient care struggled to pay for the medication they were supposed to take (58% were asked to pay even though they were being treated in a public hospital), medical equipment or food. We also chose only to ask about medication and not about any of the other possible costs of in-patient care, such as tests and scans.

<sup>44</sup> This does not include, of course, difficulties with paying in-patient fees or for medication, which are purely

financial.

<sup>&</sup>lt;sup>45</sup> This was the second most common factor in a failure to complete the necessary follow-up after an in-patient stay, cited by some 60% of those who were unable to complete some or all follow-up.

<sup>&</sup>lt;sup>46</sup> The most common type of difficulty that individuals face in completing a regular appointment, at the same percentage as financial difficulties.

<sup>&</sup>lt;sup>47</sup> Transportation difficulties are the third most common factor in failure to complete required follow-up after in-patient care (46%) and likewise in failure to complete a regular appointment (44%). Similarly, non-provision of services was a commonly cited reason (34%) for failure to complete follow-up after in-patient care.



A comparison of the different delegations shows marked disparities in most cases.<sup>48</sup> On some points there were considerable differences between all five delegations, with Al Mourouj scoring highest and North Tataouine lowest (on the percentage who faced difficulties in completing a regular appointment, paying for prescribed medication at the end of a regular appointment, <sup>49</sup> paying for in-patient care <sup>50</sup> or completing the full prescribed course of inpatient treatment, as well as the difficulty of getting an appointment or of getting to the venue for a regular appointment). On other points Al Mourouj stood out in comparison to the other four delegations, whose rates were relatively similar (the percentage who faced difficulties in paying for prescribed medication at the end of an emergency appointment, 51 the rate at which financial causes were cited for failure to obtain medication after a regular appointment). In one unusual case, another delegation scored lower than North Tataouine (how frequently individuals failed to obtain prescribed medicine after a regular appointment). There were noticeable disparities between Greater Tunis and the delegations of the interior (how frequently individuals faced financial difficulties preventing them from completing in-patient care, how frequently they cite non-financial causes as a reason for not completing necessary aftercare<sup>52</sup>). Finally, however, the limited sample size prevents us from confirming that other apparently significant differences were important. 53

Comparison shows that there are other differences according to household income on all indicators, particularly with respect to regular appointments: struggling to complete them (9% to 57%), failure to obtain medication (7% to 35%) and frequency of financial reasons for this failure (8% to 53%). With respect to medication prescribed in emergency appointments, there are fewer differences, or else the small sample size affects them, as is the case with difficulties in completing the full course of in-patient treatment or meeting its costs.<sup>54</sup>

Breaking down the data by health coverage, comparison of various indicators shows that those whose health coverage is not part of the Medical Insurance System, whether they fall under the Social Safety Program or Low-Income and Student Social Security, <sup>55</sup> face difficulties in using health services <sup>56</sup> as frequently or even more frequently than those with no coverage at all. The additional

<sup>&</sup>lt;sup>48</sup> With some exceptions: how frequently financial causes were cited as a reason for not being able to complete the necessary aftercare following in-patient treatment, and particularly to complete a regular appointment. The same applies to the number of those who obtained prescribed medication after an emergency appointment.

<sup>&</sup>lt;sup>49</sup> 15% in Al Mourouj and North Kasserine versus 39% in North Tataouine and 40% in Sidi Hassine.

<sup>&</sup>lt;sup>50</sup> 8% in Al Mourouj versus 58% in North Tataouine, with middling statistical significance because of the small sample size in Al Mourouj.

<sup>&</sup>lt;sup>51</sup> 9% in Al Mourouj versus 33-37% elsewhere, with middling statistical significance because of the small sample size in Al Mourouj in particular.

<sup>&</sup>lt;sup>52</sup> 14% versus 50% for no provision, 28% versus 64% for transportation difficulties, 36% versus 79% for appointments.

The frequency of an inability to complete required aftercare following in-patient treatment (marked but statistically insignificant differences between the lowest rate, 7%, in Douar Hicher, and the highest rate, 31%, in North Tataouine, alongside 22% in Al Mourouj), the frequency with which people had failed to obtain prescribed medicine after an emergency appointment (marked but statistically insignificant differences between Al Mourouj, with 29%, and the rest of the delegations taken together, with 70%, with figures of 76% and 100% in North Tataouine and North Kasserine respectively).

<sup>&</sup>lt;sup>54</sup> But differences in the rate of failure to complete necessary aftercare after in-patient treatment are more significant (from 9% to 42% according to income level).

<sup>&</sup>lt;sup>55</sup> The National Medical Insurance Fund treats these individuals as beneficiaries of social security, providing them with special treatment cards that differ from the other three kinds of treatment card associated with medical insurance provision.

<sup>&</sup>lt;sup>56</sup> These difficulties sometimes reach the point of being unable to complete a full course of treatment.



private health coverage<sup>57</sup> enjoyed by members of the armed and security forces<sup>58</sup> and their families, on the other hand, provides robust protection from these dangers and makes them almost totally immune to some of them. Those covered by the two Medical Insurance System programs that are orientated towards private sector care<sup>59</sup> are also in a relatively better position than those covered by the "Public Care System".

