



How to build an investment case for immunisation – Discussion with Egypt, Morocco and Tunisia

- Dr. Mohammad Abdelfattah, Ministry of Health and Population, Egypt
- Dr. Mohammed Benazzouz, Ministry of Health, Morocco
- Dr. Mahrez Yahyaoui, Ministry of Health, Tunisia

Interviews' Key Takeaways



Could you describe your health system and the status of your immunisation programme? Ε

G

Ο

0 C C 0 "All Egyptian children have access to ten mandatory vaccines for free. The extended programme for immunisation (EPI) is in place at the central level, in the Ministry of Health and Population, and covers each of the 27 governorates and all 286 administrative districts, including over 5000 primary healthcare units."

"The National Immunisation Programme, previously known as the Expanded Immunisation Programme, was reformed in 1997 and aims at allowing all the people living in Morocco to benefit from free vaccines.
Our programme includes 13 vaccines. We want to expand the number of vaccines offered and the population target. Our primary target covers children under 5 years old. Our secondary target includes catch-up vaccination, vaccination of teenagers against HPV and of women of childbearing age and pregnant women against neonatal tetanus."

"The health system in Tunisia is mainly based on social coverage. Employees are covered by the National Health Insurance Fund. For nonsalaried people, we have an indigence card which provides either free coverage or a reduced rate, defined by the State. Finally, we also have private health insurance.

The national immunisation programme includes 11 vaccines that are offered completely free of charge to the Tunisian population."

Have you introduced any vaccine over the last 12 months? Do you plan to introduce some in the near future? If you haven't already, when do you plan to introduce HPV/ **Rotavirus/ PCV?**

Ε

G

Ρ

Μ

R

С

С

О

"The 2 additional doses of the Salk vaccine were the latest to be introduced, in February 2021. Our priorities in the EPI are categorised as follow: First priority: pneumococcal vaccine for 2024; Second priority: rotavirus; Third priority: HPV. Unfortunately, we don't have a timeline for the rotavirus and HPV vaccines yet."

"In October 2022, we introduced the HPV vaccine for teenage girls. And in February 2023, we went from a PCV 10 to a PCV 13. The pneumococcal vaccine was introduced in 2010 for infants. The rotavirus vaccine was also introduced in 2010.

Currently, we are working on several projects including the introduction of the hepatitis A vaccine."

"In March 2023, we introduced a 3rd dose of the polio vaccine for 6-month old babies and moved from an oral presentation to the injectable vaccine." Our projects for the future include the introduction of the HPV vaccine for the 2024-2025 academic year. We are also planning to introduce the acellular dTC vaccine for pregnant women and the Tetraxim vaccine for 6-year olds. The rotavirus vaccine is currently not a public health priority in Tunisia."

Could you describe your latest experience with immunisation funding? What are the main obstacles you have observed to sustainable immunisation financing and at what stage of the process? What have you done to overcome them?

Ε

G

Ρ

Μ

 \cap

Ο

C C 0

S

"The first step is to take the decision to introduce new vaccines and this is usually not an issue for us. The decision should be based on scientific evidence. So, regarding the introduction of the pneumococcal vaccine, we have 9 sentinel sites for neurological disorders. The main obstacle for vaccine introductions is most of the time related to finances."

"The introduction of the HPV vaccine was recommended by the Technical Immunisation Committee in 2010 but we did not have the budget for it then. We got it in 2019.

It was negotiation and advocacy mainly that allowed us to secure the required funds. Associations and civil groups, working to fight cancer, also supported our advocacy. Among the data that helped us support the introduction, our two cancer registries were key, as they listed the numbers of diagnosed cases and of deceased women. We also had projections of cases for 2030-2050, without the vaccine's introduction."

"We have not faced any obstacles for the HPV vaccine introduction, so to speak.
Above all, we had to make sure that the State budget allowed us to introduce the vaccine. We put together an advocacy case which was accepted first by the Minister of Health, then by the Minister of Finance.
The advocacy case was put together following a request coming from the Tunisian Society of Gynecology. It gathers all the studies that were carried out, in particular those showing the disease's seriousness and its costs in Tunisia, but also the experiences of other countries."

