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Building resilience:
a key pillar of
Health 2020 and
the Sustainable
Development Goals
Examples from the
WHO Small Countries
Initiative

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Abstract

This publication was developed under the framework of the WHO Small Countries Initiative, which is coordinated by the WHO European Office for Investment for Health and Development, Venice, Italy, of the WHO Regional Office for Europe. It reviews the scientific basis for strengthening resilience, which is central to Health 2020, the WHO European policy framework for health and well-being.

The publication explains the concept of resilience and its implications for health at three levels (individual, community and system/society). It presents knowledge gained on strengthening resilience in three countries participating in the WHO Small Countries Initiative (Iceland, Malta and San Marino). It describes on-the-ground action taken in these countries and the main lessons learnt in strengthening resilience and developing supportive environments for population health and well-being.

The material presented in this publication is intended to inform other countries participating in the WHO Small Countries Initiative and encourage them to share their own experiences in strengthening resilience for health and well-being.

Keywords: GOALS, HEALTH POLICY, COMMUNITY PARTICIPATION, RESILIENCE, PSYCHOLOGICAL, SOCIAL SUPPORT, CONSERVATION OF NATURAL RESOURCES, ICELAND, MALTA, SAN MARINO

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Foreword

Having participated in many meetings and events related to the Health 2020 policy over the last five years, I have been very encouraged to experience the appreciation shown by policy-makers, health-system and public-health experts, members of civil society and the research community alike of the rationale behind the policy's four cross-cutting priority areas. At the same time, I realized that the importance of priority area 4 –creating community resilience and supportive environments for health and well-being – is not entirely understood, and that its relevance to certain contexts might be underestimated. Since priority area 4 is key to our efforts to modernize public health and increase the effectiveness of our actions to promote population health and avoid unacceptable health inequities, it is crucial that its overall importance be fully recognized.

For these reasons, I commissioned an in-depth review of the action being taken to strengthen resilience for population health and well-being, which could make it easier for policy-makers to appreciate its importance in improving the effectiveness of health-related action. This report provides a comprehensive overview of resilience-related knowledge and action, as well as the conceptual frameworks involved. It fills a gap in terms of documenting on-the-ground activities that benefit individual, community and societal resilience. Furthermore, it shows the crucial role of resilience in synergizing the implementation of the 2030 agenda and Health 2020.

The relevance of strengthening resilience and developing environments that are supportive of health and well-being was discussed at the High-level meetings of the WHO Small Countries Initiative in 2015 and 2016. Building on these discussions, the report also presents “inspirational examples” of strengthening resilience from three small-population countries: Iceland, Malta and San Marino. It will be interesting to learn of progress made in this area during the forthcoming High-level meeting of the WHO Small Countries Initiative in Malta in June 2017, the title of which is “Building resilient and healthy communities”.

I am confident that the information included in this report will provide the reader with the scientific and practical information needed to appreciate the importance of resilience to ensuring population health and well-being.

Zsuzsanna Jakab
WHO Regional Director for Europe

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Executive summary

This publication was developed under the framework of the WHO Small Countries Initiative, which is coordinated by the WHO European Office for Investment for Health and Development, Venice, Italy, of the WHO Regional Office for Europe. It reviews the scientific basis for strengthening resilience, which is central to Health 2020, the WHO European policy framework for health and well-being.

Structured in two parts, the publication explains the concept of resilience and its implications for health at three levels: individual, community and system/society. It presents knowledge gained from case-study analyses in three countries participating in the WHO Small Countries Initiative – Iceland, Malta and San Marino. In describing the on-the-ground action taken in these countries, efforts have been made to highlight the three levels of resilience and the different types of resilience capacity all of which are important in addressing Health 2020 priority area 4.

Interviews were organized with policy-makers and representatives of health institutions, social services and nongovernmental organizations in the three countries to collect information on their approaches to strengthening the resilience of: (i) victims of child abuse to help them recover from the trauma (Iceland); (ii) the health workforce through measures to counteract the brain drain (Malta); (iii) people with disabilities (and their families) through measures to integrate them into society (San Marino). The information collected shows how strengthening resilience at one level helps strengthen it at the other levels.

Background

Health 2020, the new European health policy framework, was developed to assist European countries in their individual and collective pursuits of health, equity, and well-being. The vision underpinning the framework is “a WHO European Region where all peoples are enabled and supported in achieving their full health potential and well-being and in which countries, individually and jointly, work towards reducing inequalities in health within the Region and beyond” (1). It is aimed not only at ministers of health, but also at ministers and civil servants across government and stakeholders throughout society who can contribute to the development of supportive environments for population health and well-being.

The WHO Regional Committee for Europe adopted Health 2020 on 12 September 2012 during its 62nd session in Valletta, Malta. Its strategic objectives are two-fold: to improve health for all; and to reduce health inequities through improved leadership and governance for health. In addition, it identifies four cross-cutting priority areas for action that are key to its effective implementation:

- (1) investing in health through a life-course approach and empowering people;
- (2) tackling Europe’s major health challenges;
- (3) strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance and response; and
- (4) creating resilient communities and supportive environments (1).

Of the four priority areas, perhaps the least understood – and the one that, so far, has received least scientific attention – is priority area 4; hence the rationale of this report.

The topic covered by priority area 4 was under discussion at the second and third high-level meetings of the WHO Small Countries Initiative (2015 and 2016) (1–4). This report builds and expands on the discussions held at these meetings; it also presents what can be referred to as three “inspirational examples” from countries participating in the Initiative (2).

Aim of the report

The main aim of the report is to show the crucial importance of Health 2020 priority area 4 (creating resilient communities and supportive environments) and why it is central to the overall policy framework (1). It reviews the scientific basis for strengthening resilience to enable effective health interventions. Building and sustaining resilience requires the development of environments that are supportive of population health and well-being. Thus, resilience should always be seen in relation to the availability of such environments. As explained in several WHO publications, a supportive environment includes a social and physical dimension, as well as the cultural, economic and political resources necessary for the health and well-being of the population (5–7).

The report provides knowledge drawn from the existing literature on resilience and an analysis of on-the-ground action in countries. It aims to ensure that strengthening resilience and developing supportive environments are an integral part of current and future processes to align national and subnational strategies, policies and programmes with the Health 2020 policy framework. Although the main focus of the report is on countries participating in the WHO Small Countries Initiative (2), it is hoped that its content will be meaningful to all countries in the WHO European Region and beyond.

Why strengthening community resilience and developing supportive environments are Health 2020 priorities

Health 2020 states that “building resilience is a key factor in protecting and promoting health and well-being at both the individual and community levels”. The development of supportive environments is instrumental in building resilience, which has an impact on population-health outcomes, and lies at the heart of Health 2020 priority area 4 (creating resilience and supportive environments). Collaboration among policy sectors and the full engagement of civil society are key elements in the development of supportive environments for health and well-being and in strengthening resilience. This is captured in the terminology used to describe the approaches recommended in implementing Health 2020, namely, “whole-of-government” and “whole-of-society” (1).

Health 2020 priority area 4 is essential for modernizing and increasing the performance of health-services and public-health programmes. Several studies have revealed that the impact of these programmes can be hampered by an overemphasis of the use of the so-called “deficit model”, an approach that focuses solely on the deficits of individuals and communities (8). Deficits are measured in negative terms, usually estimated on the basis of mortality and morbidity data. Such an approach is very prominent in interventions that are based only on the assessment of what does not work in a given community. It grossly overlooks what actually works well and the potential health assets of the population (for example its resilience, or intergenerational levels of solidarity and cohesion).

It has been argued that people do not develop because of their deficits but rather on the strength of their assets and resilience capacities (9). The more traditional deficit approach often puts disadvantaged communities on the defensive, while identification of the potential strengths of individuals and communities is seen increasingly to throw a positive light on their development (10). Asset-based approaches are required to complement the deficit model, the emphasis being on *complementing*, rather than replacing. This is also recommended in Health 2020 (1).

In the design and delivery of public-health programmes, community

assets should be identified and considered rather than ignored. Resilience is one of such assets.

Health 2020 priority area 4 offers a much-needed innovative lens for viewing a wide range of complex public-health challenges, such as health inequities. The assets-based approaches of the strategy aim to improve the impact of programmes and strategies to create conditions that will allow individuals and communities to maximize their health potential (1).

Resilience should be considered at three levels: individual, community and system/society. To ensure resilience at all these levels necessitates environments that support health and well-being. WHO has a long legacy of working to create such environments, which can be traced back to its Constitution (1948) and the *Declaration of Alma Ata* (1977) (11,12). Since the adoption of the *Ottawa Charter for Health Promotion* (1986), the development of supportive environments has consistently taken centre stage in the work of the WHO Regional Office for Europe (6). It is among the key priorities of different WHO action plans and programmes in the areas of environment and health, health systems' strengthening, communicable and noncommunicable diseases (NCDs), health promotion, and health equity.

There is now increasing recognition in policy formulation at the national and subnational levels of the need to develop supportive environments. Much less known, however, is the concept of resilience and the need to strengthen it in all activities related to the promotion of health and well-being. This is why, in developing Health 2020, the decision was made to include the creation of community resilience and supportive environments as one of its four priority areas (1).

Supportive environments: a prerequisite for strengthening resilience

Supportive environments offer people protection from factors that can threaten their health and enable them to expand their capabilities and self-reliance (6). They constitute the basic conditions necessary to ensure health protection and promotion at the individual and population levels despite threats and hazards. Therefore, they are critical to strengthening resilience at the individual and community levels.

The development of supportive environments for population health and well-being can include both sectoral and intersectional measures. Political action to implement pro-health policies and regulations (for example, tobacco-control legislation, or bans on advertising unhealthy junk food to children) and the use of financial incentives (for example, to increase the availability affordability of healthy food, or the adoption of safety measures at the workplace), or disincentives (such as, raising the prices, or limiting the availability, of unhealthy products) can contribute to their development. The provision of cultural, educational and local-community resources can shape a wide range of environments that empower individuals to take control of their health and improve their physical and living environments.

The WHO definition of health promotion refers to enabling people to increase control over and improve the determinants of their health (6). The notion of “being in control” is intrinsically linked to resilience. The level of control (or lack of it) that a person has over his or her life has been shown to be a key factor in the social determination of health and health inequities (13–15). The concept of control has been identified as one of the major factors in determining access to resources that protect and promote health. It can be traced back to Amartya Sen’s theory of the “freedom” to live and the “capabilities” for a long and healthy life (16). Sen shows that lack of control and powerlessness are the fundamental causes of inequities in health observed in different population groups (17). These findings were confirmed in the final report of the Global Commission on the Social Determinants of Health (2008) (14) and the European review of the social determinants of health and the health divide (15).

The following sections summarize the scientific backing, which links resilience to health outcome. The role of the health and other sectors in building resilience and developing supportive environments is also considered, as well as the increasing relevance of resilience to the United Nations 2030 Agenda and its 17 Sustainable Development Goals (SDGs) (18).

Definition of resilience and why it matters

Various definitions of resilience are found in the scientific literature. Notwithstanding their differences, they all point to the fact that resilience is related to processes and skills that result in good individual- and community-health outcomes in spite of negative events, serious threats and hazards (19–22). A number of resilience-related studies have looked into the characteristics of people and communities and the factors that allow them to manage problems effectively and bounce back after adversity. They have shown that the capability of individuals and systems (families, groups, communities and even organizations) to cope successfully in the face of significant adversity develops and changes over time (23–25).

The concept of resilience was originally used with reference to children and young people, but has since been broadened to incorporate adults and elderly people (26). In recent years, resilience has also been regarded as a characteristic of social systems and institutions (27). (System-level resilience is discussed later in the report.)

In the early years of research into resilience, disciplines with a focus on children, such as developmental psychology, conducted many studies and discovered that resilient young people possess the problem-solving skills, social competence and sense of purpose that enable them to cope with stressful situations (28). Research related specifically to developmental psychology has shown that these capabilities in children and adolescents help them to rebound from setbacks, thrive in the face of poor circumstances, avoid risk-taking behaviour and generally continue to lead productive lives (20).

Another discipline that played a strong role in the early studies on resilience was traumatology (29). Here, the focus was mainly on adulthood and old age. The results of these studies showed that adult response to stress is very much influenced by the type of interaction individuals have with each other and the settings in which they live. These factors are of meaningful significance to victims of trauma. Adult response also depends on factors associated with the reliability of the resources available to them. This relates not only to material resources, but also to the support available to them in the web of social networks on which, for example, victims of trauma rely, such as cultural and religious organizations, self-help groups and other community and societal assets (26–31).

There is now widespread agreement that resilience is not a given personal, unmodifiable characteristic with which one is born. Rather, it is the result of a developmental process that can become stronger over time, according to circumstances (32). As mentioned earlier, building resilience is shaped by the availability of supportive environments. This means that interventions aimed at strengthening resilience are more effective when supported by environments that are protective of and promote population health and well-being (33). This is well described and recommended in Health 2020 (1).

Nowadays, research on resilience has become a domain that encompasses many different variables stemming from the social and cultural environments in which people are born, grow and age (14). These are, among others: individual and community characteristics; coping processes; a sense of coherence; and resources amenable to policy action, such as parental support, community organization, self-help, mutual support, and community resources available to individuals and groups, including high-quality health services and public health programmes (35,36).

Resilience has a very prominent role to play in working towards basically all of the United Nations Sustainable Development Goals (SDGs) (18), as discussed later in the report. It is important to stress here, however, that, of the three levels – individual, community and system/society – the SDGs call for an approach involving the last-mentioned, which is crucial and must not be overlooked (18,37). Indeed, the three levels are interlocked and embodied in the rationale of Health 2020 priority 4 (1).

Changes in mechanisms to strengthen resilience over time

They do. Recently, the Overseas Development Institute (ODI) completed and published an impressive comprehensive scientific review on resilience, which concludes that factors that promote and protect resilience unfold over the life course (38). There is a notable connection between the findings of the review and Health 2020 priority area 1 (investing in health through a life-course approach and empowering people). Indeed, the interaction between, and the mutual reinforcement of, the four priority areas of Health 2020 deserves more attention and appreciation. Understanding this issue is important to being able to fully acknowledge the robustness of the rationale on which Health 2020 is based (1,38).

The ODI review (38) shows that resilience-building mechanisms can vary depending on life stages and situations. For example, there is evidence to show that in childhood and adolescence, family-related processes determine resilience to a large degree. In adulthood and later life, it may be affected by entrenched patterns of coping acquired over time, physiological stress responses and social relationships (39,40). Thus, strengthening resilience mechanisms that promote well-being and provide protection against negative health outcomes should be central to health interventions. These could be associated with individual trauma, or community shocks resulting, for example, from ecological disasters and natural calamities (such as, earthquakes) (41).

It has been argued that, in the future, the use of resilience know-how in the design of a wide range of public-health interventions will increase. These interventions include programmes for tackling complex issues relating to addictions, chronic illnesses, communicable disease, and the aftermath of disasters and climate change (38). Paying more attention to the role of resilience and the protective factors related to it, such as social capital, support networks and social-community relationships, is important to finding out why some people cope better than others in terms of health outcome, for example, in an economic crisis, or other social or natural upheavals (42,43).

The importance of the concept of control in strengthening resilience

Increasingly, strengthening resilience is recognized as an important element of action to tackle health inequity. This is based on the concept that people affected by it have little control over their lives and destinies and, as a result, are less resilient and, thus, more vulnerable (44).

Recent studies have produced evidence that this lack of control is caused by a combination of three levels of disadvantage, usually referred to as the micro (individual), meso (community) and macro (society) levels (45). The policy recommendations resulting from such studies advocate the importance of strengthening resilience at all three levels (13,15). In addition, the *European Review of the Social Determinants of Health and the Health Divide* pointed out the following.

How people experience social relationships influences health inequities. Critical factors include how much control people have over resources and decision-making and how much access people have to social resources, including social networks, and communal capabilities and resilience (15).

Thus, creating conditions that enable people to gain control over their lives and destinies is put forward as a credible way to strengthen resilience and create environments that are supportive of health and well-being (46).

The contrary of control is powerlessness, which is the state people find themselves in when they have little or no control over what is happening in their lives, for example, with respect to gaining the means and resources necessary to shape their lives. In this connection, the word “hopelessness” is also used in the literature. Powerlessness, or hopelessness, could be the result of political or economic circumstances. It is an objective condition with a very detrimental impact on health and well-being (47). Conversely, empowerment is very important for resilience, representing both a process and an outcome (48). Again, this is reflected in the rationale of Health 2020 priority area 4 (1).