Health service	No health	Coverage type							
Percentage who faced difficulties/were unable to use part of the service	coverage	Social Safety Program	Non-Medical Insurance Social Security	Public Care System	Reclamation of Costs or Private Care System	Additional Cover for Immediate Family of Security/Armed Forces Personnel			
Regular appointment									
Difficulties using service	%42	%53	%41	%28	<b>%22</b>	%26			
Percentage financial difficulties	<b>%74</b>	%65	%38	%45	%55	%10			
Did not get medication	%15	<b>%26</b>	%17	%17	%10	%27			
Percentage financial causes	%74	%91	* %80	%43	%29	* %22			
Difficulties in paying for medication*	%36	%42	%38	%27	%16	%7			
Emergency appointment									
Did not get medication	%23	%19	*%27	%13	%13	* %25			
Percentage financial difficulties	%68	%91	*%75	*%67	*%50	* %25			
Difficulties in paying for medication*	%34	%53	* %56	%22	%18	* %38			
In-patient care									
Difficulties completing full stay	%57	%36	*%40	%37	%23	%0			
Percentage financial difficulties	%74	%80	%100	%55	*%33	-			
Difficulties meeting costs	%58	%50	* %75	%23	%37	*%0			
Failure to complete aftercare	%30	%25	* %60	%13	%19	<b>%0</b>			

<sup>\*</sup>Of those who paid for medication

## 4 The effect on the right to sexual and reproductive health services

Because of the particular importance of sexual and reproductive health to young people, we decided to investigate the relevant services in a dedicated section of the study. We focused on guarantees of safe reproduction, including pregnancy care, on the basis that demand for these services is very high among young people. These services cannot easily be delayed, and failure to provide them and

<sup>\*</sup> Figure to be treated with caution because of small sample size

<sup>&</sup>lt;sup>57</sup> This also applies to some extent to employees of the health ministry. However, the small number of such employees in the study meant that we were not able to closely examine their use of health services.

<sup>&</sup>lt;sup>58</sup> In addition to one of the three medical insurance programmes.

<sup>&</sup>lt;sup>59</sup> This concerns outpatient care, i.e. without a hospital stay.



attempts to supplement them with traditional methods can be very dangerous.<sup>60</sup> We posed several questions to both men and women<sup>61</sup> (who had at least one child<sup>62</sup>). For those who had two (43%) or more (26%) children, we asked only about the care received during the most recent pregnancy.

We also asked about reproductive and sexual education, because of its central importance in preparing young people for the dramatic changes that they experience during puberty and adolescence, changes that signal the transition from childhood to responsible adulthood.

#### Birth contrary to scientific recommendations: giving birth at home or by unnecessary caesarean

#### a. Home birth is still present in the interior, even in major urban centres

One of the main aims of the decades-old Mother and Child Health Program is to ensure not only that all births take place in medical facilities, but that those facilities are suitable<sup>63</sup> and properly equipped.<sup>64</sup> Studies show that there has been significant progress on the first point, with one a national survey from 2018 finding that only 0.3% of births took place outside of hospital.<sup>65</sup>

Although only a small number of home births were recorded in our study, <sup>66</sup> they are nonetheless significant. All of them took place in North Kasserine and North Tataouine between 2017 and 2021, meaning that the percentage of births taking place out of hospital in those delegations is between 3.5% and 4.6%. <sup>67</sup> Moreover, the majority of those families that reported giving birth at home had a household income of less than 500 DT, and all of them less than 800 DT. They either had no healthcare coverage at all, or were only covered by the Social Safety Program. <sup>68</sup>

## b. Caesarean sections: notable characteristics of a high rate

35% of the most recent births reported by young people across the five delegations were by caesarean section. This is unsurprising: the national study cited above found an even greater percentage (43%). By international standards, however, it is very high, <sup>69</sup> including by comparison to nearby countries such as Algeria (19% in 2014) and France (20% in 2020).

<sup>&</sup>lt;sup>60</sup> Other fundamental elements of reproductive and sexual health, such as family planning and STIs, have been covered by many other works. Like difficulty conceiving, they are more appropriate material for a dedicated study on reproductive health than a study on general healthcare provision.

<sup>&</sup>lt;sup>61</sup> 29% of young people who participated in the study (some 610 young men and women) had at least one child, about 81% of those who were married.

<sup>&</sup>lt;sup>62</sup> Although reproductive health concerns women directly, its significance in individuals' lives means that fathers often take a close interest, in many cases accompanying mothers on trips to the doctor's. The very small number of people who did not answer the questions shows that this was the right approach.

<sup>&</sup>lt;sup>63</sup> Suitable to the preliminary level of risk faced by the mother and her child, determined during pregnancy.

<sup>&</sup>lt;sup>64</sup> Equipped to rapidly refer the mother to the right level of care in the event of unexpected complications.

<sup>&</sup>lt;sup>65</sup> Sixth Multiple Indicator Cluster Survey on Mothers and Children in Tunisia, National Institute of Statistics and UNICEF, 2019.

<sup>&</sup>lt;sup>66</sup> 7 births, a figure with low statistical significance (1.2%), but still four times the national average.

<sup>&</sup>lt;sup>67</sup> Versus 1.3% and 0% respectively in the midwestern and southeastern regions to which the delegations belong, according to the same study.

<sup>&</sup>lt;sup>68</sup> With the exception of one young man who was covered by the public care system because he had a stable job on a limited income (the only source of income in the household).

<sup>&</sup>lt;sup>69</sup> Since 1985, the World Health Organisation has put the optimal rate for caesarean sections at between 10% and 15% of births. See: WHO statement on caesarean section rates, April 2015.



The National Health Policy claims that "unnecessary recourse to healthcare concerns both the public and private sectors and applies to a range of medical services, such as caesarean sections". <sup>70</sup> A closer look at the figures, however, casts doubt on this claim. It is quite clear that the very high rate of caesarean sections is primarily the responsibility of the private sector, where they account for some 74% of births, as opposed to only 25% in the public sector. <sup>71</sup>

Further investigation of this disparity shows that whatever delegation the young people concerned live in, the majority of births in the private sector are achieved by caesarean section, while the majority of births in the public sector are natural, with some marked differences in percentages. <sup>72</sup> It should be noted that in North Tataouine, all the private sector births recorded actually took place in another governorate, since Tataouine has no natal hospital. <sup>73</sup> The complete opposite is true of North Kasserine. <sup>74</sup>

Perhaps more importantly, 23% of total births (31% of caesareans) in the private sector were requested by mothers rather than being carried out for medical reasons. This was far rarer in the public sector.<sup>75</sup>