What strategies do you use to advocate for and protect funding? Ε

G

Μ

Ο

"According to the national health security action plan, our government's highest priority is to ensure the supply of vaccines, regardless of any emergency or pandemic. All the required money needs to be secured to that end."

"We are currently working on a project of co-financing vaccines. As vaccines allow health insurance companies to save money, by reducing the number of patients, the idea is to involve them in the financing of prevention and immunization funding."

"We rely on an effective surveillance of the diseases targeted by vaccines, showing an elimination or reduction in disease cases. Public support for vaccination and most importantly the promotion of the immunisation programme are also key to defending it.
We react to the evolution of reported cases: if we see an increase in cases of a disease for which a vaccine exists, this will justify its introduction."

5

Е

G

Μ

0

Ο

С

0

What are you currently working on to improve immunisation sustainable financing in your country? "Regarding the introduction of the pneumococcal vaccine, our government decided to rely on our vaccine factory, Vacsera. We have a memorandum of understanding with a vaccine manufacturer to introduce the vaccine and to support us with the technology transfer and local production.
There are also discussions going on between our government, international manufacturers and Egyptian companies about the technology transfer for

other vaccines."

"First, we purchase the majority of our vaccines from UNICEF, which allows us to obtain competitive prices.

Next, Morocco is working with its international partners and the national private sector on the creation of a large vaccine factory. We already have the required skills, as well as a training and support programme. A transfer of technology and know-how was carried out and production should be able to start in the coming months."

"Financing exists on demand: if we need additional funds, we put together an advocacy case file to obtain the government's agreement. So far, we have not encountered any obstacles to the introduction of a vaccine and new vaccines are introduced almost every two to three years in Tunisia."

For each of HPV, Rota, and PCV, have you completed or are planning an investment case? If not, do you think an investment case is needed to support the introduction of these vaccines? How would the investment case be used?

Ε

G

Μ

0

Ο

C O "For the pneumococcal vaccine, we have already booked the required funds in the Ministry of Health's new budget, which was approved by the Ministry of Finance. So, the budget is already available. This new vaccine introduction will be putting an additional load on the

country's cold chain system, starting with transportation but also storage. We always need to improve the quality of our cold chain system and our transportation methods."

"We rather use factsheets with synthetic and clear ideas. Regarding the HPV vaccine, a detailed case file was presented to the Technical Committee, with all the studies carried out, in particular the economic and impact studies, as well as the benchmarks of countries which have already introduced this vaccine. The number of cases recorded was also included. Numerous surveys have been conducted to assess the population's acceptance of this vaccine.

Finally, we benefited from the decrease in the number of doses from three to two and the price reduction on international markets."

"To support the HPV introduction, we requested a Health Technology Assessment (HTA) to have a cost/benefit study.

Cost/benefit studies are carried out for each vaccine and are normally a prerequisite for the introduction to be agreed on. In the case of HPV however, the agreement was obtained before the study's results and thanks to the alarm bells set off by gynecology societies. In Tunisia, investment cases are not a thing; we focus on what we call the advocacy case file. It is made up of all the elements which are in favor of the vaccine's introduction. And one of the key elements is to ensure the sustainability of the financing."

For a vaccine that has already been introduced, what were the objectives for developing the investment case? What are the steps and recurring processes when building an investment case? G

M

Ο

Ο

C O

S

"The first step is to make cost-effectiveness and cost-benefit studies to gather all available data on the cost of introducing the vaccine. We calculate the doses needed on the basis of our target population. This figure is in our system because population data and vaccination records are now fully automated.

We also have to study the suitable method of vaccination and presentation, choosing between 2 or 3 doses. Then, we calculate the approximate costs and submit them to the National Immunisation Committee."

"The entry point is to examine the burden of disease in the country. Second, we have to look at whether the vaccine is available and whether the State can afford it.
Third, the current immunisation system and its organization need to be assessed in order to know if they can handle the introduction of a new vaccine.
Finally, the most important step is to ensure the population's support for the new Vaccine.
These 4 steps are the pillars of the case. If we can answer these questions, the case is complete."