Approaching resilience building at different levels

Both Health 2020 and the 2030 Agenda point to the importance of strengthening resilience also at the system level (1,18). It has been argued that a programme aimed at building resilience should consider the factors underlying people’s vulnerability and address the power dynamics behind, and causes of, the health and other inequities covered by the SDGs (18). These aspects cannot be left out of the debate on, and the search for, credible policy action to strengthen resilience (49).

There is a growing body of knowledge related to resilience, which may explain the current interest of policy-makers, professional disciplines and civil society in determining how to build and enhance it (19,50). Scientific efforts to explain how resilience affects health and well-being at the individual, community and system levels and to find ways to strengthen it should continue in order to consolidate the evidence-base in this field. Lessons learnt through the implementation of Health 2020 and action towards achieving the SDGs (1,18) will potentially improve policy know-how in this complex but very promising domain.

Other concepts relating to resilience

In the 1970s, the pioneering research of Antonovsky (51) and Werner & Smith (28) paved the way to a wide range of studies aimed at

identifying factors that have an impact on individual and community health and well-being. This field of study is scientifically referred to as “salutogenesis”. The salutogenetic approach focuses on determining the factors that help people stay healthy, or cope with hazards and risks that could be detrimental to their health and well-being. It is, therefore, quite different from the more commonly known approaches to identifying factors that create pathogenesis, such as disease and illness. Studies in this area aim to explain why, in the face of adverse life circumstances, some people prosper (or at least cope remarkably well), while others fail and develop pathogenic outcomes.

The concept of salutogenesis is useful, in several ways in the context of strengthening resilience. At its core is the theory of “sense of coherence” (SOC). Antonovsky describes SOC as the capacity of people to view the world and their living environments as comprehensible, manageable and meaningful (52,53). It is a resource that strengthens people’s resilience, helping them to analyse and mobilize the external and internal resources available to them to promote their health and cope with stress and challenges throughout the life-course (52,54,55).

In the scientific literature, another theory associated with salutogenesis relates to the so-called generalized resistance resources (GRRs), which are biological, material and psychosocial factors that make it easier for people to perceive their lives as being consistent and structured. Research findings have shown that having these resources enables people to experience life in a way that promotes SOC and, thus, the ability to manage its many stressors (56). As mentioned previously, factors that determine resilience are seen to be important health-promoting resources (10).

Another concept worth considering in creating environments that strengthen community resilience is that of social capital, which can be broadly defined as community resources that help create trust, solidarity and social organization. Scientists argue that social capital contributes to a range of economic, social and health outcomes that benefit society (57). A community with a high level of social capital could, therefore, be considered a resilience-supportive environment. Thus, social capital would seem to be of particular importance in small-population countries.

In the last decade, some studies on social capital have explored pathways to and mechanisms of accumulating and distributing political

and economic resources in society. Their focus was on disentangling the ways in which social and civic aspects of life reinforce and reproduce patterns of privilege and power (58,59). In this way, the area of social capital offers a framework within which to consider the changes needed to render society more equitable and sustainable, including which might contribute to bringing these about (60).

The evidence base on the relationship between social capital and various health outcomes has grown exponentially over the last 20 years, many studies having revealed links between the two (57,61–66). According to the scientific literature, however, the exact relationship between different indicators of social capital and different social outcomes varies, though some predictive values of health seem to be present in most of the relevant studies (67). In his early work, Wilkinson noted that social capital provides a link between income inequity and health, as it is indicative of the underlying psychosocial factors known to be closely related to health risks. He argues that low social status and weak social affiliations have a negative effect on health. According to his analysis, living in a strongly hierarchical society has a detrimental impact on the health of those at the lower end of the scale. On the other hand, strong social ties can counteract this, as they act as a protective factor (68).

The more research that is published, throwing light on the nature of social capital, the more effectively it can be applied in creating environments supportive of resilience. For example, recent descriptions of the differences between bonding, bridging, and linking social capital are helpful in understanding the potential opportunities of using the concept of social capital to shape policy action. Bonding social capital occurs among relatively close-knit groups that share many common characteristics. Bridging social capital, on the other hand, relates to spanning social ties (which are looser than bonding ties) across differences in, say, culture and ethnicity, but not in terms of institutional power and influence. Links and associations among members of an amateur football team are an example of bridging capital: the teams might comprise members from different ethnicities and of varying religious and political persuasions, but they would all have team membership in common. Linking social capital refers to forming relationships across explicit formal or institutionalized, power or authority gradients in society (69).

Thus, linking social capital relates to social solidarity and, as such, has

the potential of being a great asset to population health (59). It has also been argued that linking social capital is useful in articulating the effectiveness of community programmes in overcoming some of the political barriers to achieving health and well-being in local neighbourhoods (70).

In conclusion, over the last 30–40 years, a variety of concepts supported by empirical studies have emerged, forming a pool of knowledge relevant to policy action to strengthen resilience. For operational purposes, it is essential to understand the impact of these concepts on resilience and health across age groups, genders, cultures, ethnicities and the types of social welfare available. It is critical to understand how, in a specific community, the different assets and types of social capital might change over the life course and strengthen resilience.

Future trends in research on and the application of resilience

Recently, some researchers have advocated for more focused research on the role of resilience to better understand the health-protective factors that mitigate the impact of the economic crisis still affecting many countries in Europe and globally (42). They recommend the adoption, in future studies, of a comprehensive approach to a wide range of factors associated with health outcomes caused by the impact of financial crises and social and economic shocks. In fact, there is evidence that health outcomes cannot be adequately explained by traditional demographic and socioeconomic factors alone (43). Thus, a better appreciation of the role of resilience might be achieved if elements, such as social capital, social relations and networks, community-supportive resources and other resilience-related factors, were to be explored (66,71). Such research would have the potential of producing policy-relevant information on how to strengthen resilience and minimize negative health outcomes during times of economic and social upheaval.

Resilience frameworks have also been studied and are increasingly used in various fields other than public health, particularly environment, climate change, engineering, ecology, urban planning, social and economic development, agriculture and poverty. Current research focuses more and more on discovering what factors and measures affect resilience building. Much of the push for this type of research has come from the area of ecology and climate change, in the context

of which, building resilience is seen as a capacity for “making people, communities and systems better prepared to withstand catastrophic events (both natural and manmade) and able to bounce back more quickly and emerge stronger from these shocks and stresses” (72).

As mentioned previously, a new aspect of resilience research, namely, resilience at the system/societal level, is attracting the attention of an increasing number of disciplines, ranging from ecology to sustainable economic development. This level of resilience is crucial for the implementation of Health 2020 (1) at the national and subnational levels as it is linked to mechanisms of and opportunities for making change possible. It is discussed further in the section on resilience and the SDGs (18), as well as in the inspirational examples from Iceland, Malta and San Marino.

A recent study conducted by Emma Lovell and her colleagues showed a rise in the inclusion of resilience in the key areas addressed by academic research, scholarly journals, and internationally agreed frameworks, and international organizations and donor agencies in the post-2015 agenda. The study also collected data on searches for the word “resilience” on social-media platforms, such as Google and Twitter, which revealed that there had been a nine-fold increase in its use in published work between 1997 (when there were very few citations) and 2015 (when the number had risen to almost 30 000) (73). Climate change, ecosystem sustainability and urban planning are the areas in connection with which the term was used most often. Strangely (or significantly) health is basically invisible in the findings of the study. This makes the inclusion of priority area 4 in the Health 2020 framework (1) even more salient and innovative.

To sum up, resilience-related research is moving from purely conceptual thinking to a search for operational ways and means of building resilience at the individual, community and system levels. It is foreseen that future research will focus more on the overall governance and system arrangements required to do so (74). This shift in focus is closely linked to the current substantial investment of donor agencies in programmes and initiatives for strengthening resilience, in line with the post 2015 agenda (73).

Why resilience and supportive environments are important to population health

Good and poor health result not only from genes and germs, but also from the social and economic contexts in which people are born, live, work and age. This means that there are strong and mutually reinforcing links among, and causal pathways related to, health, resilience and supportive environments. Being part of community life and having social connections and a voice in local decisions are all factors that contribute to good health. Community assets, such as skills, health literacy, social networks and community organizations, are building blocks to good health and resilience (20). All this is well reflected in Health 2020 and the rationale for priority area 4 (1).

This section explores the roles of the health and other sectors in creating environments that help strengthen resilience. Evidence of the links between various policy sectors and population health and well-being was recently reviewed by the WHO Regional Office for Europe (75,76) and the results have been put together in the form of sector briefs on intersectoral action for better health and well-being (77). While these briefs give a general overview of the health and policy sectors, the information given in this section relates exclusively to issues of particular relevance to resilience.

The role of the health sector

While health sectors in Europe and elsewhere in the world may vary in structure and magnitude as a result of historical, economic and cultural factors, they share a common set of functions related to service delivery, human and technological resource development, financing and stewardship (78). These functions cannot be performed effectively without a strong resilience focus, particularly in the light of today's social and economic challenges (43). For example, in several countries, the current rate of health-sector investment in tertiary-level curative and clinical services cannot be maintained (79,80). Health systems that invest only in tertiary and curative clinical services are becoming unaffordable in many countries (81).

A strong and effective health-promoting focus is necessary if a health sector is to sustain population-health development in an equitable and sustainable manner (82). For health systems to be sustainable, thinking

in terms of system-level resilience is becoming an urgency, particularly – though not exclusively – in small-population countries, as evidenced in the inspirational example from Malta included in this report.

Resilience should also be seen as an impact of curative, preventive and health-promotive action taken by the health sector. As far as the health-policy sector is concerned, perhaps the most important implication of resilience is the potential role of health services and public-health programmes in increasing people's control over their lives and destinies. This is key, not only to promoting health, but also to prevention, rehabilitation and healing processes (6). These are all areas in which the health sector has a clear role to play.

Supportive measures to strengthen individual and community resilience can be introduced even in the face of extreme situations, which involve disease or natural disasters (83). They can be integrated into the whole spectrum of medical-, care-, cure- and rehabilitation-related action taken by the health sector. The inspirational examples of Iceland and San Marino described later in this report offer many reflections on this. Indeed, effective public-health programmes can create conditions, which help people avoid health hazards and, in turn, builds personal and community capacity to promote health and well-being (19,22). Furthermore, the health sector itself needs to be resilient to the many challenges and changes that can affect its operations. Ensuring this is a special challenge in small-population countries, as highlighted in the inspirational example from Malta.

Health-system and public-health action can strengthen the control that people have over their lives at different levels, namely, individual, community and system/society (45). As mentioned earlier, lack of control and powerlessness are the real causes of the health inequities observed in different population groups (14,17). Much of the research on having a sense of control and the impact this has on health and well-being has either overlooked or underestimated the role of the health system in this domain (81). Individual and community control – or the lack of it – is linked to health outcomes (14,15). This should be a key element of any intervention aimed at building resilience, and appropriate health-system and public-health policies and practices can enhance it (20). For example, in providing appropriate health care and social support to patients with noncommunicable diseases (NCDs) and chronic and degenerative conditions, health services could consider how the environments in which these patients live affect their ability to

cope. Helping them rearrange or adjust their furniture and facilities, for example, could help them maintain their self-image, mental health and motivation, and increase their sense of control; this would strengthen their resilience and, thus, have positive effect on their health and well-being (84).

Research has revealed that health and welfare professionals who take the time to listen to their clients without judging them, and who are prepared to advocate for them and seek solutions appropriate to their needs, are valued highly by, and make a positive difference to the lives of, their clients (22). Health professionals with these characteristics are instrumental in resilience-building processes.

In short, a well-functioning health sector not only ensures equitable and universal access to a good range of curative and preventive services, it also advocates for better social and environmental conditions that would allow people more control over their lives and, thus, improve their health and resilience (85). In practice, this means that people with access to the health services are more empowered, better able to take care of themselves, and more motivated and equipped to maintain, protect, and promote, both their own health and that of the communities in which they live. This is still far from common practice in many countries. Nevertheless, there are ample opportunities for health systems to advocate, enable and mediate action towards better health conditions: this includes changing policies, legislation and practices to create environments that are more equitably supportive of health and well-being (82).

The role of non-health sectors

In addition to considering the often-underestimated potential role of health services and public-health programmes in strengthening community resilience and promoting supportive environments, it is important to recognize that activities of the non-health sectors can either help or hinder efforts to this end. This opens opportunities for the health sector and a wide range of other sectors to coordinate and even integrate their efforts, depending on the national or subnational context (86). The *Tallinn Charter: Health Systems for Health and Wealth* refers to this as the “stewardship function” of health systems (78).

The health-in-all-policies and health-equity-in-all-policies concepts are centre stage in Health 2020 (1) and have become more and more

operational in national and subnational policies (87). The adoption of pro-resilience and pro-health policies in the sectors for environment, education, social security, housing, urban design, transport, agriculture and labour policy, among others, is highly desirable. The adoption by non-health sectors of pro-health policies on issues of inequity, the effects of climate change on health, and other public-health challenges, is identified in Health 2020 as urgent and essential (1). These are policy areas in which the health sector needs to develop appropriate know-how, professional skills and accountability mechanisms, as well as a legislative framework to facilitate the adoption of pro-health policies in non-health sectors. Action in these areas would contribute to building the resilience of the population for coping with conditions and hazards that have an impact on health and well-being.

The WHO Regional Office for Europe has a long and important tradition of ensuring that population health is central to the development of non-health-sector policy. An excellent example of how two sectors cooperate to strengthen action and achieve their respective goals is illustrated through the Environment and Health Programme (7). The findings of this Programme indicate that exposure to environmental risk factors and its impact on health vary among population groups, depending on demographic, socioeconomic, ethnic and spatial determinants (88). An example of an approach to building resilience is the WHO seven-country initiative.² The overall aim of this initiative is to protect population health from climate change by building capacity for assessing vulnerability, impact and adaptivity and, thus, strengthen the health systems of the countries. The initiative has enabled the development of national health-adaptation strategies or action plans to counter the impact of climate change, and facilitated awareness-raising activities and the sharing of knowledge and experiences in this complex field (89,90). Institutional capacity to adapt and prevent the negative impact of climate change on health is very much linked to the

² The seven-country initiative covers four different geographical and climatic zones: arid and semi-arid water-stressed areas (Kazakhstan and Uzbekistan); high mountainous areas (Kyrgyzstan and Tajikistan); Mediterranean countries (Albania and the former Yugoslav Republic of Macedonia); and a sub-Arctic region in the northern Russian Federation (Arkhangelsk Oblast and Nenets Autonomous Okrug). Each country has experienced climate-related exposure, such as extreme events, water scarcity, glacier melting and permafrost thawing. By drawing upon the experiences of countries already affected by climate change, this initiative offers a firm foundation for future action by providing examples of the priorities, challenges and emerging solutions utilized by the seven countries participating in the project (90).

creation of supportive environments for strengthening resilience (83).

As already explained, resilience is a combination of assets, capabilities and positive adaptation that enables people to cope with adversity and protect their health and well-being. Thus, it cannot be strengthened without coherent efforts and the development of supportive environments in all relevant policy sectors (91). For example, in tackling health inequities, it is well known that strengthening resilience and equity cannot be the concern of the health sector alone. Rather, as pointed out by Nobel Prize winner, Amartya Sen, “it must come to grips with the larger issue of fairness and justice in social arrangements, including economic allocations, paying appropriate attention to the role of health in human life and freedom” (92). These issues are addressed in the recommendations of both the final report of the Global Commission on the Social Determinants of Health (2008) (14) and the European Review on Social Determinants of Health and the Health Divide (2014) (15).

Other examples can be found in the area of education. Research reveals many interactions between the education and health sectors that are very important in the context of Health 2020 priority area 4 and its focus on resilience and supportive environments (1,93–96).

At the individual level, resilience is not a fixed personality trait, but a developmental characteristic that can increase or decrease over time and is affected by relationships, experiences and opportunities. As schools play a significant role in the development of children for at least 10–15 years of their lives, they have the opportunity to influence their resilience, as well as that of their families and the wider community (22). The concept and practice of what are commonly called “health-promoting schools” are based on this rationale (97).

Policies and programmes that aim to develop and sustain health-promoting schools contribute to the creation of powerful, supportive environments for resilience building. The inspirational example from San Marino describes well how schools and community action – backed by coherent national policies – can make a difference in increasing the resilience and well-being of children with disabilities and their families. The multisectoral approach that characterizes a health-promoting school is effective in building resilience and reducing health inequities when they are included as a key element in education and health and human-rights policies, and granted sufficient time to produce results (98).