Similarly, the most marked disparities in the private sector were linked to household income. Caesarean sections accounted for 64% of all births in this sector for those households with a monthly income of less than 1200 DT per month, but 91% for those with a monthly income of more than 2000 DT. The percentage of caesareans requested by mothers similarly sits at 13% in households with a monthly income of less than 1200 DT but rises to 30% for those with a monthly income of more than 2000 DT (20% to 33% of caesarean sections). <sup>76</sup>

## Pregnancy care: the basic test package is not available to everyone

For decades, the Mother and Child Health Program has identified the most important components of pregnancy care and the timetable for their delivery. One of these components has been an almost constant feature of health ministry budgets since goal-driven spending was introduced in 2008.<sup>77</sup>

In 2018, the components of pregnancy care were set out in some detail as part of the "basic services package" for mother and baby health. <sup>78</sup> For this study, we took six points from this basic package: the preliminary consultation within the first trimester, four subsequent consultations in the second

 <sup>&</sup>quot;Mashru' al-Siyasa al-Wataniyya li'l-Sihha fi Ufuq Sanat 2030", Social Dialogue on National Health Policy, Strategy and Planning, 2019. Note that this study did not look at the differences between the two sectors.
 The same phenomenon has been noted in Algeria (and Morocco) but the figures in France are very similar across the two sectors.

<sup>&</sup>lt;sup>72</sup> The largest difference between the two sectors was recorded in Kasserine, where 100% of private sector births took place by caesarean section, as opposed to 16% in the private sector. The smallest difference was recorded in Al Mourouj, where the corresponding figures were 55% and 25%.

<sup>&</sup>lt;sup>73</sup> Similarly, 10% of normal births and 21% of caesarean births covered by the private sector took place in other governorates.

<sup>&</sup>lt;sup>74</sup> But here, all the births covered by the private sector were caesarean sections, even though – with only one exception – they all took place within the governorate!

<sup>&</sup>lt;sup>75</sup> 1% of all births and 4% of caesarean sections.

 $<sup>^{76}</sup>$  At a rate of 26% of all births. Those whose monthly household income fell between 1200 and 2000 DT were closer to the higher strata.

<sup>&</sup>lt;sup>77</sup> "Nisbat al-Taghtiya bi-Khams 'Iyadat li-Muraqabat al-Haml Hasab al-Ruznama al-Wataniyya".

<sup>&</sup>lt;sup>78</sup> "Paniers des soins essentiels en santé maternelle et néonatale, ONFP-FNUAP; Décembre 2018".



and third trimesters,  $^{79}$  first, second and third ultrasounds,  $^{80}$  and tests requested during consultations.  $^{81}$ 

Our first summary finding here was that in at least 46%<sup>82</sup> of pregnancies,<sup>83</sup> mothers were not able to make use of this basic care package. This is an unexpected and troubling figure, especially given that it is even higher within particular groups:

- The young people of North Tataouine were the most likely not to have received the basic pregnancy care package, with some 75% saying that they had not done so, compared to 21% in Al Mourouj (less than half the rate in North Kasserine, at 50%, and about half the rate in Sidi Hassine, at 44%, and Douar Hicher, at 40%).
- The same is true of those covered by the Medical Insurance Fund but who do not fall within
  the general Medical Insurance System and those with free treatment cards, 73% and 72% of
  whom respectively reported that they had not received the basic package. This compares to
  26% of those with armed and security forces cards<sup>84</sup> and 28% of those covered by the private
  sector medical insurance programs.<sup>85</sup>
- Unemployed jobseekers were also very likely not to have received the basic package (71%), markedly more so than those in other economic activity categories (52% for those who are economically inactive and 36% for those in work).

The disparities are even sharper between different incomes, ranging from 62% among those with a household income of less than 500 DT to only 14% for those with a household income of more than 2000 DT. So On the other hand, there are few disparities between different educational levels, and even fewer between different age groups. Similarly, there were no differences between the first and subsequent pregnancies, and no clear positive or negative trend depending on the year of birth.

Ultrasound scans, particularly second scans, accounted for much of this high percentage of patients not receiving all six elements of the basic services package (46% of participants). The number of people who did not have a second ultrasound alone accounted for three fifths of this figure (around 27% of participants overall, 89 of which around 6% had had no ultrasound at all). This was followed by non-completion of all five appointments, which accounted for around 23%, 1.3% of whom had had no appointment whatsoever during their pregnancy (similarly, 3% had completed only the first

<sup>&</sup>lt;sup>79</sup> Without giving details on the timing or the type of health provider used (midwife, family doctor, specialist doctor) or corroborating answers.

<sup>&</sup>lt;sup>80</sup> Using a simplified framing with an approximate timing or main goal for each allocation of funding.

<sup>&</sup>lt;sup>81</sup> Without going into detail, offering three possible answers: all tests completed, some tests completed, no tests completed.

<sup>&</sup>lt;sup>82</sup> 50% obtained the whole basic package, 4% were unable to answer on one or more components.

<sup>&</sup>lt;sup>83</sup> Pregnancies that ended in the birth of a living child (and still alive as of the study).

<sup>&</sup>lt;sup>84</sup> Thanks to the double coverage they enjoy, which also allows them to use the facilities provided by the relevant ministry.

 <sup>85 59%</sup> of those covered by the reduced-rate treatment card and 43% of those covered by the medical insurance system's public treatment program. For those who had no coverage whatsoever, the rate was 50%.
 86 With a rate of 48% for those whose income fell between 500 and 800 DT and 37% for those between 800 and 2000 DT.

<sup>&</sup>lt;sup>87</sup> Between 59% for those who had received no or only a primary education, and 29% for those who had reached higher education.

<sup>&</sup>lt;sup>88</sup> Between 59% for those in the 18-24 age bracket and 45% for those in the 30-39 bracket.