"There are three important steps. First, the Technical Vaccination Committee has to recommend the vaccine's introduction and put together an advocacy case file. Second, the Health Minister needs to approve the introduction. Finally, the Finance Minister needs to be convinced that the vaccine is important and will save lives, so that additional funds are dedicated to the health budget."

According to you, what is the number one requirement for a good investment case and what can be done to achieve it? Could you share a recent best practice investment case and what made it successful?

"The following elements are fundamental: the extent of the disease and the number of deaths it causes on the one hand, the vaccine's efficacy and its risks on the other.

Indeed, we cannot invest in a vaccine whose efficacy is limited to 30-40%. Likewise, the risks associated with the vaccine must not undermine the confidence that the population has in the entire immunisation programme."

"A solid advocacy case file includes clinical data and a cost/benefit analysis of the vaccine: what will be the future impact of the vaccine in terms of human lives and money?" What indicators, information or resources did you use to build an investment case? If there are gaps,

what do you need

and how do you

plan to access

better input?

Ν

"We need to know the price of the vaccine, its availability on the international market and any other products in development. Having this visibility is crucial.

We use the WHO, UNICEF and PAHO websites a lot, which gives us an idea of prices. Other resources are helpful, such as TechNet21 and the VPPN, which gather strategic documentation as well as information on other countries' experience.

It would be useful for us to have more precision on the vaccines' price. Currently, we receive approximate prices from UNICEF, which do not allow us to precisely define our budgetary needs."

"We mainly use the results of the studies that are carried out as well as the experiences of other countries. The key indicator is the number of disease cases reported by hospitals or surveillance systems."

10

What kind of help could international agencies such as UNICEF provide you with to build better investment cases? Would a process framework with key steps, outputs and indicators be useful? "The VPPN is a very important tool and it would be useful if it could be more active in terms of sharing relevant information. For example, countries could be divided into subgroups based on their involvement. A methodology document would be useful, if it complements the WHO guide on new vaccines introduction."

"Technical assistance on how to make a good advocacy case file or a good cost/benefit study would be useful."

11

Would the sharing of experience from other countries be helpful? If so, what kind of information are you looking for and how would it help? "Sharing experiences between countries is useful for us. In terms of topics, beyond vaccine procurement, it would be helpful to discuss how successful the implementation of new vaccines were in different countries and to cover the technical and programmatic aspects as well as the lessons learnt and solutions found."

"We often use the experiences shared by other countries in our advocacy case files. Of course, we cannot remain isolated from others. If a country has been able to see benefits from a new vaccine, it will be favorable to its introduction in Tunisia."

Full Interviews



EGYPT

- All Egyptian children have access to mandatory vaccines for free. Starting at birth and up to 18 months, the mandatory vaccines include:
 - Bivalent oral polio vaccine against poliovirus types 1, and 3 (7 doses) and 3 doses of Salk vaccine;
 - Pentavalent vaccine against diphtheria, tetanus, pertussis (whooping cough), hepatitis B and Haemophilus influenzae type b;
 - Combined live vaccine for measles, mumps and rubella (MMR).

The extended programme for immunisation (EPI) is in place at the central level, in the Ministry of Health and Population, and covers each of the 27 governorates and all 286 administrative districts, including over 5000 primary healthcare units.

Could you describe your health system and the status of your immunisation programme?

MOROCCO

⁶⁶ Our health system has a 3-level structure, including a centre in Rabat, under the umbrella of the Minister of Health, 12 regions and 81 provinces. Each province is divided into health districts where the primary healthcare centres are. This is where vaccination is carried out continuously and systematically, for the entire population entitled to the immunization programme.

The National Immunisation Programme, previously known as the Expanded Immunisation Programme, was changed in 1997 and aims at allowing all the people living in Morocco to benefit from free vaccines, following an immunisation schedule initially established by the National Technical and Scientific Immunisation Committee. Our role is to apply the Committee's

immunisation recommendations, once they are approved by the Ministry of Health. We are also ensuring that all financial, technical and programmatic means are available for the implementation of the immunisation policy.

Our programme includes 13 vaccines. We want to expand the number of vaccines offered and the population target. Our primary target covers children under 5 years old. Our secondary target includes catch-up vaccination, vaccination of teenagers against HPV and of women of childbearing age and pregnant women against neonatal tetanus.