In the environment and urban-planning sectors, many studies have shown that equitable access to parks and green open spaces increases social contact and a sense of belonging (99). These are all beneficial to individual and community resilience. People living in safe, walkable areas are more likely to know their neighbours, show more solidarity, be more trusting, and have higher levels of participation in politics and better relationships with formal governmental institutions, compared with people living in other areas (100). Urban planning and cultural and social policies affect levels of isolation and connectedness. Evidence from a meta-analysis of 148 studies on social relationships and mortality risk shows that individuals with strong social relationships have higher levels of resilience and are likely to live longer than those with lower levels (101).

In conclusion, a policy sector cannot develop sustainably on its own. Increasingly, sectors, such as those for education, environment and economic development, are investigating how policy on strengthening community resilience would affect progress in their respective domains (27,102). As discussed in the following section, the SDGs (18) have strengthened the impetus to work towards sectoral, intersectoral and community resilience.

The need to protect and strengthen community resilience is generally agreed and yet many forces act against this aim. Some interesting analyses warn us about what is known as “citizenship crisis” or “social pathology” (103,104). Recent studies have shown that economic and fiscal strategies may undermine family and community relationships and have a detrimental effect on resilience (19,105). The famous work of Zygmunt Bauman concludes that our society faces:

...a crisis of citizenship, commercialisation of human bonds and interaction, the advance of consumerist culture, the dissipation of human solidarity. It has many names, but a closer scrutiny reveals that they all relate to a shared referent: a deepening feeling of existential insecurity (106).

To avoid a disruption of community resilience, it is crucial to increase policy know-how to develop intersectoral pro-resilience practices and interventions in a coherent, systematic way. The implementation of the recently endorsed SDGs (18) has this potential, as outlined in the following section.

The importance of health and resilience to achieving the SDGs

In adopting resolution A/RES/70/1, *Transforming our world: the 2030 agenda for sustainable development* on 25 September 2015, the United Nations General Assembly made its mark in history (18). Based on lessons learnt in working towards the Millennium Development Goals, the SDGs call for global mobilization to tackle issues of widespread public concern. The elimination of poverty, hunger, climate change, disease, food insecurity, and environmental degradation, the strengthening of preparedness for man-made and natural disasters, and the sustainability of the planet's ecosystem are some of the global challenges included in the 2030 agenda and its 17 SDGs and 169 targets (18,107).

The overall perspective of the 2030 agenda is totally in harmony with the conceptual background and priority action described in *Health 2020* (1,18). This section highlights how the SDGs (18) have increased the profile of resilience. Sustainable development requires sustainable societies of which resilience is a key element. Furthermore, it implies the search for and deployment of structural processes and scientifically robust solutions to address the vulnerability of the planet. All this requires resilience building at various levels (74).

This section also presents arguments to support the belief that the implementation of frameworks, such as *Health 2020*, at the national and subnational levels of policy-making is crucial to achieving the SDGs (1,18). Strengthening resilience and developing environments supportive of population health and well-being are essential to achieving both the health-related SDGs and those pertaining to other areas (18).

The role of health in the SDGs

Population health can be regarded as a precondition for, and an indicator and outcome of, sustainable development. Ensuring healthy lifestyles and promoting well-being at all ages is the specific focus of SDG 3: ensure healthy lives and promote well-being for all at all ages. In reality, building resilience and environments supportive of population health and well-being is instrumental in achieving all of the SDGs.

Therefore, it should not be difficult to determine the key contributions that health-policy frameworks, such as Health 2020, could make in all domains of the SDGs (1,18).

The WHO report, Health in 2015: from MDGs to SDGs, sees the SDGs as a platform for collaboration between the health and non-health sectors that would benefit population health. It states that:

... the fundamental idea behind governance for health is that deliberate action is needed to influence governance in other policy arenas to promote and protect health. The integrated nature of the SDG agenda provides additional legitimacy for WHO to pursue a more active agenda in this domain (108).

Given their resilience-related characteristics and elements of vulnerability, small-population countries could play a leading role in demonstrating the importance of resilience, equity and population health within the post-2015 agenda (109).

The role of resilience in achieving the SDGs

The SDGs call for resilience mainly at the system level. SDG 1 envisages building the *resilience* of the poor and those in vulnerable situations, and reducing their exposure and vulnerability to extreme climate-related events and other economic, social and environmental disasters; SDG 2 calls for sustainable food-production systems and the implementation of *resilient* agricultural practices; SDG 9 relates to industry and innovation and calls for building *resilient* infrastructures; SDG 11 focuses on sustainable cities and communities and advocates action to make cities and human settlements inclusive, safe, *resilient* and sustainable; SDG 13 calls for strengthening *resilience* and capacity for adaptation to climate-related hazards and natural disasters in all countries; and SDG 14 aims to strengthen the *resilience* of marine and coastal eco-systems (18,73).

Resilience is not explicitly mentioned in the broad-reaching SDG 3 (ensure healthy lives and promote well-being for all at all ages) or its 13 targets (18). Nevertheless, it is increasingly recognized that building community resilience and supportive environments for health and well-being (as Health 2020 priority area 4 strongly advocates (1)) is indispensable also in relation to SDG 3 (18). This was recently put forward in the *Report of the High-level Panel on the Global Response to Health Crises*, which was discussed at the 70th session of the

United Nations General Assembly in 2015 (110). The United Nations Development Programme (UNDP) also addressed the issue of resilience during the 2017 Istanbul Development Dialogues (111). Through this initiative, UNDP explores ways of building resilience strong enough to face the risks associated with and adversities caused by natural disasters, climate change, poverty, conflicts and socioeconomic crises. Resilience strengthening is pursued at various levels with the aims, in particular, of: (i) reducing the likelihood of these risk events occurring; (ii) reducing their impact when they do occur; and (iii) helping people to recover quickly from their impact.

The issue of strengthening resilience was addressed at a number of major intergovernmental meetings held just before and following the adoption of the 2030 agenda in September 2015 (18). These include: the Third United Nations World Conference on Disaster Risk Reduction, Sendai City, Japan, on 14–18 March 2015 (at which the *Sendai Framework for Disaster Risk Reduction* was adopted); the Third International Conference on Financing for Development, Addis Ababa, Ethiopia, 13–15 July 2015; the United Nations Climate Conference (COP21), Paris, France, 31 November to 12 December 2015 (at which the *Paris Agreement* on climate change was adopted); the United Nations Conference on Sustainable Urban Development (Habitat III), Quito, Ecuador, 17–20 October 2016; and the United Nations Climate Conference (COP22), Marrakesh, Morocco, 7–18 November 2016 (which followed up on the *Paris Agreement*). The success of action emanating from these SDGs-related initiatives very much depends on issues related to resilience building (112).

In conclusion, the resilience mentioned in the SDGs (18) relates to the capability of communities and systems to deal with potential vulnerabilities, shocks and disturbances by developing “absorptive”, “anticipatory” and “adaptive” capacities, usually referred to as the “3As” (113). This approach goes back to the pioneering work of Holling and others in the 1970s, advocating the need to build resilience in communities and systems to preserve and improve the ecosystem (114). These resilience capacities enable communities and systems to pursue positive change (115). They are also critical in addressing system-level issues of policy coordination, cooperation and integration, and are important at the individual and community levels in enabling citizen mobilization and empowerment.

All three levels of resilience are needed to secure progress towards achieving the SDGs (18); the inspirational examples of Iceland, Malta and San Marino provide further reflection on this.

The motives behind the call in the SDGs to strengthen resilience

As mentioned before, resilience is a key factor in the SDGs, health being conceptualized mainly in SDG 3. Within the United Nations, prospective progress in sustainable development will be reliant on the resilience of communities and systems to manage the synergy among and interdependency of the SDGs. Resilience is, therefore, seen as a central mechanism for making progress in addressing them (18,116).

It should not be forgotten, however, that the possibility of redirecting development towards the SDGs is shaped, to a large extent, by the same powerful forces that made current development unsustainable. These forces have caused rapid and unplanned urbanization, environmental degradation and greater inequity in the distribution of material resources and power (117). Thus, measures adopted for strengthening community resilience must be explicit and address power issues and the distribution of resources.

Several experts and civil-rights associations have pointed out that measures aimed at resilience building should clearly address the questions: “resilience for whom”, “where”, “when” and “why” (118). Failure to answer these questions clearly could result in defining and pursuing resilience in a vague and diffuse way, and in the tendency to shift the responsibility for strengthening resilience to the individual level (119). This would jeopardize progress in achieving the SDGs (18).

Mechanisms and incentives that foster intersectoral cooperation on, as well as the coordination and, in some instances, the integration of, different policy efforts are key to SDGs-related progress. In addition to managing intersectoral synergies, there is a real need to secure sectoral development conducive to strengthening resilience and achieving the SDGs. Basing sectoral development on criteria that favour resilience and health-supportive environments would be most desirable. Such criteria could be used to shape self-regulation protocols that go beyond the traditional remits of policy sectors, which would seem to be crucial for the achievement of the SDGs.

In conclusion, given the structure of the SDGs, making the mutually reinforcing link between population health and resilience more visible would strongly enhance the position of public health within the 2030 agenda (18). To do so would require a periodic and systematic review of the interdependency of policy sectors and the impact it has on population health at the three levels of resilience. This would seem to be a very good opportunity, particularly for small-population countries where health and sustainable and equitable development are so interwoven.



Inspirational examples from three countries participating in the WHO Small Countries Initiative

Various concepts of resilience building were reviewed in the previous sections to show the rationale behind Health 2020 priority area 4 (creating community resilience and supportive environments for health). As explained, a resilience framework can be applied at three levels – individual, community and system – and environments that are supportive of health and well-being are a prerequisite for strategies to strengthen resilience. In this regard, small-population countries are in a very special situation as their outlook depends heavily on their resilience capacities. This was evident from an analysis presented at the Third high-level meeting of small countries in Monaco in October 2016 (109).

This section presents inspirational examples of measures taken to strengthen resilience and develop supportive environments in three countries participating in the WHO Small Countries Initiative (2): Iceland, Malta and San Marino. In presenting these examples, efforts have been made to highlight all three levels of resilience, as well as the types of resilience capacity that are important to addressing Health 2020 priority area 4 (1).

Iceland's approach to increasing resilience by avoiding retraumatization and revictimization of victims of child abuse³

This section describes the approach developed by Iceland to improve the performance of its national and local systems in tackling child abuse and maltreatment by strengthening resilience at the individual, community and social/system levels. Building resilience and supportive environments for health and well-being are very relevant to the prompt rehabilitation of children who have been subjected to abuse and maltreatment.

At the international level, there has been a great deal of interest in, and recognition of, the Icelandic approach to tackling child abuse, especially its measures to avoid the retraumatization and revictimization of children. It is hoped that the information presented about Iceland's approach and the lessons learnt in applying it will be of inspiration to other countries.

³ This analysis was written by Erio Ziglio and Emily Hughes Ziglio.

Child abuse and maltreatment: an ugly, underestimated, under-reported issue

WHO defines child maltreatment as “all forms of physical and/or emotional or sexual abuse, deprivation and neglect of children, or commercial or other exploitation resulting in harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power” (120).

According to WHO, the term, “child maltreatment”, includes the physical, sexual and mental abuse or neglect of children younger than 18 years (121). No matter the definition used, child maltreatment, abuse and neglect are unacceptable. This problem is underestimated in countries of Europe. This is well evidenced in the WHO *European report on preventing child maltreatment* (2013), which identifies the alarming magnitude of child maltreatment in Europe and the need for countries to review their current policies thereon. The report advocates more direct action towards prevention and recommends that countries multiply their efforts to ensure that children can grow up in abuse-free environments (121).

In 2013, when the report was published, it was estimated that, in the European Region, child maltreatment leads to an annual average of at least 850 premature deaths in children under the age of 15 years. The report also points out that not all deaths from maltreatment are identified and recorded (121). This means that the figure given is likely to be only the tip of the iceberg. In addition, abuse can be perpetuated for years without causing death, or coming to the attention of the police and child-protection services. Many victims are too young to understand or communicate what happened to them and older children may be too embarrassed or afraid to report it (122). Even adults often fail to report child abuse known to or suspected by them, as they are reluctant to interfere in “family matters”. Thus, the full extent of child abuse in European countries remains unknown.

It is recommended that countries improve the registration of, and their official statistics on, child abuse and maltreatment in order to assess and monitor the full scale of the problem (121,123). The skills of professionals in identifying, assessing and recording child abuse and maltreatment should be improved (124). Regular, tailored surveys are essential and should become a routine feature of work to detect the scale of the problem and assess the effectiveness of policies on, and

services for, combatting child abuse and maltreatment. Furthermore, society as a whole should be more aware of child maltreatment and become more committed to its eradication.

According to the *European report on preventing child maltreatment* (2013), in the WHO European Region:

- at least 850 children under 15 years of age die annually as a result of maltreatment;
- sexual abuse is estimated to affect 18 million children under 18 years of age;
- physical abuse is estimated to affect 44 million children under 18 years of age;
- mental abuse affects at least 55 million children under 18 years of age;
- maltreatment is usually accompanied by other adverse childhood experiences;
- children who receive no, or low-quality, rehabilitation treatment may develop poor mental and physical health and social outcomes, resulting in poorer education and employment prospects;
- the social costs of child maltreatment, abuse and neglect run into billions of Euros;
- home-visiting services, supported by intersectoral, interdisciplinary cooperation and coordination and combined with programmes for parents and schools, are key to preventing maltreatment (121).

The health impact of child abuse and maltreatment

The above data, unacceptable as they are, cannot convey the devastating impact of maltreatment, neglect and abuse (121). There is now a huge amount of scientific literature showing that the maltreatment of children causes them stress to levels that may seriously affect the development of their brains (125,126). Studies have illustrated that maltreatment and abuse can lead to cognitive impairment and the development of risk behaviour that harms mental and physical health (127). The report summarizes the scientific evidence of the fact that abuse and maltreatment result in various aspects of mental ill-health, such as depression, anxiety, eating disorders, behavioural problems, suicide attempts, self-harm and illicit drug use (121). Post-traumatic

stress disorder caused by abuse and neglect is also very common. Child psychologists and therapists are conducting an increasing number of studies on the impact of such stress (128).

Some studies show that child maltreatment tends to perpetuate the cycle of disadvantage and social injustice (121); preventing it, therefore, would contribute to the prevention and reduction of a much broader range of societal problems. For example, some children affected by maltreatment may not have the chance of receiving proper support through effective healing processes and this gives rise to inequity. In addition, the distribution of quality rehabilitation and treatment services for children is not usually equitable; problems related to the availability of and access to these services have been reported repeatedly in studies and surveys (129).

The evidence resulting from these studies has many serious implications for policy on the prevention and treatment of child abuse and maltreatment. International agencies, such as the Council of Europe, the United Nations Children's Fund (UNICEF) and WHO, have translated these policy implications into specific recommendations of action to tackle health inequities and neglect of the rights of abused children (130). Child maltreatment and abuse should be prioritized much more in the current debate about social justice and equity.

The need to improve prevention and rehabilitation

While eliminating child maltreatment and abuse is a priority in many European countries, few allocate adequate resources for, or concentrate the necessary attention on, developing evidence-based policy in this area. In most countries, policy reviews aimed at checking current practices and improving their effectiveness are the exception rather than the rule. They are usually carried out on an ad-hoc basis, often as a retroactive response to scandal stories in the media about serious episodes of abuse. Instead, policy reviews should be an in-built, systematic practice of the overall system, namely, the policy sectors, institutions and services responsible for safeguarding children's rights and preventing maltreatment and abuse.

There is increasing concern that traditional responses to child abuse, which focus on protecting children from further harm, are failing to reduce the magnitude of the issue adequately. As a consequence, international agencies, professional associations and civil-society

organizations are calling for policies, which place prevention at the centre of the fight against child abuse and neglect. In taking such an approach, strengthening individual, community and system resilience and developing health-supportive environments are of paramount importance. Without commitment to these goals and to improving practices in tackling child abuse, the problem will remain.