<sup>&</sup>lt;sup>89</sup> 14% who had not had the second consultation and 11% who had not had the first consultation. The percentage that had not had at least one of the three consultations was 37%, i.e. four fifths of the total number of those who had not received all six of the elements of the basic services package (46%).



appointment in the first trimester, while 5% had not completed the first appointment). Another major driver was the failure to undergo all the recommended tests, which accounted for around 21%, of whom 3% had undergone no tests at all.

The situation is even more serious for some specific groups, albeit with variation depending on the nature of the test. With regard to ultrasounds, North Tataouine stands out: some 64% of mothers here reported that they had not had a second ultrasound while pregnant with their last child – six times the figure in El Mourouj  $(11\%)^{90}$  – and some 13% had not had an ultrasound at all. Failure to provide tests, meanwhile, was at its worst for unemployed jobseekers (42%), and is correlated with household income (41% among those whose income was less than 500 TD a month, including 8% who had not been tested at all), medical insurance coverage (38% among those who have coverage outside the Medical Insurance system)<sup>91</sup> and place of residence (36% in North Tataouine).

Place of residence is the most important factor with respect to examinations after the first trimester. The percentage of mothers who had had between one and three (rather than four, because it is a lower number) examinations was 29% in North Tataouine, 27% in North Kasserine and 5% in El Mourouj. The percentage who had not had a single appointment was 6% in North Tataouine, 4% in Douar Hicher and only 1% in Al Mourouj and North Kasserine.

However, with respect to consultations in the first trimester, it is educational level that is the most prominent factor. Among households where the mother or father holds a university degree, the percentage who had not had this consultation was 0%, while it was 9% among those who had not got past primary level and 11% among those who had been totally denied the chance to study. And the only mothers who had not had any consultations at all fell exclusively into one of these two latter groups.

## Difficulties encountered during pregnancy care

Alongside the failure to provide these six elements of the Basic Care Package to some 46% of mothers during their latest pregnancy (which ended in a live birth), consultations after the first trimester and tests<sup>92</sup> also threw up various difficulties for a large number of people, accounting for 48% of mothers.

Those who had received all six elements were not unaffected by differences between delegations, albeit at lower levels. This is particularly true with respect to consultations, where only 22% of participants in Al Mourouj reported experiencing difficulties, a mere half of the figure (44%) in North

<sup>&</sup>lt;sup>90</sup> And three times that in Douar Hicher (24%) and more than three times the figures for Sidi Hassine and North Kasserine (20% in both). Non-receipt of the first and third examinations was a less significant contributor to failure to receive all six elements of the Basic Services Package in all regions, including North Tataouine. But the figure was highest in this region. Indeed, the difference with respect to non-receipt of the first consultation in particular is more significant: in North Tataouine, this percentage was some 12 times higher than it was in El Mourouj (24% as compared to 2%) and almost five times as high as in North Kasserine (24% as compared to 5%). The differences between regions with respect to non-receipt of the third consultation were much less significant, and were mainly a matter of differences between El Mourouj (7%) and the rest of the delegations (20% in North Tataouine, 16% in Sidi Hassine and 13% in both North Kasserine and Douar Hicher).

<sup>&</sup>lt;sup>91</sup> Those covered by the "social safety programme" (free or reduced-rate treatment cards) or the social security system for those on low incomes who are not covered by the Medical Insurance System (despite having a treatment card from the National Medical Fund (CNAM)!

<sup>&</sup>lt;sup>92</sup> I.e. without considering difficulties faced with respect to ultrasounds or the first consultation, which we did not ask about in order to avoid making the questionnaire too long.



Tataouine.<sup>93</sup> It was more common to experience difficulties carrying out tests, but the differences were less significant, with the lowest figure, in Al Mourouj, being 31%, and the highest figures in North Tataouine and North Kasserine, with 53%.<sup>94</sup>

Educational level, on the other hand, was correlated with more significant differences. Particularly high figures were recorded among those who had received no education whatsoever, both with respect to tests (77%) and to consultations (57%), compared with those who had a university education (28% and 23% respectively). <sup>95</sup> The differences between different levels of economic activity were more limited. <sup>96</sup>

Household income and health coverage, however, showed the sharpest disparities. Only 11% of those who had a security forces family treatment card faced difficulties in tests or consultations, compared to 66% of those who had coverage outside the medical insurance system. <sup>97</sup> Similarly, the figures range between 17% for those with a family income of at least 2000 DT and 68% for those on an income below 500 TD.

There were also marked differences in difficulty depending on the year of pregnancy. After a sharp drop in 2011-2012 (24%, down from 56% before 2011) it rose rapidly again, reaching 49% in 2020-2022.

The difficulties faced were primarily financial, with respect to both consultations (89% of those who had experienced difficulties) and tests (93%). Alongside this, North Tataouine was unusual in that many participants also reported facing transportation problems (75% of those who faced difficulties in consultations and 64% in tests). Likewise, in both North Tataouine and North Kasserine, many participants reported procedural difficulties as well (registration, appointments, timing).<sup>98</sup>

## Families being asked to buy medication or other medical necessities on a maternity ward

There is a general impression that public hospitals now often ask patients' relatives to buy and bring in medication or other medical necessities during the patient's in-patient stay, even when they are covered by medical insurance. This is generally held to be a recent phenomenon which until recently was very unusual. As such, we decided to include a number of precise questions seeking to determine whether participants had been asked to bring medication (painkillers or "other") or other necessities during their time in the maternity ward.

Some 43% of parents reported having been asked to provide at least one of these three items. <sup>99</sup> There were no significant differences in this respect between public hospitals and private clinics. <sup>100</sup>

In hospitals, the type of medical insurance did not meaningfully affect the figure. In normal births, the figure was very close to the overall figure, although in caesarean births it was higher. There were,

<sup>&</sup>lt;sup>93</sup> The disparities between the other three delegations were much smaller. Their figures corresponded most closely to those of Tataouine, particularly as regards the overall figure (36%).