TUNISIA

The health system in Tunisia is mainly based on social coverage. Employees are covered by the National Health Insurance Fund. For nonsalaried people, we have an indigence card which provides either free coverage or a reduced rate, defined by the State. Finally, we also have private health insurance.

The national immunisation programme is offered completely free of charge to the Tunisian population. In the private sector, vaccination is not covered by the National Health Insurance Fund, but can be paid by private health insurance.

The national immunisation programme offers 11 vaccines, including: hepatitis B and BCG at birth, pentavalent at 2-3-6 months, vaccines against polio (injectable and oral), hepatitis A, measles, rubella and pneumococcal vaccine. Very soon, we plan to introduce the HPV vaccine.

Which best describes your health system and what is the status of the immunization programme?

Have you introduced any vaccine over the last 12 months? Do you plan to introduce some in the near future? If you haven't already, when do you plan to introduce HPV/ **Rotavirus/ PCV?**

EGYPT

The 2 additional doses of the Salk vaccine were the latest to be introduced, in February 2021. We decided to introduce the Salk vaccine according to the WHO switch policy. It was somewhat delayed because of a shortage in the global supply chain. We first introduced a single dose of the Salk vaccine for 4-month-old babies, in 2018. Then, we decided to introduce 2 additional doses for 2- and 6-month-old babies, in 2021.

In addition to that, we are planning to introduce the pneumococcal vaccine in 2024, following the cost-effectiveness and cost-benefit studies.

Our priorities in the EPI are categorised as follow:

- First priority: pneumococcal vaccine for 2024;
- · Second priority: rotavirus;
- Third priority: HPV.

Unfortunately, we don't have a timeline for the rotavirus and HPV vaccines yet. As a MIC with no Gavi support, our government is responsible for the introduction of each and every vaccine and we of course need to be careful, considering our limited resources. After the introduction of the pneumococcal vaccine in 2024, we will discuss how to proceed for the rest of the vaccine priorities.

MOROCCO

In October 2022, we introduced the HPV vaccine for teenage girls. And in February 2023, we went from a PCV 10 to a PCV 13.

Have you introduced any vaccine over the last 12 months? Do you plan to introduce some in the near future? If you haven't already, when do you plan to introduce HPV/ **Rotavirus/ PCV?**

The pneumococcal vaccine was introduced in 2010 for infants. The rotavirus vaccine was also introduced in 2010.

Currently, we are working on several projects to be presented to our hierarchy and to the Technical Committee, namely the transition from pentavalent to hexavalent, the introduction of the hepatitis A vaccine, and the broadening of the target population for the influenza and pneumococcal vaccines to include the elderly.

TUNISIA

In March 2023, we introduced a 3rd dose of the polio vaccine for 6-month old babies and moved from an oral presentation to the injectable vaccine which is significantly more expensive.

Our projects for the future include the introduction of the HPV vaccine for the 2024-2025 academic year. We are also planning to introduce the acellular dTC vaccine for pregnant women to protect babies against whooping cough and the Tetraxim vaccine in schools, for 6-year old children.

The rotavirus vaccine is currently not a public health priority in Tunisia, based on the recommendation and priorities classification carried out by the Tunisian Technical Vaccination Committee.

Could you describe your latest experience with immunisation funding? What are the main obstacles you have observed to sustainable immunisation financing and at what stage of the process? What have you done to overcome them?

EGYPT

1 The first step is to take the decision to introduce new vaccines and this is usually not an issue for us. The decision should be based on scientific evidence. So, regarding the introduction of the pneumococcal vaccine, we have 9 sentinel sites for neurological disorders. We gave the data to the decision-makers and it was then easy for them to accept the introduction of this vaccine. For the introduction of any vaccine, we are depending on the evidence coming from our national surveillance system.

The main obstacle for vaccine introductions is most of the time related to finances. The budget of the entire Ministry of Health comes from governmental resources. Before the end of each financial year, all ministries report on their needs for the coming year with their justifications to the government. And this needs to be approved by the government.