The Barnahus model: building resilience and avoiding retraumatization and revictimization

Barnahus⁴ (which literally means “Children’s house”) is a child-friendly, interdisciplinary and multi-agency centre where different professionals work under one roof. It was established in 1998 with the main purpose of investigating suspected cases of child sexual abuse and providing the victims with psychological and therapeutical support. The role and activities of Barnahus are based on a partnership between the State Police, the State Prosecution, the University Hospital and the local child-protection services. The Government Agency for Child Protection (also known as the National Agency for Child Protection) is responsible for its day-to-day operations.

Located in a residential area of Reykjavik, and not in medical or police premises, Barnahus is designed to provide maximum comfort to the children and give them the feeling of being safe and cared for. Its rooms are warm, cosy and colourful and equipped with toys, games and pictures (Fig. 1).

Children up to the age of 15 years are taken to Barnahus; those aged 15–17 years are interviewed at a police station in a protective environment, but the Police can ask for assistance from Barnahus. Children in the younger age group are not required to testify in court. If necessary, Barnahus can provide the support of trained staff from Barnahus for the older children, who are required to do so.

The basic concept of Barnahus is to avoid moving abused children from one service to another whereby they are examined and interviewed by different professionals in different locations, including the courtroom. Experiences like this can be very stressful (131), and even more painful

⁴ The description of Iceland’s Barnahus is based on interview with, and material received from, Bragi Gudbradsson, General Director, Government Agency for Child Protection and Ólöf Ásta Farestveit, Leader of the Barnahus team.

and traumatic than the original abuse (132,134), causing anxiety, panic attacks, withdrawal and other negative effects in an already traumatized child. In the literature, this is referred to as “retraumatization” and “revictimization”; it impedes the strengthening of resilience and hampers the healing process.

Fig. 1. Rooms at Barnahus



Being interviewed repeatedly by people who are not specifically trained in forensic investigation is likely to distort the child’s account of the event(s) to the detriment of the criminal investigation (132,134). The child-friendly environment provided by Barnahus reduces the anxiety of the child being interviewed, which is conducive to eliciting his/her disclosure (132,134). Barnahus activities focus on maximizing the child’s chances of being rehabilitated and resilient enough to overcome the effects of the abuse.

The Barnahus model of investigating abuse cases protects the child from having to repeat his/her statements, or come into contact with the suspect(s) in the courtroom. As already mentioned, the interview takes place in a child-friendly room and is conducted by a trained investigation interviewer (usually a member of the Barnahus staff), according to protocol. It is video-recorded and, in the case of a prosecution, accepted as valid evidence in court. This approach has been recognized as a just and effective procedure by case law of the European Court of Human Rights.

The interview is observed from a different room by a judge, who is legally in charge of the procedure, a social worker from the child-

protection authorities, a police representative, the prosecuting lawyer, the defence lawyer and the child's lawyer (Fig. 2).

Fig. 2. Interview and observation rooms at Barnahus



The interview is videotaped for multiple purposes, including the child's protection, the criminal investigation and as a testimony during the court case, should there be an indictment. The Barnahus arrangement makes it possible, in most cases, to make do with only one interview with the child who, as already mentioned, is not obliged to appear in court. This procedure reduces the risk of retraumatization and revictimization, and creates processes towards strengthening resilience.

After the interview, it may be necessary for the child to undergo a medical examination. A room for this purpose is also available at Barnahus, which makes it possible for the child to stay in the same, friendly environment rather than be referred to a hospital department or other appropriate medical service.

Especially in the case of sexual abuse, the findings of the medical examination are documented at Barnahus by a team, comprising a nurse, a paediatrician and a gynaecologist who endeavour to make the child feel protected and safe. During the examination, the nurse talks to the child in an effort to prevent the experience from becoming another traumatic event. The paediatrician spends time with the child before performing the gynaecological examination, using a videocolposcope (a state-of-the-art non-invasive recording tool) (Fig. 3).

Fig. 3. Medical room at Barnahus



One of the key failures of the legal system is that it disregards the significance of a child's age in relation to the questions he/she is expected to answer. Despite the growing body of literature in this area, many European countries have been unable to translate best practice into actual practice. The legal criteria for what is acceptable as evidence are unrealistic and children are treated as if they were adults. It has been argued that, under such stressful conditions, even many adults would not be able to meet these criteria (for example, to give the exact time and place(s) of the abuse), never mind children (135). Iceland's adoption of evidence criteria for children, based on expected age-related capabilities, is indeed an important step forward. Table 1 gives an overview of the estimated age-related line of questioning used during forensic interviews conducted at Barnahus; it is the result of many studies on interviewing child victims of abuse (136).

Research has shown that children and adults focus on different aspects of the events. Children, particularly those under six, find it difficult to focus their attention on more than one aspect at a time (135). They are not always able to state precisely how many times an act was performed, or what someone was wearing, but they can usually tell how they felt, or what was said at the time (136). The wrong questions may make a child seem incapable of making a testimony, and valuable evidence may be missed. Most importantly, badly conducted interviews can lead to retraumatizing and revictimizing the victim (137).

Table 1. Estimated age-related line of questioning used in forensic interviews at Barnahus

Age (years)	Who?	What?	Where?	How?	When?	How often?	Whole scenario
3 1/2	Dark blue		Light blue	White			
4	Dark blue			Light blue	White		
5-6	Dark blue				Light blue	White	
7-8	Dark blue					Light blue	White
9-10	Dark blue						Light blue
11+	Dark blue						

Note. Dark blue: expected direction of questioning of children at specific ages. Light blue: possible direction of questioning of children at specific ages.

Source: Anderson et al (136).

An independent evaluation conducted in Iceland in 2007–2009 demonstrated that children and parents who were interviewed at Barnahus were more satisfied than those who gave evidence in court facilities (138). Since the establishment of Barnahus in 1998, the number of cases brought to criminal investigation in Iceland has doubled, and the number of indictments and sentences has tripled.

The impact of Barnahus in avoiding (or at least minimizing) the retraumatization and revictimization of children is crucial to strengthening their resilience and helping them heal. Barnahus also provides treatment services for child victims of abuse and their non-offending parents. Therapists at Barnahus assess the child and develop an individual treatment plan, which is followed either at Barnahus or, if the child lives outside of the capital, as near to home as possible. Adverse childhood experiences, including child abuse, increase the risks for poor health (including mental health) and well-being in adulthood. Factors, such as having access to a trusted adult as a child, may strengthen a child’s resilience to developing these negative outcomes (130). Through their therapeutical work, the Barnahus staff aims to instill an element of trust (in adults) in victims of child abuse.

In recent years, Barnahus has inspired the establishment of around 50 similar centres in the Nordic countries. It received the Multidisciplinary Award of the International Society for the Prevention of Child Abuse and Neglect in 2006. In addition, the Barnahus model is recommended

as good practice in many Council of Europe standards, including the *Guidelines of the Committee of Ministers of the Council of Europe on child-friendly justice* (139) and the *Council of Europe Recommendation on children's rights and social services friendly to children and families* (140), and has been promoted by the Lanzarote Committee, the monitoring body of the Lanzarote Convention (141).

Since 2015, the European Union (EU)-funded project, PROMISE,⁵ has been involved in consolidating and strengthening the Barnahus movement in Europe. The aim of the project is to strengthen the capacity and knowledge of, and the exchange of experiences between, the justice system, the child-welfare sector, the medical field, public/private forensic and therapeutic services, and NGOs and lawyers working with children's rights. The project promotes a one-stop approach for child victims and witnesses of crime, limiting the number of interviews and ensuring comprehensive care, including social, medical, therapeutic and legal support (142).

Other elements of the Icelandic strategy on child abuse

Barnahus does not operate in isolation. As one of the elements of Iceland's overall strategic approach to addressing the issue of child abuse and maltreatment, it is an integral part of the intersectoral, interdisciplinary effort being made to enhance the performance of the institutions involved in cases of child abuse, and the engagement of civil society in preventing them. Some of the other bodies dealing with the issue of child abuse in Iceland are described below.

The Ministry of Welfare

The Ministry of Welfare is the ultimate authority on matters of child protection. On its behalf, the Government Agency for Child Protection (an autonomous agency under the authority of the Minister of Welfare) is in charge of the day-to-day administration of the child-protection services (143,144). Child protection committees (CPCs) are responsible for the child-protection services at the local-community level. Iceland has a mandatory reporting system, which puts the public and professionals alike under obligation to notify the child-protection

⁵ The PROMISE project is funded by the EU Rights, Equality and Citizenship Programme (2014–2020).

services of any situation whereby the welfare of a child is, or may be, at risk.

According to Iceland's Child Protection Act, the main objective of child protection is to ensure that children (defined as individuals under the age of 18) are raised in satisfactory conditions (143). The guiding principle for all work related to child protection in Iceland is to follow a course of action in the best interests of the child.

The Government Agency for Child Protection

The Child Protection Act of Iceland provides the terms of work of the Government Agency for Child Protection. In practice, the Agency has a twofold mission: (i) to enhance the quality of work and competences of professionals involved in child protection through standard-setting guidelines, training and supervision; and (ii) to secure comprehensive, specialized, evidence-based, child-friendly services that meet the individual needs of child victims of abuse and maltreatment and are in their best interest (144,145).

The Government Agency for Child Protection is responsible for monitoring the local child-protection services, including the collection of statistical data, and addressing complaints related to intervention and service delivery. Its main role could be defined in terms of secondary and tertiary prevention. The Agency is also involved in school activities and in building the awareness of parents and civil-society associations (144).

Through the work of the Agency, Iceland is able to develop environments that are supportive of children's rights by fostering training to upskill a wide range of interdisciplinary professional groups, parents and the children themselves. The role of the Agency in proactively engaging with the media is very important. Furthermore, its active website, which contains educational materials, information about research support, etc., has been reported as having had a positive effect on the creation of supportive intersectoral, interdisciplinary environments for the victims of child abuse (144,145).

The Agency, therefore, plays a crucial role in creating awareness of the problem of child abuse and in building resilience for, and commitment to, its prevention through activities tailored to specific target groups. In cooperation with other policy sectors (for example, that for education) classes for parents on the prevention of child sexual abuse are systematically organized in basically all schools in the country. As the

school curricula include tested educational films, theatre plays and material on children's rights, all Icelandic children have the opportunity to gain the necessary knowledge and skills to address issues related to abuse (146–149).

In addition to its national remit, one of the main roles of the Agency is to coordinate action related to enhancing child protection at the local level. This includes counselling and supporting CPCs with respect to family welfare and the management of child-protection cases at the local level, which is essential if the needs of child-abuse victims are to be met and their rights respected in accordance with the agreed standards. The Agency monitors the work of CPCs by collecting and analysing their annual reports.

The Agency also recruits and trains prospective foster parents and provides crucial support to research on the prevention of child abuse and the realization of children's rights (144).

Child protection services at the local-community level

According to the Child Protection Act, each local authority is required to establish and maintain a CPC composed of five members. The Act stipulates that all CPCs should have access to the services of relevant professional staff. In 2017, there were 27 CPCs across the country.

In an overwhelming majority of cases, cooperation between CPCs and parents is for the benefit of the child; on average, 20–25 cases annually result in the coercive termination of parental rights. Such decisions can be referred to the Child Protection Appeals Board or the relevant district court, depending on their nature and how serious they are.

It is estimated that, on an annual basis, CPCs have dealt with more than 8000 referrals a year. At the risk of oversimplifying them, these cases can be classified into two groups: cases of child abuse and neglect by parents who typically suffer from psychiatric and emotional disorders and/or substance abuse; and cases where the child, usually an adolescent, is jeopardizing his/her own well-being through self-destructive behaviour, such as the harmful use of alcohol, drug abuse, or delinquency.

Treatment for children and youth with behavioural problems

Children's sexual development is a process, as is their physical,

emotional and social development. It begins at birth and continues throughout childhood. Young people's sexual behaviour may become a problem if it is aggressive and/or involves other children in harmful ways. Since 2009, the Government Agency for Child Protection has been providing treatment for children and youth with sexual behaviour problems. A team of specialized psychologists provides this service; it is located in Reykjavík, but works with children and youth all over Iceland.

Two important interventions in this area are the Oregon model of parent management training (PMTO) and Multisystemic Therapy (MST).

PMTO is a structured, evidence-based intervention programme to help parents and caregivers manage child behaviour. It is designed to strengthen the social and cooperative skills of children aged 4–12 years and to prevent, reduce and reverse the development of mild to severe conduct-related problems. PMTO empowers parents, as the primary carers, to promote and sustain positive change for their families. Since 2013, the programme has been based in the Government Agency for Child Protection. The Agency offers education for professionals who wish to use PMTO in the course of their work in the community.

MST is an intensive family- and community-based treatment programme that focuses on addressing the environments of chronic and violent juvenile offenders (homes and families, schools and teachers, neighbourhoods and friends). It is used in dealing with the toughest offenders in the 12–17 years age group who have long histories of criminal offence. There are two MST teams in Iceland; both are located in Reykjavík but work with families all over the country.

To complete the overall picture of services and programmes that are part of the Icelandic strategy, it is necessary to mention that there are four facilities for the treatment of children with behavioural and emotional problems, delinquency and substance abuse. The Government Agency for Child Protection is responsible for these facilities, one of which is the State Diagnostic Centre for Adolescents that provides diagnoses and short-term treatment for youth. Based on diagnoses, decisions are made as to whether youths can return to live with their families, with the support of post-care services, or if placement in a treatment facility should continue. The State Diagnostic Centre for Adolescents is located in Reykjavík and works with youth and families from the whole country.

The other three facilities provide treatment for periods of 6–9 months. Located in pleasant, rural surroundings, they provide educational and/or vocational training, as well as individual and group therapy. They also conduct healthy leisure-time activities and encourage youth to participate in work-related activities or take on other responsibilities.

Finally, a pilot project was implemented in 2011–2013 with the aim of ensuring that, in reacting to emergency calls regarding violent domestic situations involving children, the police are always accompanied by a child specialist. The role of the latter is to support, talk and listen to the child to assess the need for trauma-focused treatment and ensure that, if it is called for, it is offered to the child within the following 48 hours. The Research Centre for Children and Families evaluated the project and it was found to be positively received by parents, children, the police and child-related professions (150). The project was then made available to the larger CPCs in the country that have, as a result, set up agreements with the police to ensure that every child exposed to domestic violence is assisted and provided with care. The challenge will be to extend the project to the whole country given the remoteness and scarce populations of some areas of Iceland. Nevertheless, mainstreaming this intervention to the current practices of most CPCs should be seen as a very positive step towards the prevention and management of domestic violence. This development has strengthened system resilience in Iceland in the fight against maltreatment and abuse.

Conclusions and lessons learnt

There are many lessons to be learnt from Iceland's inspirational example. Perhaps the most important are related to the new insights into shifting policy on tackling child maltreatment towards prevention and the innovative practices introduced to avoid the retraumatization and revictimization of child victims of abuse.

The example also shows that it is possible to improve societal performance in strengthening the resilience of children to bounce back from maltreatment and abuse, and that of the community to tackle the problem. Iceland is endeavouring to strengthen resilience at all three levels – individual, community and system/society – which requires sustained and organized intersectoral and interdisciplinary effort. The organized action of the Government, and society as a whole, is in itself an

example of community and system resilience. Resilience at these levels is key to improving overall system performance in fighting child abuse and creating resilience at the individual (for example, child victim's) level, which is essential to the healing process and the recovery of the victims.

In its approach, Iceland recognizes that the causes and consequences of child maltreatment involve a complex interplay of many societal factors. Therefore, an effective strategy to prevent child maltreatment and abuse requires an intersectoral, multidisciplinary policy approach. Iceland's experience shows that such an approach can only succeed if the sectors for criminal justice, health, education and social welfare, as well as the community, are involved.

Experience in Iceland confirms that the effective prevention of child abuse requires the input of high-performing institutions, combined with community action and commitment to human rights. It requires a strategy for action that encompasses criminal justice, police involvement, education, public health, culture, social welfare and various aspects of community development. Innovation is needed to enhance the cooperation of several, if not all, government departments, as well as the coordination and integration of their efforts: in other words, a whole-of-government approach to building community and system resilience is required to fight child abuse and maltreatment. Iceland is pursuing a whole-of-society, whole-of-government approach, according to the principles of the Health 2020 policy framework (1).

The Barnahus model creates a supportive environment for child-abuse victims, which has a positive impact on their resilience. Relevant disciplines and agencies cooperate under the same roof to safeguard the needs of the child and avoid retraumatization. It is important to understand that Barnahus does not work in isolation. It is a central element of an overall strategy to strengthen individual, community and system resilience, guided by the vision of a society free from child abuse.