<sup>&</sup>lt;sup>94</sup> And hovered around the overall figure (46%) in both Douar Hicher and Sidi Hassine.

 $<sup>^{\</sup>rm 95}$  But also, albeit less sharply, with those of lower educational levels.

<sup>&</sup>lt;sup>96</sup> There were almost no differences between age groups.

<sup>&</sup>lt;sup>97</sup> Whether within the "Social Safety Programme" or those covered by limited-income social security.

<sup>&</sup>lt;sup>98</sup> Transportation or administrative difficulties were also common among those who had had no education and unemployed jobseekers.

<sup>&</sup>lt;sup>99</sup> 26% of families were asked to supply painkillers, 30% other medicines and 19% other medical necessities. More than one was requested in more than half of cases (all three in 10% of births, two of the three in 12%). <sup>100</sup> There were almost no differences in distribution even between the three options or how frequently they occurred together.



however, noticeable differences between the different delegations, primarily between the two interior delegations and those of Greater Tunis, and in particular between Al Mourouj (less than 20% of hospital births) and North Tataouine (74% of hospital births). <sup>101</sup>

Equally significant was the accelerating growth of this figure over time. <sup>102</sup> Over the last three years, this has become a practice affecting more than half of hospital births (56%).

#### Pregnancy care between the private and state sectors

The majority – around 80% of the whole sample – of the participating parents said that the birth had taken place in a public sector hospital. Public sector hospitals were also the majority choice in every individual delegation, although only by a relatively small margin in Al Mourouj (56%), where the percentage was lowest. <sup>103</sup> The same applied to educational level (albeit only by a small margin among those with a university education, 54% of whom had used public sector hospitals), <sup>104</sup> age group, <sup>105</sup> and economic activity. <sup>106</sup>

It is notable that public-sector maternity wards remain the primary destination for those about to give birth, irrespective of their health insurance coverage, even those whose health insurance is private-sector orientated and falls within the medical insurance system (56%). <sup>107</sup> It also applies to 80% of those who are covered by the public system, despite the Medical Insurance Fund offering to cover their costs in the private sector, just like the other two systems (up to around half of the contractual tariff between the Fund and clinics/unaffiliated doctors in case of a normal birth, and more than two thirds in the case of a caesarean section). <sup>108</sup> When we disaggregate the data according to household income, however, we find that a clear majority (around two thirds) of new mothers whose monthly household income is higher than 2000 DT give birth in private facilities. <sup>109</sup>

Finally, it is worth noting that the likelihood of choosing to give birth in a private facility falls by almost half between first (31%) and second (16%) children.

However, the private sector was the destination of choice when it came to more general pregnancy care (albeit by a smaller margin, with overall figures not exceeding two thirds of participants),

<sup>&</sup>lt;sup>101</sup> The figure was 28% for Sidi Hassine, 38% for Douar Hicher and 53% for North Kasserine.

<sup>&</sup>lt;sup>102</sup> The figure was 20% in the last three years before the revolution (2007-2010) and 25% in the first three years after it (2011-2014), but rose to 35% in the following three-year period (2014-2017) and 40% thereafter (2017-2019).

<sup>&</sup>lt;sup>103</sup> Compared to the high figures of 87% in North Tataouine, 84% in North Kasserine, 82% in Sidi Hassine, and a similar figure in Douar Hicher.

<sup>&</sup>lt;sup>104</sup> The frequency of public sector births at the other end of the education scale, that is among those who had had no education whatsoever, was around 94%, against 0% in the private sector (the remaining 6% were home births).

<sup>&</sup>lt;sup>105</sup> It appears that the younger the couple is, the more likely it is that the birth will have taken place in a private sector clinic (25%, 22% and 19% in the 25-29 age group, 30-34 age group and 35-39 age groups respectively).

<sup>&</sup>lt;sup>106</sup> With a limited tendency among those who are employed to choose private sector clinics (26%) compared to jobseekers (15%) and the economically inactive (16%).

<sup>&</sup>lt;sup>107</sup> The Private Treatment System or reclamation of costs system.

<sup>&</sup>lt;sup>108</sup> Among those who have no health insurance or have security forces or ministry of health employee family treatment cards, the public sector accounts for around three quarters of all births.

<sup>&</sup>lt;sup>109</sup> This tendency towards giving birth in the private sector begins with those with a monthly household income of between 1200 and 2000 DT. It is very uncommon for those with a household income to give birth in a private hospital.



whether with respect to consultations (65%), <sup>110</sup> ultrasounds (65%) or tests (63%). Disaggregating the data according to various variables reveals a number of exceptions, although in most demographics a small majority still preferred the private sector, with some variations in the difference.

In regional terms, the mothers of Douar Hicher are unique in that a majority relied on the public sector to carry out tests (53%), and around half to do ultrasounds (48%) and initial consultations (46%). <sup>111</sup> It is more common to seek out different kinds of services in the private sector in some delegations than others, depending on the type of service: Al Mourouj has the highest rate of private-sector consultations (80%), <sup>112</sup> but it is in North Tataouine that people are most likely to turn to the private sector for ultrasounds (82%) or tests (78%). <sup>113</sup>

When disaggregating the data by educational level, meanwhile, we find that public sector hospitals are the main destination when one of the parents has no education whatsoever, whether for the first consultation (69%), ultrasounds (65%) or tests (63%). Similarly, among those who had only a primary education, only a very small majority resorted to the private sector (55%, 54% and 53% respectively). <sup>114</sup>

In terms of economic activity, unemployed jobseekers divide almost equally between the private and public sectors with a slight preference for the private sector when it comes to ultrasounds (52%) and tests (54%). The same applies in terms of monthly household income. 60% of those with a monthly income of less than 500 DT had their first consultation in the public sector, 56% ultrasounds, and 52% tests. A small majority of those with household incomes of 500-800 DT preferred the private sector for these three services (59%, 57% and 54% respectively). 116

The most important variable, however, was health insurance coverage. The majority of expectant mothers who have coverage outside the Medical Insurance System sought pregnancy care in the public sector (at particularly high rates among those with free treatment cards<sup>117</sup> and lower rates among the remainder<sup>118</sup>). The families of army personnel also relied heavily on the public sector, especially for tests and ultrasounds, at rates of 82% and 79% respectively. Of those covered by the Medical Insurance System, however, a small majority relied on the private sector to provide

<sup>&</sup>lt;sup>110</sup> In this study, we only asked about the first consultation, but the figures were clearly similar between different types of service, whether consultation or otherwise.