MOROCCO

The introduction of the HPV vaccine was recommended by the Technical Immunisation Committee to the Ministry of Health in 2010. At that time, 3 doses of the vaccine were necessary and the products on the market were too expensive for us, considering that Morocco is a non-GAVI, middle-income country. The cost of vaccines is entirely covered by the State budget and vaccination is offered free of charge to the whole Moroccan population. There is therefore a huge need for financing.

In 2010, we did not have the budget to introduce the HPV vaccine. Between 2012 and 2013, the dosing was reduced to two doses, which decreased the vaccination costs a bit. We started planning the introduction in 2017 and got the budget in

Could you describe your latest experience with immunisation funding? What are the main obstacles you have observed to sustainable immunisation financing and at what stage of the process? What have you done to overcome them?

2019, following political contacts between the Ministry of Health and the Ministry of Finance. The Prime Minister strongly supported this vaccine in his government speech. Everything was ready for 2019, but Covid postponed the introduction.

The HPV introduction required a lot of negotiations and explanations, especially of the public health benefits. We have gathered all the economic data that show the vaccine's added value, despite its high cost due to the small number of manufacturers and little competition. It was therefore negotiation and advocacy mainly that allowed us to secure the required funds. Associations and civil groups, working to fight cancer in general and gyneco-obstetric cancer in particular, also supported our advocacy.

Among the data that helped us support the introduction of the HPV vaccine in Morocco, our two cancer registries were key, as they listed the number of diagnosed cases and the number of women who died from this cancer. We also had projections of cases for 2030-2050, without the vaccine's introduction. These figures were dramatic and allowed us to explain that we should not be limited to secondary prevention through screening, but had to act with primary prevention through vaccination. A lot of research and explanation work was therefore needed to introduce this vaccine.

TUNISIA

We have not faced any obstacles for the HPV vaccine introduction, so to speak. Above all, we had to make sure that the State budget allowed us to introduce the vaccine. We put together an advocacy case which was accepted first by the Minister of Health, then by the Minister of Finance. We received an agreement in principle from the Ministry of Finance on the allocation of the required budget. We are now waiting for the official confirmation of the budget by the end of the year to make the introduction plan and issue a call for tenders. Procurement and distribution are planned for 2024, with actual vaccination expected to start in early 2025.

3

Could you describe your latest experience with immunisation funding? What are the main obstacles you have observed to sustainable immunisation financing and at what stage of the process? What have you done to overcome them?

The advocacy case was put together following a request coming from the Tunisian Society of Gynecology. It gathers all the studies that were carried out, in particular those showing the disease's seriousness and its costs in Tunisia, but also the experiences of other countries.

Fortunately, we have not faced any obstacle to the HPV vaccine's introduction. The Minister of Health was very much aware of the issue and the Minister of Finance had no objection to this new introduction and enrichment of the vaccination programme.

EGYPT

According to the national health security action plan, our government's highest priority is to ensure the supply of vaccines, regardless of any emergency or pandemic. All the required money needs to be secured to that end. Routine immunisation is fully funded by the government, without any help from international agencies, while we work with partners like WHO and UNICEF for supplementary campaigns only.

MOROCCO

We are currently working on a project of co-financing vaccines. Until now, all the funds for immunisation have been provided by the State. These vaccines have however allowed health insurance companies to make savings, by reducing the number of patients, and the idea is to involve these companies in the financing of prevention. We are therefore looking at how to involve health insurance and social security organizations in immunization funding. We are also carrying out studies on the impact of vaccines in reducing future illnesses and the public health savings that they allow.

What strategies do you use to advocate for and protect funding? TUNISIA

Strictly speaking, we do not have a proper strategy. To defend the introduction of new vaccines, and maintain the immunisation programme and its financing, we rely on an effective surveillance of the diseases targeted by vaccines, showing an elimination or reduction in disease cases. Public support for vaccination and most importantly the promotion of the immunisation programme are also key to defending it.

The surveillance of the diseases targeted by vaccination is done through different channels. At the national immunisation programme's level, we monitor measles, rubella and poliomyelitis for which we have elimination and eradication strategies. Otherwise, at the basic healthcare level, the epidemiology unit carries out either an active or passive disease surveillance, based mainly on mandatory disease reporting. We react to the evolution of reported cases: if we see an increase in cases of a disease for which a vaccine exists, this will justify its introduction. For example, we decided to introduce the whooping cough vaccine for pregnant women, following a disease upsurge in babies under two months old, often contaminated by their mothers and siblings.