In many European countries, there is a clear need to improve current practices related to the prevention of child abuse. Through the EU-funded PROMISE project, representatives of several governments and services in Europe are currently participating in a series of meetings to discuss possibilities of establishing the Barnahus model at the national level (142). There is a sense of urgency about the need to improve measures to assure child victims and witnesses of abuse rapid access to justice and quality of care. The PROMISE project aims improve current practices so that:

- forensic interviews are carried out in accordance with an evidence based protocol;
- the validity of the child’s statement as evidence is ensured through appropriate arrangements in line with the principles of “due process” to avoid the child’s having to repeat his/her statement during court proceedings in case of an indictment;
- a medical evaluation is carried out as part of the forensic investigation and to ensure the child’s physical well-being and recovery;
- the child and the non-offending family member(s) or caretakers receive short- and long-term psychological support for trauma;
- child victims and their siblings are assessed with a view to protecting them and following up on their needs.

With its strong focus on avoiding the retraumatization and revictimization of abused children, the adoption of the Barnahus model would indeed improve current practices in many countries. It would also contribute to strengthening the resilience of victims of child abuse, their non-offending parent(s) and the overall community.

Strengthening the resilience of Malta’s health system through the retention and development of human resources⁶

This section highlights the importance of strengthening system-level resilience to assure optimal and sustainable health systems. This is particularly pertinent in small-population countries where systems can be fragile. The following description of the main steps that Malta has taken to increase the resilience of the health-system workforce can be considered as an inspirational example to other countries participating in the WHO Small Countries Initiative (2).

System-level resilience

In the scientific literature, the focus on resilience has mainly been concentrated at the individual or community levels. Recently, however, more and more attention is being paid to the need for resilience also at the system level. Various health-related studies have considered various aspects of system-level resilience, but their focus has mainly been on its financial aspects. In the last decade, *financial resilience* has

⁶ This analysis was written by Erio Ziglio and Natasha Azzopardi Muscat.

become a topic of political interest, particularly the degree to which the contracting economy is affecting the main sources of financing health care and public health. In this context, health-system resilience relates to its capacity to introduce innovative financial mechanisms to counteract the negative impact of austerity measures (151,152).

Other studies on health-system resilience have focused on adaptive resilience, namely, the overall ability and capacity of the health system to absorb and manage external and internal disturbances and, at the same time, retain its basic functions, structure and identity without compromising health outcomes and equity (153,154). Additional concepts can be found in the literature, such as *transformative resilience*, which relates to the capacity of a system to transform itself when ecological, economic, social, cultural or political conditions make it untenable (155).

Regardless of which aspect of system-level resilience is in focus, health systems need to be resilient to respond effectively to significant change and challenges. This means that they need to be able to predict, prepare for, cope with and adapt to change. Resilience has tended to be seen as the ability to bounce back in the face of adversity; the Maltese example allows us to appreciate the need to strengthen it at the system level.

Health-system resilience: the issue of workforce vulnerability

The resilience of health systems in small countries is commonly described in terms of a lack, or the fragility, of their human resources. Having adequate human resources to achieve self-sufficiency in the provision of highly specialized health services is, therefore, a complex challenge in these countries. The question of sustainability in connection with the training and recruitment of certain types of health professionals gives rise to much concern among policy-makers, health-sector managers, etc., in countries participating in the WHO Small Countries Initiative (2,156,157). It has been argued that these countries are usually more exposed to critical issues arising from changes in global or European policy contexts (2). Their levels of vulnerability can seriously increase in the face of harsh challenges, such as the effects of financial crises, the impact of sudden unplanned migration, or other public-health emergencies (158).

In small-population countries, one of the major issues related to

strengthening health-system resilience is, without a doubt, human resources. In Malta, system-level resilience has been studied in the seminal work of Briguglio and Azzopardi Muscat who point out that very often specialists can only be trained overseas with no guarantee of their eventually returning home to practise (109). Small countries tend to rely on larger countries for training and recruiting professionals from a wide range of disciplines and for the provision and procurement of certain services and products. They usually face high per-unit training costs and are highly dependent on imported technology. Often, their domestic markets are limited, which tends to inhibit the development of self-sufficiency in some areas of their health systems. In addition to lacking specialized medical and public-health resources, small countries are faced with relatively high per-unit costs for public administration. This also poses challenges related to human resources in the areas of health-system management and overall governance (109).

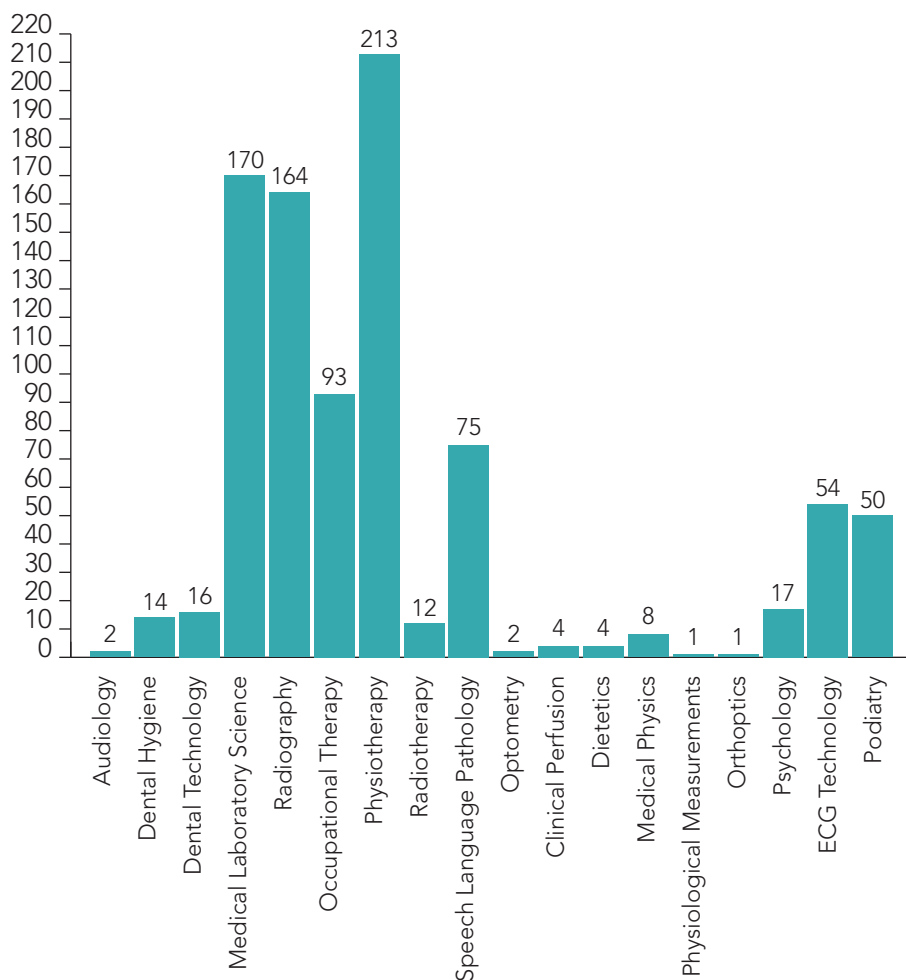
Briguglio and Azzopardi Muscat have pointed out that the resilience and sustainability of health systems in small countries are likely to be hampered by factors closely connected to their small pools of human-resources (109). Such factors make it difficult to provide the wide range of medical and public-health disciplines and specialized services needed. Typically, small countries find it challenging to provide patients affected by rare diseases with highly specialized care, and to sustain treatment services where the number of patients is not high enough to warrant doing so. Despite these system challenges, it is possible for small countries to address the fragility of their human resources and improve the resilience of the overall health sector. This is evident from the experience of Malta in strengthening the resilience of its health system, as outlined below.

Improving health-system resilience by reducing workforce vulnerability

For a health system to function well, it needs the right number of health professionals equipped with the right skills (159). Many countries face difficulties in trying to strengthen the resilience of their health systems and develop environments conducive to sustaining their health workforces. Elements to be considered in searching for ways to improve resilience include education and training, recruitment and retention strategies, continuous professional development and the strengthening of overall health-system governance (160).

Like other small-population countries, Malta is faced with serious challenges related to the health workforce, such as those related to the shortage and retention of several professional disciplines. The numbers of health professionals per capita are in general considerably lower in small countries than the EU average, with the exception of dentists and midwives (161). Workforce migration and an imbalance in the overall stock of human resources are serious issues in these countries, resulting in system fragility (162). The latest available data on the numbers of allied health professionals employed in the Public Service of Malta (Fig. 4) clearly highlight this.

Fig. 4. Allied health professionals employed in the Public Service, Malta, 2016

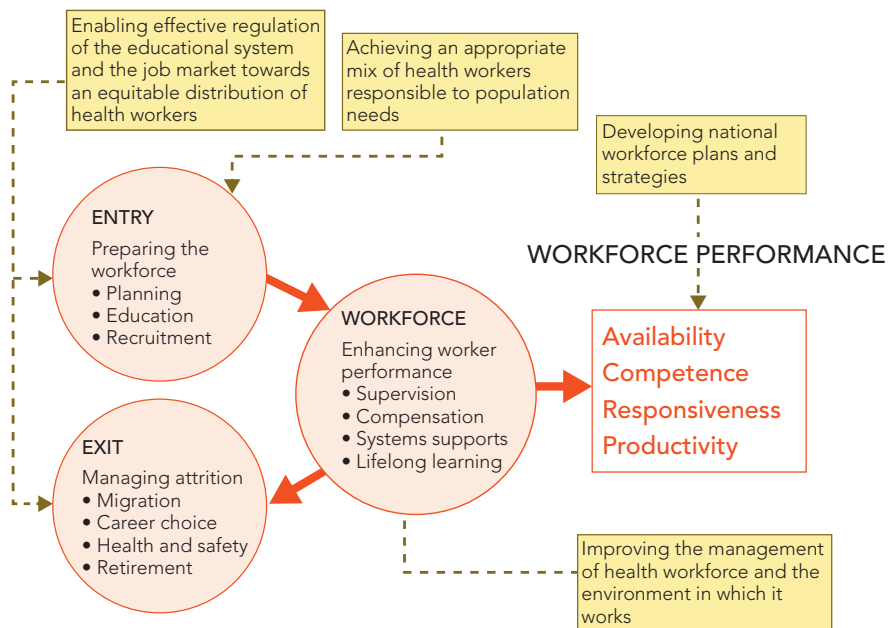


Source: Allied Health Care Services Directorate, Ministry for Health of Malta.

The necessity of addressing issues related to the sustainability and vulnerability of the health workforce in small countries is recognized in the work of the WHO Small Countries Health Information Network (156). Their political relevance is also reflected in the fact that health-workforce vulnerability was chosen as one of the priorities of the Maltese presidency of the EU Council (1 January–30 June 2017).

Malta has started an innovative process to improve resilience and reduce the vulnerability of its health workforce. This ties in well with the proposals on health-workforce development outlined in *The world health report 2006* (Fig. 5) (163).

Fig. 5. Stage of health-workforce development



Source: The World Health Report 2006 (163).

The WHO health-workforce model includes three main elements: entry, workforce and exit. The entry element relates to preparing a workforce (through planning, education and recruitment) that can assure the effective regulation of the educational system and job market towards an equitable distribution of health workers. The aim is to achieve an appropriate mix of health workers to effectively and sustainably meet the current and predicted health needs of the population. The workforce element relates to improving the performance of the health

workforce by enhancing supervision, compensation, system support and lifelong learning, as well as the working environment. The exit element consists of managing attrition related to migration, career changes, health and safety, and retirement, the aim being the same as that of the entry element, namely, to enable the effective regulation of the educational system and the job market towards an equitable distribution of health workers.

All three elements of workforce development are, in many ways, reflected in current efforts to diminish the vulnerability of the human-resources and improve the resilience and sustainability of Malta's health system, as outlined below.

The Maltese approach and its impact

The Maltese approach aims to resolve issues related to the quantitative and, in some areas, also the qualitative deficits of Malta's health-sector workforce. It relies on international cooperation and joint ventures, combined with internal incentives and processes linked to human-resource development.

The training of health workers takes place almost exclusively at the University of Malta. Training in other institutions, such as Barts Hospital, London, United Kingdom, is expected to start operating during 2017. As mentioned, the number of health workers in Malta is in general lower than the EU average. In 2010, the number of physicians per population, including trainees, was below the EU average; however, as a result of counteractive measures taken in Malta, it has since risen and is currently on a par with the rest of the EU (159,162). This recovery was made possible by the introduction of specific regulations, internal coordination and intersectoral action, and international cooperation agreements. The process has allowed the establishment of formal specialist training programmes in Malta and a series of agreements with educational institutions, deaneries and trusts in the United Kingdom (where most Maltese medical graduates undergo specialist training). Malta also has specific training-related agreements with institutions in Belgium, Germany and Italy as part of the overall strategy to reduce health-workforce vulnerability in Malta (Box 1) (162).

Box 1. Development of mechanisms for training partly in and partly outside Malta

Before joining the EU, Malta lacked formal systems of specialization. Immediately following accession, a legal infrastructure for the recognition of specialist training was established. As this was still reliant on recognition of specialization obtained overseas, it was considered necessary to establish a domestic system of specialization and accreditation. It was decided to develop this in partnership with other countries to ensure that Maltese doctors were exposed to the breadth of their specialties and, as a result, would be able to introduce relevant innovation to the Maltese health system. Therefore, for a number of specialist areas, agreements on training partly in Malta and partly abroad were established. These contribute to achieving the dual objective of retaining capacity locally while ensuring the necessary exposure to patient numbers and diversity and maintaining the hospital as a teaching and training institution. The agreements are vulnerable, however, in that they depend on the ability of the host institution to accommodate the trainees; the vast majority of these are institutions and deaneries in the United Kingdom. Events, such as Brexit, highlight the vulnerability of small countries to policy decisions taken by larger countries on which the former are, to a certain extent, dependent. In recent years, Malta has also entered into training agreements with other European countries although language issues can pose a problem. A more European-wide solution could be an attractive way of strengthening and sustaining structured cross-border mobility with respect to specialist training.



Malta is now nearing the EU average for total number of physicians but the average for nurses is still relatively low despite a recent increase in their numbers (162). The increase was mainly the result of a capacity-building plan developed by the University of Malta and the Government, as well as recruitment from other European countries. The Maltese Nursing Conversion Programme enabled over 800 second-level nurses to be registered as first-level nurses. Not only can these nurses work independently but they can also contribute to upskilling the nursing profession. The introduction of a nursing degree has contributed greatly to the maintenance and development of the nursing workforce and to rendering nursing a more attractive profession (Box 2).

Box 2. Development in the area of nursing

At the time of the EU accession, more than 50% of the Maltese nurses held nursing qualifications that were not in compliance with the EU directives on nursing. This provided the impetus to look into the nursing-education programmes. Over a period of around ten years, more than 800 nurses underwent a programme to upgrade their skills and become recognized nurses. Furthermore, as a result of steps taken to professionalize nursing, nurses can now seek higher-level qualifications and this has had a positive impact on service delivery.

Compared with other small-population countries and the EU, Malta has a low dentist-to-population ratio. Recently, the Faculty of Dental Surgery of the University of Malta re-evaluated its courses on dental technology and dental hygiene. A new diploma is now being offered for dental-surgery assistants to improve the quality of the dental services and strengthen the concept of the dental multidisciplinary team. Furthermore, studies are being conducted on the oral health of the Maltese population.

In general, there are certain similarities in the challenges experienced by small countries in relation to education and training, one of the most prominent being the lack of post-graduate medical education. Therefore, those seeking a health-related education, especially a specialist education, often have to go abroad. To address this challenge, Malta has expanded its educational facilities and opportunities, the latter in the form of post-graduate training and lifelong learning programmes (159,162). The success of these programmes in the medical profession has encouraged policy-makers to consider developing a similar model for nursing and allied health professionals.

Malta seems now to have an adequate supply of medical graduates and has reached the EU average in terms of number of practising doctors per 100 000 population. This is partly due to the removal, over 20 years ago, of the University's numerus clausus, and to a major improvement in the retention of graduate doctors. The University's intake of medical and pharmaceutical students has increased considerably in recent years. The admission of dental students, however, is still limited due to the small number of training positions. Malta is aware that increasing admission must go hand in hand with improving and monitoring the quality of education (159).