<sup>&</sup>lt;sup>111</sup> The closest delegation to Douar Hicher is Sidi Hassine, where around two fifths of participants had had recourse to the private sector, whether with respect to the first consultation (42%), testing (44%) or ultrasound (39%).

<sup>&</sup>lt;sup>112</sup> Relatively far from North Kasserine (70%) and even more so from North Tataouine (66%).

<sup>&</sup>lt;sup>113</sup> Then Al Mourouj and North Kasserine, in opposite orders (ultrasound: 70% and 63%; tests: 66% and 72%).

<sup>&</sup>lt;sup>114</sup> Where one parent has a university education, meanwhile, couples rely very heavily on the private sector, at rates of 80% and above. The rates among those with a middle or secondary school education were slightly above two thirds.

<sup>&</sup>lt;sup>115</sup> With a clear preference for the private sector among employed people, at rates of around or slightly more than 70%, and a less clear preference among the economically inactive (60%).

<sup>&</sup>lt;sup>116</sup> Those with a monthly household income of more than 2000 DT, meanwhile, preferred the private sector, exclusively (100%) with respect to consultations and almost exclusively when it came to tests (94%) and ultrasounds (91%). The situation is similar among those with a monthly income of 1200-2000 DT (88-84%), but quite different among those whose income is between 800 and 1200 DT (71% for tests and ultrasounds, 67% for the first consultation).

<sup>&</sup>lt;sup>117</sup> 78% for the first consultation, 74% for tests and 73% for ultrasounds

<sup>&</sup>lt;sup>118</sup> 57%, 55% and 52% respectively for those with Reduced-Rate cards and National Medical Insurance Fund cards for those on limited incomes who are not covered by the Medical Insurance System.



pregnancy care.<sup>119</sup> As is to be expected, pregnancy care in the private sector was very common (between 83% and 87%) among those who had chosen a private-sector orientated insurance package as part of the Medical Insurance System. Notably, however, the families of security personnel relied exclusively on the private sector for consultations (100%), almost exclusively for ultrasounds (94%) and commonly for tests (78%).<sup>120</sup>

The majority preferred the private sector irrespective of age group. It is significant, however, that the tendency to make use of the public sector for pregnancy care has fallen over the last six years, by over a third in the case of tests (from 45% in 2014-2016 to 29% in 2020-2022) and ultrasounds (46% to 30%) and by a smaller amount in the case of consultations (from 41% to 33%) – after a period of five years (2011-2016) in which the percentages had been more or less stable. This trend is visible in all five delegations, albeit more or less marked, with a particularly sharp fall in North Tataouine between 2017-2019 and 2020-2022.

Some 28% of tests carried out in the public sector and some 13% in the private sector were only partial. Incomplete ultrasounds were even more common, with less difference between the rates in the public (36%) and private (31%) sectors. In most cases, in both sectors, this was a matter of failure to complete the morphology scan, albeit at slightly higher rates in the private sector (81% of cases in which two scans or one scan were carried out) than the public sector (75%).

Disaggregating by delegation, meanwhile, partial testing and incomplete ultrasounds were reported far more frequently by expectant mothers in North Tataouine, albeit with different margins separating them from the other delegations depending on the relevant service and the sector. The most marked disparity between delegations, in both sectors, concerned the frequency of incomplete ultrasounds (i.e. having only one or two scans): in North Tataouine, the figures were 74% in the public sector (against between 29% and 40% elsewhere) and 69% in the private sector (against between 8% and 27% elsewhere).

Disparities between the two sectors within the same delegation were limited in Douar Hicher (29% in the public sector and 27% in the private sector), as in North Tataouine, but much more marked in Al Mourouj (31% against 8%) and to a lesser extent North Kasserine (40% against 22%) and Sidi Hassine (34% against 25%).

With respect to tests, the disparities are greater, both between the two sectors and between the delegations of the interior and those of Greater Tunis. Nonetheless, by far the most significant data point is the high frequency of partial completion of tests in the public sector in North Tataouine in particular (74%) and also in North Kasserine (57%). These are figures that are quite distinct from those recorded in the same sector within the delegations of Greater Tunis (14% in Douar Hicher and 17% in both Sidi Hassine and Al Mourouj) and those recorded in the same two delegations but in the private sector (21% in North Tataouine and 18% in North Kasserine). In the private sector in Greater Tunis, it was rare (10% in Douar Hicher and Sidi Hassine) or almost unheard of (2% in Al Mourouj) for tests to remain incomplete.

## 6 Education and awareness-raising with respect to sexual and reproductive health

# a. Among those with at least a seventh grade education

<sup>&</sup>lt;sup>119</sup> First consultation: 55%; other tests: 58%. The same rate applies to both those who had tests and those who had ultrasounds.

<sup>&</sup>lt;sup>120</sup> Those with no medical insurance made use of the private sector at rates between 63% (for ultrasounds) and 76% (for tests).



Around half of those who had successfully completed (at least) the seventh grade of basic education had never received – according to their responses – any education on "the most important development in the life of an individual – from childhood to youth,

i.e. puberty and sexual maturity – or on the implications of this for health", either within or beyond the educational institution. The figure rises to 62% among those whose educational journey ended at the seventh or eighth grade. And it is also high (37%) even among those who have successfully completed at least a year of higher education.