For HPV, we do not have a surveillance system but use data coming from the national cancer registry and specialized societies, which issued an alert on the increase in cancerous lesions due to the papillomavirus.

We therefore rely on these quantitative data, scientific and medical studies.

What strategies do you use to advocate for and protect funding?

EGYPT

Regarding the introduction of the pneumococcal vaccine, our government decided to rely on our vaccine factory, Vacsera. We have a memorandum of understanding with a vaccine manufacturer to introduce the vaccine and to support us with the technology transfer and local production. Of course, these steps will take time, 7 years at least. In the meantime, we will buy the pneumococcal vaccines from this manufacturer.

There are also discussions going on between our government, international manufacturers and Egyptian companies about the technology transfer for other vaccines. The Egyptian market is interesting for vaccine manufacturers, because we have 2.3 million children to vaccinate every year.

The financial needs for vaccination are a priority for our government and funds are therefore secured for our immunisation programme. However, we face several challenges, one of them being the many crises in neighbouring countries causing an influx of refugees. They represent an additional load on our health system, as we try to reach and vaccinate all children among refugees too.

MOROCCO

First, we purchase the majority of our vaccines from UNICEF, which allows us to obtain competitive prices. Next, Morocco is working with its international partners and the national private sector on the creation of a large vaccine factory. This will enable us to have access to a range of vaccines including new technologies, at truly competitive costs. The project started more than two years ago and it should be completed within the next 6 to 12 months. The factory and all its components

5

What are you currently working on to improve immunisation sustainable financing in your country? have been built; safety tests are currently taking place. We already have the required skills, as well as a training and support programme. A transfer of technology and know-how was carried out and production should be able to start in the coming months.

TUNISIA

Financing exists on demand: if we need additional funds, we put together an advocacy case to obtain the government's agreement. So far, we have not encountered any obstacles to the introduction of a vaccine and new vaccines are introduced almost every two to three years in Tunisia.

As for rotavirus, it is currently not considered as a public health problem in Tunisia. The improvement of family and school lifestyles has made it possible to eliminate the problem of diarrhea. If this were to change, the Vaccination Technical Committee, which is made up of most pediatricians and pediatric societies, would define the rotavirus vaccine as a priority and it would be introduced at all costs. After the introduction of the HPV and dTC vaccines, rotavirus may get higher on the list of introduction priorities.

What are you currently working on to improve immunisation sustainable financing in your country?

For each of HPV, Rota, and PCV, have you completed or are planning an investment case? If not, do you think an investment case is needed to support the introduction of these vaccines? How would the investment case be used?

EGYPT

For the pneumococcal vaccine, we have already booked the required funds in the Ministry of Health's new budget, which was approved by the Ministry of Finance. Because of the technology transfer, the project has been postponed to next year, but the budget is already available.

Developing countries are always in need of support. This new vaccine introduction will be putting an additional load on the country's cold chain system, starting with transportation but also storage in all 3 administrative levels. Our cold chain structure relies indeed on 3 layers: we have 2 central hubs located in Helwan and Giza, then subnational stores securing vaccines for each governorate and finally district stores which provide vaccines to up to 20 primary health care units. So, we always need to improve the quality of our cold chain system and our transportation methods.

MOROCCO

We don't have a single investment case document, but rather use factsheets with synthetic and clear ideas.

Regarding the HPV vaccine, a detailed case file was presented to the Technical Committee, with all the studies carried out, in particular the economic and impact studies, as well as the benchmarks of countries which have already introduced this vaccine, such as Malaysia whose situation is similar to Morocco's. The number of cases recorded was also included and very telling about the need to introduce the vaccine.

Numerous surveys have also been conducted to assess the population's acceptance of this vaccine. We were indeed worried about facing some reluctance from the population, given that it is a sexually transmitted virus. To counter that, we

6

For each of HPV, Rota, and PCV, have you completed or are planning an investment case? If not, do you think an investment case is needed to support the introduction of these vaccines? How would the investment case be used?

focused our communication on the fact that we are offering a vaccine against cancer, rather than talking about a sexually transmitted disease. Several other countries have also used this proven communication strategy.