Recruitment is also a challenging and complex issue for small-population countries. In general, these countries need to recruit certain categories of health specialists from outside to make up for workforce shortages. Health professionals in small countries tend to migrate because professional opportunities are difficult to find in their native countries. Therefore, programmes are needed that can ensure the balance and sustainability of the human resources. The health sector in Malta relies on foreign consultants for special types of services, including neurosurgery and complex orthopaedic surgery (for example, for scoliosis), and in connection with the production of orthotics and prosthetics. International cooperation and agreements to meet these needs are very important to the Maltese approach.

Tackling rare diseases and ensuring continuous innovation are major challenges to small-population countries. Since, low patient numbers make it unfeasible to offer certain specialized care in a systematic and sustainable manner, Malta is highly reliant on support from other countries in the management of rare conditions. This support is, in turn, dependent on ongoing political and economic developments in the countries in question. This is exemplified by the situation of the Visiting Consultants Programme. To ensure sustainability, the Programme relies on agreements with foreign institutions on sending specialists to Malta not only to treat patients, but also to train local professionals and thus contribute to the enrichment of local expertise. What makes this Programme a success in Malta is the proactive manner in which it is run, making it possible to adapt quickly to the needs for new services as they arise (158). Once a service is well established with the help of a visiting specialist and patient numbers are large enough to warrant retention of the expertise the next step is to train the local multidisciplinary health team in the specialized procedures in question.

Box 3 highlights the benefits of the Visiting Consultants Programme to cardiac-surgery services in Malta.

Box 3. The development of cardiac surgery services in Malta

In the post-World War II decades, visiting consultants from London travelled to Malta on a regular basis to see patients and advise about treatment. Some of these patients would be sent to London for further investigation and, in some cases, surgical treatment. In 1983, a visiting cardiac surgeon performed Malta's first heart operation. This was the start of a visiting cardiac-surgery service. Between 1983 and 1995, Maltese patients benefitted from the services of British teams, which performed surgery both in Malta and the United Kingdom. In the early 1990s, as the numbers of coronary-artery bypass grafts started to increase significantly, and with the development of coronary angioplasty, it was deemed feasible, safe and cost-effective to establish a domestic service. This was facilitated by the return of Maltese specialists who had been trained abroad in interventional cardiology and cardiac surgery. In the early years of the service, patient treatment increased steadily and waiting times fell. A heart-transplant programme was also established; however, as the annual number of procedures performed doubled, despite the increase in treatment availability, demand became greater than supply and waiting times increased again.

This pattern is still seen on a regular basis with the introduction of new services and techniques, which previously would only have been available on a cross-border basis. The decision to establish a permanent service rather than rely on cross-border referral depends on whether it would be cost-beneficial in the light of number of cases and the availability of expertise. Trained nationals who are willing to return to their home countries to work are important drivers of service development in small countries.

Source: Manche (163); Azzopardi-Muscat (164).

The issue of remuneration increases the complexity of ensuring health-system resilience in small-population countries and losing significant numbers of well-trained health professionals to migration can result in workforce shortages (165,166).

Malta experienced a severe net outflow of mainly newly graduated medical doctors after accession to the EU. For example, many remained in the United Kingdom after completing their specialist training. In 2009, the Government of Malta addressed this challenge by

establishing the Malta Foundation School, which is recognized by and equivalent to the Foundation Schools in the United Kingdom. The Malta Foundation School manages the successful Foundation Programme, which illustrates how small countries can adapt in a relatively short period of time. In addition, formal specialist programmes have been established and are coordinated by the School. The Malta Foundation Programme, specialist programmes abroad, and renegotiation of collective agreements on professional health care comprised the triad of measures that were instrumental in reversing the medical brain drain (162). Prior to the establishment of the Malta Foundation Programme, junior doctors were leaving the country as soon as they graduated, without having contributed to the Maltese health service, to ensure a training post abroad. The Programme succeeded in reversing this situation by introducing a competency achievement document equivalent to the Foundation Achievement of Competency Document (FACD) issued by the Foundation Schools in the United Kingdom. Thus, for graduates in possession of FACDs, opportunities of working abroad will not be in jeopardy (Box 4).

Box 4. The medical brain drain in Malta

In the period just after EU accession, Malta was losing more than 35% of its medical graduates as soon as they qualified, one in three leaving for the United Kingdom in 2007. This had a severe impact on the hospital services. Part of the reason for this was a change in the structure of the medical specialty training programme in the United Kingdom, which made it far more difficult for medical graduates who had not participated in the United Kingdom Foundation Programme to enter the United Kingdom health system. Therefore, Malta took steps to set up an equivalent programme within the Maltese health system (the Malta Foundation Programme), which was made possible by a bilateral agreement between Malta and the body responsible for medical training in the United Kingdom. The brain drain was reversed almost as soon as the Programme was set up. Currently, the Programme also recruits medical graduates from overseas and the demand for places exceeds supply.

Table 2 clearly illustrates the success achieved in recruiting medical graduates, including those from overseas, into the Maltese health-care system between 2009 and 2015.

Table 2. Success of strategy to retain medical graduates in Malta, 2009–2015

Status	2009	2010	2011	2012	2013	2014	2015
Passed interview	55	66	100	112	136	147	161
Offered post	55	66	100	100	100	100	115
On reserve list	0	0	0	12	36	47	20
Recruited	49	54	81	76	96	100	115
from UOM (%)	47 (95.9)	48 (88.9)	60 (74.1)	52 (68.4)	68 (70.8)	98 (98)	91 (79)

Note: UOM: University of Malta.

Source: Interview with Tonio Piscopo and Kevin Cassar, Malta Foundation School, Mater Dei Hospital, on 21 June 2016.

The training and retention of human resources is of great significance in small countries, like Malta, where the number of specialists in some fields may amount to only one or two individuals. It would be very difficult, at short notice, to find replacements with the necessary skills in the case of unexpected changes. This highlights the vulnerability of the health workforce in small countries where, in certain fields, posts are filled fast, while in others, the migration of a single individual could make or break the system.

Continuous monitoring of the system and adequate funding are key to maintaining and developing human resources. Over a 20-year period, the Institute of Health Care (now the Faculty of Health Sciences of Malta) developed degree programmes to educate and train allied health professionals in several areas, including physiotherapy, speech-language pathology, occupational therapy, radiography and podiatry. These courses are held on a regular basis with limited admission. This is primarily due to the small number of educational and supervisory positions available, but the need to achieve the fine balance between shortage and oversupply also plays a role. Since 2010, two new courses have been developed in response to the need for trained therapeutic radiographers who can operate the newly acquired radiotherapy equipment properly, and medical physicists to ensure the effective implementation of the national cancer plan. The courses are well established, but the possibility of their resulting in an oversupply of specialized professionals in the near future has been raised as a potential problem (Box 5).

Box 5. Development of new courses

EU funding was obtained to build a state-of-the-art hospital for cancer patients. During the planning process, an urgent need for therapeutic radiographers and medical physicists was identified. Therefore, the University of Malta (in collaboration with partners in the United Kingdom) developed two new university-level courses, one on therapeutic radiography and the other on medical physics. The University of Malta is now self-sufficient in the provision of this training, as a consequence of which, the diversity and quality of the health service has improved and patients who previously had to seek treatment abroad are now treated locally.

Conclusions and lessons learnt

Malta has undertaken a wide range of action to reduce the vulnerability of its health workforce and thus increase the resilience of the health system. It is important not only to create sufficient and effective workforce-related policy, but also to ensure that those involved have the skills needed to perform optimally. Measures taken to reduce the magnitude of the problem have improved the overall resilience and sustainability of the health system. Although this is a work in progress, there are already a number of lessons to be learnt from its approach.

The first lesson relates to governance, leadership and commitment. The need to reduce the vulnerability of the health workforce in terms of quantity, quality, training, retention and territorial allocation to ensure equity in access and outcome must remain central to health-system development policies and priorities in the country. None of the measures and initiatives described above could have been achieved without the continuous commitment of the Government of Malta to address the challenges related to building the resilience of its health system.

Malta's success was facilitated by positive, informal links, for example, between the education and health sectors, and between professional associations and the University. This fostered the goodwill and commitment of all stakeholders and, thus, ensured progress. It is not uncommon in small-population countries for people to wear various hats, changing between, for example, teaching at the University and policy-making responsibilities. In Malta, this led to the implementation of several measures to strengthen the resilience of the health workforce.

In addition, action to ensure the relevant capacity for establishing and managing cooperation with foreign educational institutions (including agreements) has been approached in a systematic and strategic manner. This forms part of the overall strategy for reducing the vulnerability of the workforce and increasing health-system resilience in Malta.

The quality of Malta's civil servants has enabled the country, and more specifically its educational, research and health institutions, to benefit from European collaboration. It is of particular importance in these days of scepticism towards Europe, which is found in some segments of society, that the results of this collaboration be given appropriate visibility through good media coverage. This would also contribute to maintaining the collaboration.

The WHO Small Countries Initiative is of key importance in sustaining and strengthening the resilience of health-systems. It facilitates collaboration among the countries participating in the Initiative, and increases advocacy for and the visibility of innovative and effective practices in these countries. The Initiative provides countries with the means to increase their capability of tackling challenges related to maintaining/building health-system resilience and opportunities for sharing expertise and knowledge. It has enabled the development of literature on and know-how about resilience tailored to the specific and unique features of small-population countries (2). The Malta example, for instance, shows that small-population countries can succeed in building a strong health-system and public-health infrastructure despite challenges related to their size, such as workforce constraints.

Judging from Malta's experience, another key lesson for success is to adopt policies that enable and strengthen governance for health. This is highly recommended in Health 2020 (1) and in two recent WHO studies on governance, namely, *Governance for health in the 21st century* (2012) (168) and *Smart governance for health and well-being: the evidence* (2014) (169). Malta and other small-population countries in Europe have good records of implementing changes rapidly. Their size affords them the possibility of ensuring that windows of opportunity are recognized and leveraged promptly to maximize a comprehensive approach to health-system development and reform. This is an important element for improving overall health-system performance within the context of Health 2020 (1).

Malta's example shows the importance of addressing resilience also at the system level. A combination of many factors contributed to its

progress in reducing the vulnerability of the health workforce and, thereby, increasing the overall resilience and sustainability of its health system. The most important of these was the adaptive capacity of the Maltese social, educational and health systems to address multiple challenges and opportunities in fast-changing national, European and global contexts.

It is hoped that Malta's inspirational example will encourage other countries participating in the WHO Small Countries Initiative (2) to share their experiences in, and know-how on, building system-level resilience, particularly in relation to: (i) addressing system disturbances of magnitude (for example, the vulnerability of the health workforce) while managing to function satisfactorily; (ii) the degree to which the system is capable of self-organization in anticipation of future disturbances; and (iii) the ability to build the capacity needed to address the main elements of system resilience (154).

These issues relate to a number of resilience capacities that are crucial to the sustainability of systems in all countries, but especially small-population countries. The Malta example throws light on various capacities of system resilience already well known in other scientific domains, such as environment, ecology and sustainable development, namely:

- adaptive capacity – the ability to adjust and absorb disturbances and risks;
- anticipatory capacity – the capability to predict and reduce disturbances and risks by means of proactive action to minimize vulnerability;
- absorptive capacity – the ability of a system to absorb and effectively cope with disturbances and shocks, and manage and recover from adverse conditions, using available skills and resources; and
- transformative capacity – the ability to develop systems that are more suited to new conditions (115).

The San Marino approach to building an inclusive and resilient community: addressing the rights of children with disabilities⁷

The San Marino example of building resilience and developing supportive environments for children with disabilities is based on

⁷ This analysis was written by Erio Ziglio, Brigida Lilia Marta and Andrea Gualtieri.

interviews arranged by the Ministry of Health during field work in November–December 2016 and January 2017, as well as an analysis of relevant documentation. The interviewees included policy-makers and people working in the Ministry of Health, health institutions and social services and members of disability associations to gain an understanding of the overall structure for tackling issues of disability and existing measures of strengthening community resilience for addressing the rights of children with disabilities.

This section describes the rationale behind San Marino’s approach to building an inclusive and resilient community, namely, the development of environments that promote the resilience of children with disabilities and their families, and the pursuit of an inclusive society based on human rights. It describes relevant national policies and programmes and provides an analysis of child disability in the country.

The example shows that health-system and public-health action, taken in collaboration with other policy sectors, can strengthen the control people with disabilities have over their own lives, which is instrumental in strengthening their resilience. In San Marino, this cooperative and integrated approach is making an impact at all three levels of resilience: individual, community, and systems/society. It is based on a life-course perspective, in line with Health 2020 (1). In describing the approach, an effort has been made to include a number of strategic lessons, which could be of interest to other countries at the European and global levels, particularly countries participating in the WHO Small Countries Initiative (2).

International context of disability and related frameworks

Over the years, the scientific literature has documented the various forms of social and cultural stigma experienced by people with disabilities (170). The obstacles they face in exercising their civil, political, economic, social and cultural rights have been reported in specialized academic journals, the popular media and reports of international organizations (171).

According to WHO, more than one billion people worldwide live with some form of disability. Nearly 200 million people experience difficulties in, or barriers to, accessing services, such as those for health, education, employment, transportation, and information (172). Estimates suggest that there are at least 93 million children with

disabilities in the world, but the numbers may be much higher (173). Despite being more vulnerable to a variety of risks, young children with disabilities do not always receive the support they need to safeguard their rights (174). They, and their families, are often faced with barriers, including negative attitude, inadequate services and inaccessibility of learning and leisure environments, as well as challenges resulting from inadequate policies and legislation (171). WHO recommends that all stakeholders (including governments, civil society and associations of people with disabilities) collaborate in creating enabling environments and inclusive policies to benefit people with disabilities and the wider community (172). San Marino is pursuing programmes and policies to meet this recommendation.

Both WHO (172) and the United Nations (175) have defined disability as the relationship between people's characteristics and the extent to which society is able to take them into account. This relationship is affected by state of health and related environmental and social factors. Accordingly, the concept of disability is complex, dynamic, multidimensional and ever evolving.

Due to its complexity, disability is very difficult to measure. The International Classification of Functioning, Disability and Health (ICF) has advanced the understanding of disability by including environmental factors as one of the parameters to be considered in measuring it (176). This is the main difference between ICF and the International Classification of Impairments, Disabilities, and Handicaps (ICIDH)), which was the standard previously used (176).

San Marino is committed to improving methods of, and collecting data for, measuring disability. ICF, adapted to the context of the country, is increasingly used in conducting research, surveys and monitoring, as well as in assessing individual functioning, administering treatment, measuring outcomes and evaluating services.

Article 25 of the United Nations *Convention on the Rights of Persons with Disabilities* (UNCRPD) reinforces the right of people with disabilities to attain the highest standard of health care without discrimination (175). WHO advocates the inclusion of disability in national health policies and programmes. It also recommends that Member States improve the collection and analysis of disability-related data and adopt strategies to empower people with disabilities and ensure their rights and dignity (177). It is also worth noting the visibility of disability in the SDGs, which is illustrated in Table 3 (18,178).

Table 3. Reference to disability in SDGs

SDGs	Aims
SDG 4, targets 4.5 and 4a	Guaranteeing equal and accessible education by building inclusive learning environments and providing the needed assistance for persons with disability
SDG 8, target 8.5	Promoting inclusive economic growth, full and productive employment allowing persons with disabilities to fully access the job market
SDG 10, target 10.2	Emphasizing the social, economic and political inclusion of persons with disabilities
SDG 11, targets 11.2 and 11.7	Creating accessible cities and water resources, affordable, accessible and sustainable transport systems, providing universal access to safe, inclusive, accessible and green public spaces
SDG 17, target 17.18	Underlining the importance of data collection and monitoring of the SDGs, emphasis on disability disaggregated data

Source: Transforming our world: the 2030 agenda for sustainable development (18).

Both the United Nations *Convention on the Rights of the Child* (UNCRC) (179) and UNCRPD (175) advocate for equal rights for children with and without disabilities, for example, in relation to health care, nutrition, education, social inclusion and protection from violence, abuse and neglect. Box 6 highlights the action called for in UNCRPD to this end (175).

On the basis of these principles, and considering the importance of a life-course approach, San Marino introduced a number of legislative, institutional and operational changes, which are in line with UNCRPD (175). These changes led to innovations in terms of initiatives and services to promote community resilience and develop environments supportive of health and well-being, as recommended in Health 2020 (1).