It is worth noting, however, that participants also reported that educational institutions had played an equal role to spaces and sources of information beyond these institutions in providing access to information on this subject: 20% said they had received their information from within the institution, 20% outside it, and 13% from both sources.

If we consider solely the educational establishment, only 11% of those whose schooling stopped at the seventh or eighth grade said that they had received education on these questions in school. Although the figure leaps to 33% among those who were able to successfully complete the ninth grade without going any further, this does not negate the fact that the remainder, that is some two thirds (67%), implicitly considered the sex education they (should have) received in ninth grade 121 not to constitute education. The figure rises only by a small amount after the ninth grade, with the highest percentage, 42%, recorded among those who reached university level.

Nonetheless, curricular education is indisputably the main source of education on these topics within the education system. 73% of all those who said they had received education on the topic within the education system said that it had been provided as part of the curriculum. The remainder attributed it either to the school nurse (8%), the health club (7%) or "other" (12%).

But the majority of young people who reported receiving sex education in school said that it was insufficient overall. When we look at the specific framework in which it was received, health clubs are evaluated more positively (sufficient for 63%), as are "other" sources (sufficient for 51% and very sufficient for 7%) when compared with education and school nurses (insufficient for 56% in both cases).

# b. Among those with no education whatsoever or who left education before completing the seventh grade

The situation is far worse among those who did not complete the seventh grade or who never started school to start with. 83% of them reported receiving no information on these matters whatsoever. Only 17% had been "lucky" enough to receive any information whatsoever, which was naturally obtained outside the education system. 122

These spaces beyond the education system have thus failed to make up for the sexual and reproductive health education these people lost by being denied their right to education up to the age of sixteen. This is a small but vital part of an individual's education, since it concerns one of the most important aspects of their life and some of the most important changes that take place therein,

<sup>&</sup>lt;sup>121</sup> The "human reproduction" module within the "life and earth sciences" subject, ninth grade. This does not mean that it was not taught. The question is more one of content and how things are taught and assessed. As a general rule, this module leaves no mark on the individual's mind, or at least on their memory.

<sup>&</sup>lt;sup>122</sup> Given that there are no relevant modules prior to the middle school level, either on the curriculum, the school health programme or school cultural activities.



as well as one of the areas which can be most dangerous for their health and even their lives (as well as for a changing society).

Moreover, the number of individuals from this vital group who attend such spaces outside the school system is no more than half the number who have completed at least one year of middle school. As we have seen, 33% of this latter group had received information on these topics outside educational institutions.

What is worse, our findings clearly show that the formal institutional structures that are supposed to provide sexual and reproductive education beyond the school system are almost completely absent. Out of four possible answers, only 5% of participants said that they had received information from a Basic Health Centre (or "clinic"), 6% from a reproductive health centre ("Family Planning Centre"), and 8% from a Youth or Cultural Centre, accounting for only a fifth of those who had obtained information. The vast majority (81%) said that they had received it "somewhere else".

This "somewhere else" can be interpreted in various ways. It ranges between traditional sources, such as family members (in particular mothers and grandmothers) or friends, and modern digital sources (such as social media or other internet sites). These latter sources are as problematic as they are popular, inasmuch as the quality and reliability of the content is questionable. But there is an almost total absence of any similar frameworks that are both reliable and attractive, whether nationally or regionally.

## 7Health services in schools and universities

These services are distinct from those previously examined in our study in that they are not treatment services (but rather either purely preventive or diagnostic), are entirely free, are present in all public and private educational establishments, and are exclusively staffed by doctors and nurses working in the public sector (frontline).

These services <sup>123</sup> are either individual and compulsory <sup>124</sup> for all children or students at a particular level (vaccinations and accompanying examinations, such as eye tests), collective (health education) or are particular to specific individuals (counselling departments, reproductive health units in universities). Given the scope of the study, we restricted our investigation to the rate of take-up of the various individual compulsory services and of awareness of the most significant other services. <sup>125</sup>

The questionnaire included questions on higher education and on services at the middle and secondary school levels. In each case, only those who had reached the relevant level of education were asked to respond.

11% of those who had completed at least three years of secondary school had not had the vaccinations that children are supposed to have at this stage. This is a high figure by any measure. But the fact that students are denied their right to other services must have an even greater effect given the high figures and the diversity of the consequences. 22% of those who had completed at least three years of secondary education had not had any of the three tests that they should have undergone "automatically" in middle school (grade 7) and secondary school (grades 1 and 3).

<sup>&</sup>lt;sup>123</sup> As provided for in the booklet published by the Health Ministry (along with the relevant ministries for each level of the education system) setting out the programme from the preschool stage to university. <sup>124</sup> Or near-compulsory.

<sup>&</sup>lt;sup>125</sup> We focused exclusively on those services provided in adolescence and beyond, excluding primary and preschool services.



Moreover, 39% had not had even one of the three eye tests that they were entitled to over the course of their middle and secondary school education. <sup>126</sup>

Among those who had not managed to complete even a single year of middle school, 37% had been denied their right to a medical examination because they had dropped out of school too soon. The rate rose to 51% when it came to eye tests. Sight problems are some of the most common chronic or long-term conditions among young people, with various possible consequences for those who are not diagnosed and treated early. The figures are even worse when it comes to the beginning of the university stage, where some 50% reported not having undergone a medical exam, and more than two thirds (68%) said they had not had an eye test.