The main questions we had to answer were about the vaccination plan: should we vaccinate at school, in healthcare centres, target girls only or boys too, what age group, etc. These programmatic questions were to guarantee the project's feasibility. But as for the vaccine's relevance, it was confirmed from the start.

Finally, we benefited from the decrease in the number of doses from three to two and the price reduction on international markets. The vaccine remains expensive, but new producers from Asia bring a welcome competition.

TUNISIA

To support the decision to introduce the HPV vaccine, we requested a Health Technology Assessment (HTA) from INEAS, the Tunisian Health Evaluation and Accreditation Authority, so that they carry out a cost/benefit study. The goal is to highlight what Tunisia will benefit from the vaccine's introduction in terms of women's health and healthcare savings in comparison to the vaccine's cost.

Cost/benefit studies are carried out for each new vaccine and are normally a prerequisite for the introduction to be agreed on by our government. In the case of HPV however, the agreement was obtained before the study's results, thanks to the alarm bells set off by Tunisian gynecology societies. Although the advocacy case file for the HPV vaccine has already been approved, the cost/benefit study was requested to enable us to answer possible questions from the media and the population.

For each of HPV, Rota, and PCV, have you completed or are planning an investment case? If not, do you think an investment case is needed to support the introduction of these vaccines? How would the investment case be used?

In Tunisia, investment cases are not a thing; we rather focus on what we call the advocacy case file. It is made up of all the elements which are in favor of the vaccine's introduction. And one of the key elements of the file is to ensure the sustainability of the financing: there is no point in investing to introduce a new vaccine if it cannot be guaranteed in the long term. Once a new line is added into the budget for the vaccine, it can no longer be removed from it. The Health Minister's agreement is therefore crucial, because the budget line cannot be diverted to another public health priority. Vaccination is untouchable. "

For a vaccine that has already been introduced, what were the objectives for developing the investment case? What are the steps and recurring processes when building an investment case?

EGYPT

16 The first step is to make cost-effectiveness and cost-benefit studies to gather all available data on the cost of introducing the vaccine. We calculate the doses needed on the basis of our target population. This figure is in our system because population data and vaccination records are now fully automated, from birth until death. Thanks to this system and its tracing capacity, no child's vaccines can be missed. Our target population covers 2.3 million children. So, for the pneumococcal vaccine, we have to study the suitable method of vaccination and presentation, choosing between 2 or 3 doses. Then, we calculate the approximate costs and submit them to the National Immunisation Committee.

MOROCCO

⁴ The entry point is to examine the burden of disease in the country and the public health problem to be resolved. We need to identify the possible solutions to the specific public health issue and check what is the place of vaccination. If vaccination is a substantial solution as primary prevention, the vaccine's introduction is almost won.

Second, we have to look at whether the vaccine is available and whether the State can afford it. The vaccine must be provided to the population without interruptions and therefore implies a long-term commitment from the State.

Third, the current immunisation system and its organization need to be assessed in order to know if they can handle the introduction of a new vaccine. For example, the cold chain, continuous training, working hours, etc. must be reviewed to determine whether additional investments are needed.

Finally, the most important step is to ensure the population's support for the new vaccine.

These 4 steps are the pillars of the case. If we can answer these questions, the case is complete.

TUNISIA

There are three important steps. First, the Technical Vaccination Committee has to recommend the vaccine's introduction. This Committee is autonomous and has no authority over the Ministry of Health. An advocacy case file must therefore be put together, either by the Technical Vaccination Committee or a subcommittee, and submitted to the Minister of Health. He has then to approve the introduction, before the Minister of Finance is contacted and receives the case file. The Minister of Finance needs then to be convinced that the vaccine is important and will save lives, so that additional funds are dedicated to the health budget to finance the new vaccine. Once the Finance Minister's agreement has been obtained, the introduction process can begin.

For a vaccine that has already been introduced, what were the objectives for developing the investment case? What are the steps and recurring processes when building an investment case?