From the experience gained, it is clear that an approach to empowering people with disabilities cannot be separated from the concept of building resilience at the three key levels – individual, community and system/society – which is embedded in Health 2020 priority area 4 and the SDGs (1,18).

Box 6. Key points in UNCRPD on safeguarding the rights of children with disabilities

“States Parties shall take all necessary measures to ensure the full enjoyment by children with disabilities of all human rights and fundamental freedoms on an equal basis with other children.”

“In all actions concerning children with disabilities, the best interests of the child shall be a primary consideration.”

“States Parties shall ensure that children with disabilities have the right to express their views freely on all matters affecting them, their views being given due weight in accordance with their age and maturity, on an equal basis with other children, and to be provided with disability and age-appropriate assistance to realize that right.”

Source: United Nations Convention on the Rights of Persons with Disabilities (175).

Implementation mechanisms fostering supportive environments and resilience

On 22 February 2008, San Marino became one of the first countries to ratify UNCRPD. The Convention is based on the principle that people with disabilities are an integral part of civil society and, as such, have the right to “full and effective participation in society on an equal basis with others” (175).

In 2013, on the basis UNCRPD principles (175), the San Marino Bioethics Committee issued the publication, *Bioethical approach to people with disabilities* (180), which is rooted in human rights and the full promotion of human dignity. In 2015, the San Marino Government adopted the Framework Law for assistance, social inclusion and rights of people with disabilities, which is also based on the principles of UNCRPD (175). Initiatives developed within this framework are briefly outlined below.

National Health Plan 2015–2017

The Health Authority for Authorization, Accreditation and Quality of Health Services of the Ministry of Health developed the National Health Plan 2015–2017 (NHP) and the related annual national programmes of work through a highly participatory process. This involved seeking the full engagement of stakeholders and associations that could make a

difference in the everyday lives of children with disabilities, and a wide range of sectors that could influence the development of pro-disability policies and generate further political commitment from, and the engagement of, the municipalities. This participatory process resulted in a NHP with a clear political vision that is consistent with the rationale of Health 2020 priority area 4 (1), namely to:

- guarantee people with disabilities the right to live in their own homes and be included in society;
- recognize the vulnerabilities and strengths of children with disabilities and the importance of addressing the former through a holistic approach, in close cooperation with the children's families and schools;
- provide intervention models based on resilience paths, which start with the children and their homes and social environments;
- provide incentives to developing and maintaining – in close collaboration with associations and civil-society organizations – a health network and social and educational services conducive to the needs of adults with disabilities.

The NHP includes resources and services to ensure adequate diagnostic, therapeutic and rehabilitative pathways for both severe post-traumatic disabilities and non-traumatic disabilities.

San Marino Commission on implementation of UNCRPD

Another key mechanism used to develop supportive environments for resilience building in the area of child disability was the San Marino Commission on the implementation of UNCRPD, established by the Government in September 2015 (Law no. 28/2015), in accordance with UNCRPD Article 33 (175). The Commission comprises representatives of associations for people with disabilities, as well as professionals and citizens. It works in close collaboration with the Commission for Equal Opportunities, the Authority for Equal Opportunities and associations dealing with disabilities to:

- promote and monitor the implementation of UNCRPD and disability-related policies;
- prepare a 3-year action plan to promote the rights of people with disabilities, in coordination with the Commission for Equal Opportunities and NHP implementation; and

- collect relevant data, promote research studies and maintain contact with international monitoring structures in this domain.

Based on these objectives, the Commission develops annual programmes of work with specific priorities and action plans. Its work is also linked to that of international disability-related institutions and processes (181).

The Commission has been effective in creating conditions conducive to the development of pro-disability policies. It has also facilitated the development and sustainment of an infrastructure of community-based projects to create environments that are supportive of children with disabilities and their families, thus enhancing system resilience. According to the interviews conducted in November–December 2016 and January 2017 with policy-makers and representatives of civil society and associations for children with disabilities and their families, the work of the Commission has played an important role in structuring coherent strategies that are sustainable in the medium and long terms.

In summary, the intersectoral priorities included in the NHP and its annual programmes of work provide a clear political vision, allowing the implementation of concrete pro-disability initiatives consistent with local needs. The creation of operational commissions comprising representatives of a wide range of sectors and disability-related associations guarantees effective supervision of the implementation of related laws and action plans and the monitoring of progress made. Such commissions function as an effective interface between bottom-up initiatives and institutional policies, providing mechanisms and tools to build a solid architecture that benefits system resilience. Resilience at this level is a precious element in any country, but particularly in small-population countries, where it enables them to address their vulnerabilities promptly and adapt to innovations swiftly. It also facilitates the implementation and sustainment of policy, and creates a context conducive to action that also benefits resilience not only at the system level but also at the individual and community levels (109,182,183).

Programmes and projects to strengthen individual and community resilience

Since the 1980s, numerous voluntary and non-profit associations have been engaged in the promotion of the rights of people with

disabilities. The most important of these (for example, associations for children with dyslexia, autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHS)) were formed by parents of children with disabilities, adults with disabilities and professionals working in the area of disability. In order to avoid fragmentation of effort, the Council of the San Marino Associations coordinates the work of these associations and fosters collaboration among them.

Promoting and sustaining the participation of people with disabilities and that of the community is key to building individual, community and system resilience. Experience in San Marino has confirmed the importance of setting up participatory processes to engage people in concrete issues, as advocated in Health 2020 (1). The programmes and projects described below engage communities in efforts to help people with disabilities achieve social inclusion and better quality of life. This participatory approach enables the involvement of people with disabilities in negotiating pro-disability initiatives, which gives them a sense of ownership. The various governments that have been in power over time have all agreed on this approach, which is seen as the way to pursue a sustainable, democratic strategy for the promotion of community empowerment and social cohesion.

The Batti Cinque Association: creating supportive environments in the community

A group of parents founded the Batti Cinque (Give me Five) Association in November 2012 with the aim of building a network to improve the quality of life of people with autism and related conditions. The Association promotes the full participation of people with autism or other pervasive developmental disorders in social and working life and is involved in the development of school curricula and teacher training to ensure that the local school environment is supportive of children with these disabilities. Batti Cinque works closely with therapists and civil-society organizations and organizes cultural events and awareness-raising campaigns with the aim of creating a human-rights culture, which is known and respected. The long-term objective of the Association is to create – in accordance with the policies of the San Marino institutions – a fair, sustainable and inclusive social context in which children with disabilities, and the whole community, may thrive.

The synergistic relationship that exists between associations like Batti Cinque and San Marino's institutions is worth mentioning. The latter

provide the Association with premises for its meetings, as well as a public playground, which allows it to bring children with disabilities and families together and facilitates the support of professionals in local projects. In addition, Batti Cinque has received state funds (allocated each year through public tenders) for the implementation of its initiatives. The network of professionals and families formed under the umbrella of Batti Cinque has become a strong technical and relational resource, which is instrumental in developing and implementing joint projects and responding to critical situations.

Also important are Batti Cinque's awareness-raising activities. Since the Association was established, it has organized several events, including photo exhibitions, round tables and cultural shows. Some of the last-mentioned were implemented in collaboration with the Ministry of Culture; for example, the 2015 and 2016 exhibitions of works by the Palestinian photographer and artist Nidaa Badwaan, entitled "Autism", which she produced with her brother who has autism. Another initiative, entitled "Sound Art", involved the organization of musical evenings at the San Marino Theatre with Francesco Salinari, an internationally renowned pianist with autism (Fig. 6). This received a great deal of media attention.

Fig. 6. Batti Cinque mothers and their children



Creating supportive environments in schools and communities

Over the years, Batti Cinque, in cooperation with San Marino's primary schools and other pro-disability institutions and programmes, has developed a wide range of awareness-raising initiatives and projects

that have created robust environments supportive of children with autism. It has also promoted use of the Applied Behaviour Analysis (ABA) method of strengthening children's autonomy, using interactive play techniques in small groups. As a result, a training programme on use of the ABA method was launched with the help of child neuropsychiatry experts and the involvement of school educators, support teachers and families. Activities of the training programme involve several social, educational and health services, as well as educators, child psychologists and local actors. Two of these activities are briefly described below.

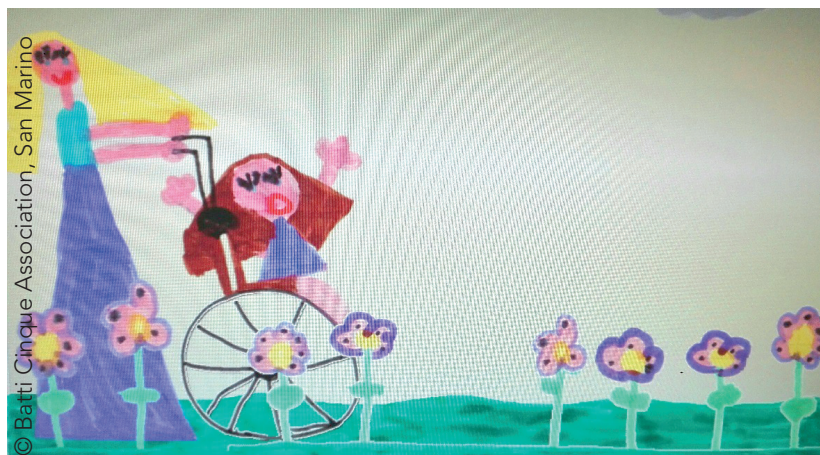
Classmates

This educators-related project is dedicated to children in early childhood and is based on the use of simulation games, graphic expression and conversation. Teachers and children with and without disabilities enact emotional situations, which emphasize the importance of respect for personal differences, a sense of inclusion and mutual understanding.

Let me describe ... the difference

In this school project, the children are encouraged to create stories on the theme of "diversity, inclusion and appreciation of differences", based on situations experienced in the classroom. The stories are collected in a book which is widely distributed in the country (Fig. 7).

Fig. 7. Picture drawn by a child participating in the "Let me describe you ... the difference" project



Another important Batti Cinque initiative is the Hours of Air project, which was started in March 2016 to support and strengthen the resilience of parents of children with disabilities. Although, the project is still in its pilot phase, the parents involved already very much value its benefits in the form of psychological and organizational support. The project enjoys the practical involvement of a solid network of competent educators who, for example, offer parents of children with disabilities the possibility of taking a break while they look after their children. This simple but relevant initiative gives the parents the feeling that they are not alone, and having time for themselves in the knowledge that their children are being well looked after, re-energizes them and increases their resilience (Fig. 8).

Fig. 8. Scenes from the Hours of Air project



Projects, like Hours of Air, strengthen mutual trust between educators, parents and children. Data were collected to evaluate the impact Hours on Air had on the families participating in the project, taking into account a wide range of psychological and organizational issues related to the everyday management of disability. An analysis of the data revealed that levels of parental stress before and after the experience were not significantly different; however, significant decreases in feelings of entrapment in parental responsibility and the perception of being unable to pursue own desires/interests (after the birth of the child with disability) were reported.

There are plans to upscale the project to reach more families and eventually cover the whole country. The idea is to make this a true

community project aimed at developing a participatory approach to helping families overcome their sense of hopelessness and isolation. As mentioned several times during the interviews, projects like Hours of Air constitute important tools for strengthening resilience as they help to promote formal and informal networks of both professionals and families. The practical support provided by the Batti Cinque Association in strengthening parental relationships is an integral part of San Marino's overall web of pro-disability environments.

The Inclusive Park project is another important Batti Cinque initiative, one of its aims being to construct a playground suitable for both children with and those without disabilities. The Batti Cinque Association, in collaboration with the Office of Environmental and Agricultural Resources Management, identified a green area suitable for such a playground. A resilience-related feature of the Inclusive Park project is its network of local associations, such as Cuore Vita, an association of patients with heart problems, which together with the Batti Cinque Association, organizes courses in parks, offerings these patients the possibility of participating in gentle physical exercise in settings conducive to social inclusion. The parks are equipped with protected game areas and spaces where parents can socialize. The project is sustained by national- and municipal-level funds, as well as funds from the two associations involved.

Box 7 highlights some of the impressions expressed by people involved in the Association during the field work conducted in San Marino (November–December 2016 and January 2017).

Box 7. Comments on the Batti Cinque Association

"The Batti Cinque Association is for everybody; initiated to overcome practical problems, it plans collective action in negotiation with the local institutions involved, which means that such action is always included in their plans."

"At first it was very difficult for us parents to go out without our son. My husband and I only ever talked about him, but slowly we learned to take a break. Spending time together produces a strong feeling of closeness."

"In the right conditions, families can develop their own paths of personal growth, becoming a resource not only for their children, but also for themselves."

Integrated efforts of national institutions and citizens associations

Research has shown that individual and family resilience can be strengthened in spite of adversity (29). Studies in the area of disability have pointed to the importance of factors that strengthen family connectedness (including home environments), the ability of people with disabilities to find a positive meaning in life, and spiritual and personal growth (184). Based on these findings, Batti Cinque has promoted and implemented several projects comprising bottom-up, civil-society action supported by local health, educational and cultural institutions. Some of these projects are mentioned below.

Project to ensure children with disabilities equal access to leisure and cultural activities

This project, which is very new, is the result of cooperation between Batti Cinque, the Department of Education and the Ministry of Culture. Its aim is to strengthen public-sector coverage of summer camps by increasing the possibilities for children with disabilities to participate fully. Although the project has just started, there is an indication that it has already been successful in disseminating the knowledge needed by summer-camp educators in addressing the issue of disability. This has resulted in an increase in trust between the educators and the families of children with disabilities, which, in turn, has created a climate of cooperation and mutual support.

Project to develop a teacher-training programme

San Marino has committed specific resources to developing and sustaining a training programme aimed at increasing teachers' knowledge about and skills in addressing disability to strengthen support for children with disabilities in the school environment. Again, the combined involvement of national institutions, such as the Institute of Social Security and the Service for Minors, and civil-society organizations characterizes this work, which has enabled the development of educational strategies with direct input from families about their needs in addressing disability on a daily basis.

Joint action by nongovernmental organizations (NGOs)

The richness of local-community assets in the area of disability can be seen in the joint work of several NGOs, such as Attiva-mente (Active mind), a voluntary association founded in 2004. Attiva-mente develops

projects related to sport, culture and solidarity, and collaborates with other voluntary groups, schools, trade unions, and economic and governmental institutions in implementing them. An important aspect of this work is the promotion of both the autonomy of people with disabilities and their physical and psychological well-being.

The full inclusion of people with disabilities in sports, educational and political activities, as well as during work and leisure time, is part of San Marino's commitment to create a greater understanding of disability among the population. Mirko Tomassoni, President of the Attiva-Mente Association (formerly Captain Regent of San Marino), who was among those interviewed in November–December 2016 and January 2017, exemplified this commitment as follows (Fig. 9).

One specific article of the UN Convention on the Rights of Persons with Disabilities, the 29th, defends and promotes the active participation in political and public life. It is very important to have direct representation at the institutional level. Otherwise you run the risk of a total disconnection between policies, interventions and perceived needs. Participation plays a key role in this regard, it is crucial for people with disabilities to participate in decision-making, to be present in the rooms where decisions are made.

Fig. 9. Mirko Tomassoni, President of the Attiva-mente Association, San Marino



The media as a supportive environment

Research has consistently shown the importance of having supportive media coverage to sustain cultural changes and awareness processes (185). Over the years, San Marino's disability-related associations and

local services have developed good cooperation with the national media. Radio Tutti (Radio for All) is a well-known national radio programme aimed at empowering and integrating people with cognitive disabilities. Radio San Marino established the programme in December 2015 in collaboration with the State Secretariat for Health, the Institute for Social Security and the Disability and Residential Care Services (Servizio Disabilità e Assistenza Residenziale) of San Marino.

People with disabilities prepare and conduct the programme, which is aired monthly, with the help of educators, social workers and professionals. The participants with disabilities are responsible for the choice of the topics to be discussed and the selection of music for the broadcast. Through Radio Tutti, media professionals help participants with disabilities to develop their skills in the fields of radio broadcasting and music programming (Figs. 10 and 11). Among other benefits of participation in the programme are self-confidence and the ability to interact. Podcasts of the broadcasts are posted on the San Marino RTV website and are available through a mobile application (APP) (186,187).

Fig. 10. Radio Tutti participants and professionals



Radio Tutti is a practical example of how the radio and other media-related tools can be used as vehicles to integrate people with disabilities socially and promote individual and community resilience. Furthermore, the programme has proven that it is possible to acquire the skills and competences needed to interact and work together despite disability. The fact that the programme is the result of interinstitutional support

points to the importance of such initiatives in creating supportive environments and building resilience.