Comparisons between the different delegations show various disparities on a number of measures, the most important of which are:

- North Tataouine had the best rates among those who had successfully completed at least the seventh grade of primary school, with 85% saying they had had at least one examination and 89% at least one eye test. <sup>128</sup> The same applied to those who had managed to complete at least one year of higher education, where 68% said they had had at least one medical exam and 58% at least one eye test at the beginning of the university stage. <sup>129</sup> It also had the highest vaccination rate (95%). <sup>130</sup>
- There were large differences with respects to eye tests between North Tataouine and the
  other delegations, in particular Sidi Hassine and Douar Hicher, where less than half as many
  participants reported having had eye tests.
- It was much less common, in the three delegations of Greater Tunis, to have had an eye test than a medical exam. At the university stage, differences still appeared between the two rates (and in the same direction), but they were less pronounced in North Tataouine (58% against 68%) and North Kasserine (29% against 36%).

Around two thirds of those who had completed their middle school or secondary education (64%) or higher education (64%) did not recall health education being provided by a school (or university) doctor or nurse. When it came to health clubs, only 13% were aware of their existence at the school level, and although the rate was double that (26%) at university level, it remained low. Much the same applied to knowledge of counselling units for students in schools, where only around one sixth of those who had reached the middle or secondary school level reported being aware of such a unit.

Comparison between the delegations places North Tataouine once again in first place with respect to "traditional" health education (classes provided by a school doctor and/or nurse), with very high

<sup>&</sup>lt;sup>126</sup> Eye tests can only be conducted under particular conditions and are entrusted generally to nurses at a particular time of year, generally a few days before or on the same day as the medical examination. A not insignificant number of students have a medical examination without having their eyes tested.

<sup>&</sup>lt;sup>127</sup> They are a major reason for school drop-out in many cases.

<sup>&</sup>lt;sup>128</sup> There is no clear worst delegation. The rates for Douar Hicher (64%) and North Kasserine (67%) on medical examinations are similar, as are the rates of Sidi Hassine (39%) and Douar Hicher (44%) on eye tests. Al Mourouj retained a safe distance from last place on all measures, occupying the second best position for medical examinations (78%) and the third-best for eye tests (60%).

<sup>&</sup>lt;sup>129</sup> The difference with the remainder of the delegations is clearer and encompasses all three. Their rates are similar, with a slightly lower level in North Kasserine with respect to medical examinations (36%) and in Douar Hicher with respect to eye tests (19%).

<sup>&</sup>lt;sup>130</sup> On the other hand, the figure in North Kasserine was only 80%. The question was not given to those who had not completed their secondary schooling, the period in which vaccinations are carried out.



levels<sup>131</sup> compared to all the other delegations.<sup>132</sup> But it is less successful when it comes to health clubs and counselling services in schools, where North Kasserine takes the lead. At the other end of the scale, Sidi Hassine "stands out" for its remarkably low scores with respect to all three services in schools.

## **Generational comparisons**

Comparing different age groups showed disparities in the majority of services and activities. All these disparities followed the same pattern – with the rate falling between the highest age group (35-39) and the lowest age group (18-24) – with two exceptions:

- The (third grade secondary) vaccination rate, which improved from 85% among the 30-39-year-old group to 90% in the 18-29-year-old group.
- How likely individuals were to have received a medical exam during middle or secondary school, which followed no consistent trend.

However, even on those measures that followed the overall trend of lower rates in younger age groups, the differences were not homogenous either with respect to their significance or how they developed through the two intermediate age groups (30-34 and 25-29).

Irrespective of the details of these disparities, the important thing, in our view, is that – given that health services and activities are associated with a particular stage of education and thus with a particular stage of life – comparison between age groups is the same as comparison between generations. It allows us to measure how much they have benefited from school and university services, or how widely available services are that they might need to use at some point, over the course of different educational stages and therefore different historical stages.

The following table therefore shows how the rates of uptake of different services or the availability of activities or services has changed at the different levels of education over various historical periods (establishing the approximate relationship between age group at the time of the study and the date at which they would have used or noted the availability of a service, presumably at a specific age). <sup>133</sup>

<sup>&</sup>lt;sup>131</sup> 59% in schools, 44% in universities.

<sup>&</sup>lt;sup>132</sup> 27-37% in schools and 26-29% in universities.

<sup>&</sup>lt;sup>133</sup> In putting this together, we relied on the table entitled "students by year of study, gender and year of birth" printed in the Ministry of Education (General Department for Planning and Information Systems) school census for the 2016-2017 educational year (*al-Ihsa' al-Madrasi – al-Sana al-Dirasiyya 2016-2017*), page 159.



Table: Approximate history of health services and activities in schools and universities by age group at the time of this study

	Sy	Educational	ducational Age group at time of study					
	Service or activity	level at Approxima		35-	30-	25-	18-	
Educational		which	corresponding	39	34	29	24	
stage		service is offered	age	النسبة والفترة التاريخية			النس	
Secondary school	Vaccination	3 grade secondary	18	<b>%85</b> 2001-2011		<b>%90</b> 2012-2022		
Secondary and/or middle school	Medical examination Eye test	7 grade basic 1 grade		Absence of clear trend				
			13, 16, 18	<b>%74</b> -1999 2002	<b>%76</b> -2003 2007	<b>%71</b> -2008 2012	<b>%76</b> -2013 2019	
		secondary 3 grade secondary	(average 15)	<b>%61</b> 1999-2012			%58 2013- 2019	
	Lye test							
	Medical education			<b>%45</b> 1998-2011			<b>%37</b> 2012-2018	
	Health club	Throughout studies	13-19 (average 16)	<b>%23</b> 1998-2011			<b>%11</b> 2012-2018	
	Counselling unit			<b>%19</b> 1998- 2001	<b>%17</b> 2002-2011		<b>%15</b> 2012- 2018	
After baccalauréat or at university	Medical exam	In the summer	19-21	<b>%52</b> 2003-2017			<b>%46</b> 2018-2021	
	Eye test	after the baccalauréat	(average 20)		<b>39</b> -2012	<b>%32</b> 2013-2017	<b>%21</b> 2018-2021	
	Health	First three years of		%45	%	29	%24	
	education		20-22 (average 21)	2003- 2007	2008	2008-2017		
	Health club	university		%39	%24		%16	