MOROCCO

1 The entry point is the public health problem. Next, we need to check the new vaccine's effectiveness rate. Indeed, we cannot invest in a vaccine whose efficacy is limited to 30-40%. Likewise, the risks associated with the vaccine must not undermine the confidence that the population has in the entire immunisation programme. Parental confidence in the immunisation programme is a key element of its success. There is of course no zero risk, but the side effects must be mild.

These two elements are therefore fundamental: the extent of the disease and the number of deaths it causes on the one hand, the vaccine's efficacy and its risks on the other.

TUNISIA

A good clinical study is crucial for a good advocacy case file. It must first convince the authorities to introduce the vaccine. A solid advocacy case file includes clinical data and a cost/benefit analysis of the vaccine: what will be the future impact of the vaccine in terms of human lives and money? Usually, these studies are easily carried out in Tunisia because we can request our national health accreditation authority to do them.

According to you, what is the number one requirement for a good investment case and what can be done to achieve it? Could you share a recent best practice investment case and what made it successful?

What indicators, information or resources did you use to build an investment case? If there are gaps, what do you need and how do you plan to access better input?

MOROCCO

G We need to know the price of the vaccine, its availability on the international market and any other products in development. Having this visibility is crucial.

For example, the HPV vaccine experienced an international shortage between 2017 and 2018. Fortunately, we did not introduce it during this period. We can definitely not work on the population's confidence, release the required funds and then not obtain the product.

We use the WHO, UNICEF and PAHO websites a lot, which gives us an idea of prices. Other resources are helpful, such as TechNet21 and the VPPN, which gather strategic documentation as well as information on other countries' experience. We are also regularly invited to meetings and webinars, either by WHO or UNICEF. These platforms are very important for us, because they give us more visibility and international contacts.

It would be useful for us to have more precision on the vaccines' price. Currently, we receive approximate prices from UNICEF, which do not allow us to precisely define our budgetary needs.

TUNISIA

We mainly use the results of the studies that are carried out as well as the experiences of other countries. The key indicator is the number of disease cases reported by hospitals or surveillance systems, especially as part of the post-introduction evaluation.

Currently, we have to assess the results of the pneumococcal vaccine following its introduction three years ago. For the moment, the feedback on the vaccine is positive, as the Technical Committee's pediatricians no longer talk about pneumococcal bacterial meningitis as they used to.

Of course, these assessments require funds. Technical assistance can also be requested from international organizations such as UNICEF or WHO.

9

What indicators, information or resources did you use to build an investment case? If there are gaps, what do you need and how do you plan to access better input?

MOROCCO

The VPPN is a very important tool and it would be useful if it could be more active in terms of sharing relevant information.
For example, countries could be divided into subgroups based on their involvement.

A methodology document would be useful, if it complements the WHO guide on new vaccines introduction.

TUNISIA

What kind of help could international agencies such as UNICEF provide you with to build better investment cases? Would a process framework with key steps, outputs and indicators be useful?

1()

Technical assistance on how to make a good advocacy case file or a good cost/benefit study would be useful.

MOROCCO

Sharing experiences between countries is useful for us. I attended one of the VPPEFs in Copenhagen and found that there was a lot to learn from the other participants, despite the language barriers, especially from the Central European representatives who were in my group.

In terms of topics, beyond vaccine procurement, it would be helpful to discuss how successful the implementation of new vaccines were in different countries and to cover the technical and programmatic aspects as well as the lessons learnt and solutions found. It would indeed be interesting to learn from vaccine introductions success stories.

TUNISIA

Would the sharing of experience from other countries be helpful? If so, what kind of information are you looking for and how would it help? We often use the experiences shared by other countries in our advocacy case files. Of course, we cannot remain isolated from others. If a country has been able to see benefits from a new vaccine, it will be favorable to its introduction in Tunisia.

Usually, the members of the Technical Vaccination Committee have access to these experiences through international literature but also through their direct contacts with their counterparts during international meetings.

Contact:

Dyuti Laura Schuwey Daeppen Community of Practice Manager Vaccine Procurement Practitioners Network

dschuwey@unicef.org

unicef 💓 for every child