Fig. 11. Members of Police Force participating in Radio Tutti



Strengthening resilience with a life-course perspective

San Marino has a wide network of public services responsible for the care of children with disabilities. The aim is to integrate the work of these services so that the children are followed effectively in their transition from childhood to adulthood. This is very much in line with the recommendations of Health 2020 priority area 1 (investing in health through a life-course approach and empowering people) (1).

The work of the health services

The scientific literature focuses increasingly on the role of the health services in addressing disability as part of a resilience-building strategy, and on the challenges met in doing so (171). Although this area of research is still in its infancy, studies have pointed to the importance of health services in relation to the health and well-being of children with disabilities and their families (173). In San Marino, these services include the Hospital Service Unit for Minors and the Hospital Paediatric Unit.

The Hospital Service Unit for Minors is in charge of all children with disabilities (aged 0–18 years) and provides care in collaboration with the Hospital Paediatric Unit. The Service Unit is responsible for the early assessment of the children, including their interpersonal,

inter-relational and communication skills, and for monitoring their development. The aim is to develop tailored personal-care and rehabilitation plans, in cooperation with the children and their parents. The Service Unit provides certification of specific psychological and psychodiagnostic conditions. An important characteristic of this Unit is its systematic and continuous communication with the families of the children in their care, as well as with their schools.

In a country with a population of just over 30 000, about 600 children (aged 0–18 years) visit the Hospital Service Unit for Minors annually because of specific health conditions. Approximately 250 of these are children with disability-related conditions, including mental-retardation syndromes, autism, ADHD and specific learning disorders (dyslexia, dysgraphia, language disorders, etc.). On average, 300 children visit physicians in the Service Unit every year.

The Hospital Paediatric Unit is responsible for the care of the children at each stage of their development, with a particular focus on clinical problems.

The Hospital Service Unit for Minors and the Hospital Paediatric Unit work in close collaboration, using a life-course approach. They are both part of networks for integrated care and their work is based on the Biopsychosocial Model and respect for human rights (188). The aim is to follow children with disabilities (and their families) from the first diagnosis through the different stages of childhood to transition into adulthood. The children, their families and the professionals are all involved in negotiating care interventions. For some complex clinical cases, the two Units are supported by services outside San Marino (for example, professionals from the Child Neurology Unit of the Bellaria Hospital in Bologna, Italy). Their approach is based on four objectives:

- organization of effective health-care assistance;
- maintenance of the highest possible degree of autonomy;
- implementation of health-surveillance activities; and
- collaboration in children's life projects, in collaboration with their families.

These objectives are implemented through systematic activities linked to promoting health and social care and supporting active citizen participation in social, cultural and political activities.

The public service responsible for the care of adults with disabilities is the San Marino Hospital Unit for Adult Disability and Residential Care. It includes a residential-care centre with 19 beds, 5 of which are for people with multiple and complex disabilities, and a day-care centre, which also deals with complex disabilities. The Unit collaborates closely with other local services, such as the Hospital Service Unit for Minors and the Hospital Paediatric Unit. Its work focuses on integrated disability-related activities involving, for example, schools, families, community resources and other associations, and on supporting people with disabilities at different stages of the life-course.

Other elements of San Marino's life-course approach are exemplified in the work of the Laboratory Atelier Le Mani and the Laboratory Atelier for Improvement of Body and Mind Potential. The Laboratory is a voluntary day-care service operating as an inclusive, equitable, job-placement centre for people with disabilities. Currently, those running the service are employed in public services, such as schools, post offices, or private companies dealing with, for example, recycling, waste-disposal and catering. The Laboratory makes items for use in the production of jewellery and steel and sells them to relevant companies. The results of other activities – printing, decoupage, bookbinding, framing, etc. – are also sold locally. All of these products are now part of the local economy and, in particular, the rather well-developed tourist industry in San Marino.

The Laboratory Atelier for Improvement of Body and Mind Potential works to increase self-confidence and relational skills mainly through creative art. In 2015, it launched the project, "Vivisibilmente", which involves visual story-telling about disability. People with disabilities, graphic designers, photographers, film-makers, and representatives of a local winery participate in the project.

In addition, typical local San Marino products now have new artistic labels, which are based on drawings made by people participating in the activities of the Il Colore del Grano residential centre for people with disabilities. The labels are now part of the local economy.

Promoting the right to autonomy and independent living conditions for people with disabilities is another element of San Marino's life-course approach. Implementing this approach requires the support of the welfare system and an intersectoral network of professionals. Currently, some projects promoted by local associations and centres

for people with disabilities, such as C'entro Anch'io (It's also about me) and Le Chiavi di Casa (The house keys), are being implemented with the involvement of the Institute for Social Security, the Hospital Unit Service for Minors and the Il Colore del Grano residential centre. These projects provide people with disabilities opportunities to live independently with the support of the welfare system and a network of dedicated social and health professionals. This feeds into another, recently initiated, project entitled, "Adesso e dopo di noi" ("Now and after us"), which aims to help people with disabilities fulfil their wishes to live independently. This project, which will be fully implemented in 2017, has been provided with resources in the form of a number of apartments flexibly designed to be suitable also for people with disabilities.

Creating supportive school environments

About 1% of all schoolchildren in San Marino have disabilities, which is in line with other European averages. San Marino has legislation to foster collaboration between, and the integration of, the educational, social and health services.⁸

This legislation seeks an inclusive and integrated approach to rendering schools and other education services supportive of all children, including those with disabilities. It also aims to ensure avoidance of the unnecessary use of medication and the provision of appropriate integrated support in dealing with specific disability-related challenges. A review of the scientific literature confirms the validity of the principles behind these aims (189).

The impact of the legislation is particularly visible in nursery and primary schools where every child with a disability has a personalized education plan (PEP). Each PEP is developed (in negotiation with the child's family) by a specialist committee, comprising school professionals and trained

⁸ The most important legislation in San Marino for fostering collaboration between, and the integration of, the educational, social and health services are: the Framework Law on Disability (Legge-quadro per l'assistenza, l'inclusione sociale e i diritti delle persone con disabilità, Legge 10 marzo 2015 n. 28; the Decree on Educational Support Teachers: Normativa sul Diritto all'Educazione, Istruzione, Formazione e Inclusione Scolastica delle Persone con Disabilità, Decreto Delegato 1 luglio 2015 n.105 (Ratifica Decreto Delegato 20 maggio 2015 n.77); and The Decree on Learning Disorders: Normativa in Materia di Disturbi Evolutivi Specifici in ambito scolastico e formativo, Legge 9 settembre 2014 num 142.

personnel from the Paediatric Service for Minors Unit. Implementing a PEP requires interaction between the health, social and educational services. Due to San Marino's intersectoral legislative approach, the schools collaborate closely with different territorial entities engaged in the development of integrated action on disability. Progress towards the achievement of medium- and long-term objectives is systematically assessed and continuously monitored. The families of children with disabilities, the schools and the social and health professionals involved collaborate in deciding how to combine school work with the specific treatment offered by the national health system, such as hydrotherapy and speech therapy.

With regard to potentially stressful life events, such as moving from one school environment to another (for example, from primary to secondary school), PEPs provide for a structured handover. This is of key importance to minimize the stress suffered by the children and the fragmentation of supportive action. Handovers occur at all levels of compulsory schooling in San Marino and there are plans to facilitate the transition by introducing possibilities, which would allow the support teachers working with the children in the primary schools to coordinate with those who will follow the children when they move to their new school environments.

In San Marino, school personnel, families and support teachers receive solid training in how to interact with children with disabilities. A variety of training courses are available for social, health and education professionals, including: a two-year Master's course entitled, "Therapeutic projects for specific learning disorders"; an annual Master's course on the diagnosis of specific learning disorders; technical courses on specific learning disorders; an educational and psychopaedagogical Master's course on specific learning disorders; a specialization course on educational support and inclusion; and a course entitled, "Teaching and psychopaedagogy for specific learning disorders". These courses are conducted in collaboration with the University of Michigan, United States of America.

In San Marino, the role played by support teachers is a very important element of the overall school environment. As a result of the Decree on Educational Support Teachers of 20 March 2015, teachers with long-term contracts have the possibility of qualifying as educational support teachers, a role formerly carried out by teachers who were on the waiting list for permanent contracts. This was an important change,

permitting children to be followed by the same support teachers throughout their compulsory schooling, and promoting continuity in their lives. These benefits are very much appreciated by disability-related associations and the families of children with disabilities. To facilitate the sustainability of this system, steps are being taken to structure it in a way that will ensure adherence to its principles of integration and inclusion.

The support-teacher system allows almost all classroom time to be spent on activities. Practical workshops are organized in safe, appropriately equipped spaces, facilitating the integration of children with and without disabilities, the work of the support teachers and the smooth running of the class. The San Marino educational support system would like to see both categories of teacher considered as class reference points.

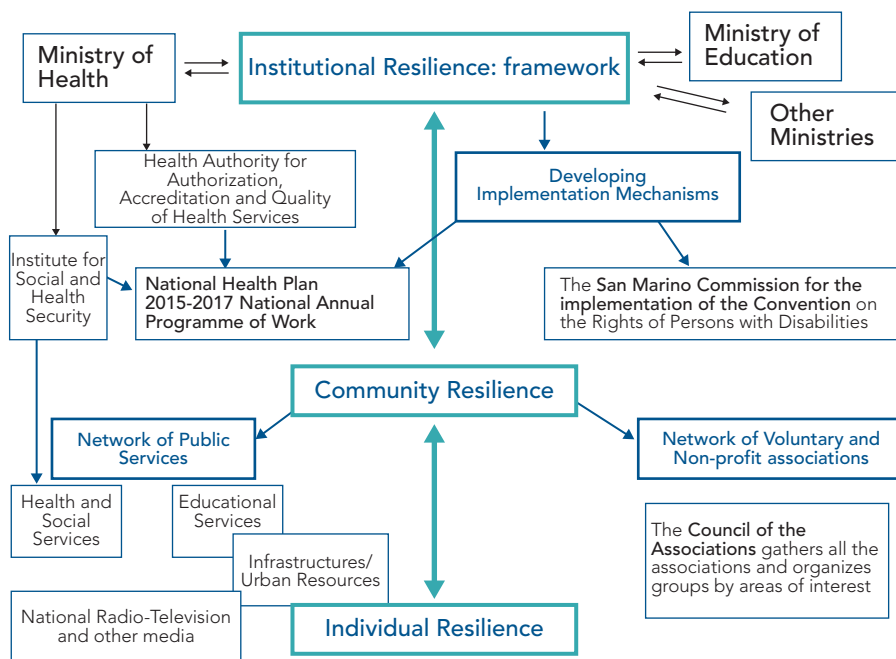
Interdisciplinary training is another feature of the San Marino approach, the objectives being to enable professionals working within the public services to share their experiences and expertise. This is considered instrumental in promoting disability-related policies based on equity, human rights and sustainability of action. To integrate efforts, support teachers need to be in daily communication with the children's families, and weekly with the different disciplines (mainly psychologists, speech therapists and other educators) working with the Service for Minors.

Conclusions and lessons learnt

The San Marino example shows how the country is pursuing pro-disability policies through the development of supportive environments and resilience strengthening. The key features of its approach are interinstitutional cooperation, intersectoral action, an interdisciplinary and life-course approach, pursuit of human rights and community engagement, all of which characterize the rationale of Health 2020 priority area 4 (creating resilient communities and supportive environments for health and well-being).

The activities described are not isolated initiatives but, together, form a part of an institutional plan to tackle the many challenges of disability by increasing resilience and developing supportive environments. The flow chart in Fig. 12 presents a visual summary of the current pro-disability infrastructure in San Marino.

Fig. 12. Overall pro-disability infrastructure in San Marino



Source: Ministry of Health of San Marino.

The San Marino approach shows that building resilience for health and well-being requires not only the nurturing and strengthening of assets at the individual level but also an integrated and supportive approach at the community and system levels. Lessons that can be learnt from this approach are described below.

The importance of horizontal relationships in building resilience to achieve human rights

The San Marino example confirms the importance of developing a community context in which its members can relate as equals with equal rights. San Marino is committed to removing the cultural, social, physical, architectural and geographical barriers that hinder people with disabilities from enjoying human rights. Major progress has been achieved over the years, despite some barriers to the full inclusion of people with disabilities, which still need to be overcome. From the experience gained, it is clear that to build the resilience of communities

and institutions and assure the rights of children with disabilities and their families, credible policies and a strong infrastructure are required.

Working together: national–local partnerships

The San Marino experience indicates that it is essential to include people with disabilities in decision-making processes. Active participation in the public domain gives people a feeling of empowerment, enforces rights and contributes to the implementation and monitoring of pro-disability policies. It also creates an effective, democratic system of accountability for the implementation and monitoring of national and international agreements, such as UNCRPD (175).

Community resilience also means following families on their paths to personal growth

In San Marino, as in other European countries, people with disabilities and their families are likely to experience high levels of stress. They can more easily overcome their difficulties if supportive measures and services are available, such as those assured through the approach taken in San Marino. Strategies to ensure such support should prioritize human rights and equity-related action in all government sectors. It is important that this is accompanied by concrete plans of action towards the complete inclusion of people with disabilities, both socially and culturally. In San Marino, the importance of, and need to, develop and sustain a strong web of supportive networks and relationships was clear and are the elements on which the San Marino approach to building a resilient community framework is based. Without such a framework, it is impossible to properly address the daily challenges posed by disability. Furthermore, it is key to implementing action that will have a positive impact on community life and on the ability of people with disabilities to find a positive meaning in life.

In San Marino, interdisciplinary, intersectoral work with families makes it possible to better address the delicate balance between the protection and enforcement of rights (with respect to entitlement to disability support; certification, retirement, etc.) within a stable welfare system that contributes to community resilience. In San Marino's experience, it is crucial to strike a balance between institutional support to people with disabilities and their families on the one hand, and the implementation of action that will contribute to their autonomy on the other.

Meeting health needs is only part of the equation

In caring for children with disabilities, meeting their health needs is of high priority, but it is crucial to understand the importance of strengthening their resilience to this end. The San Marino example shows that to do so, it is also necessary to strengthen community- and system-level resilience. The rationale behind action taken to this end in San Marino stems from the desire to build a social context in which it is possible not only to nurture the skills and abilities of people with disabilities, but also to fulfil their desires, aspirations and ambitions. In San Marino, this is being done by creating a common vision and language, and by sharing experiences. A resilient community should be able to promote not only techniques to improve quality of life, but also new social contexts and life scenarios for people with disabilities. In San Marino, informal civil-society networks have played an important role in the work carried out. Many good current practices were initially used informally and later scaled-up through support from state services and integrated at the institutional level.



Strengthening resilience through a life-course perspective

Often, the majority of services available to and measures taken for people with disabilities focus on children. In San Marino, it has been important to coordinate and integrate action taken to implement

Health 2020 priority area 1 (investing in health through a life-course approach and empowering people) (1). Action to develop integrated networks is not only intersectoral but also longitudinal to ensure continuous care in supportive environments at all the stages of the life-course. A resilience framework for action to support people with disabilities must be conducive to reducing and, if possible, eliminating the stress associated with their everyday lives.

The importance of overcoming fragmentation

In most countries, different approaches are taken to different types of disability (cognitive, physical, neurological, etc.). Global research has produced evidence of the negative impact of fragmented service delivery (190) and of the competition for resources among the governmental and nongovernmental organizations working to protect the rights of people with disabilities and those with disability-linked diseases (191). These obstacles make policy coherence difficult; experience in San Marino shows the importance of a resilience-building framework in overcoming them. Such a framework fosters the pursuance of common short-, medium- and long-term intersectoral and interdisciplinary objectives by multiple actors at multiple levels. It also facilitates shared accountability and monitoring to assess progress in implementing pro-disability policies. In practical terms, San Marino has been strengthening local intersectoral and multi-institutional networks (192). This approach connects actors (stakeholders, politicians, professionals, representatives of different disability associations and civil society) at different levels and develops the skills and resources needed to address disability-related issues of common interest.

San Marino has also developed international and multilocal networks to foster cooperation and the exchange of good practice among the different actors dealing with disability. This has allowed the development of new initiatives with a strong local impact. Fostering links between the national and international levels is extremely important in boosting innovation and developing know-how in small-population countries, such as San Marino.

The importance of effective intersectoral mechanisms

Mechanisms, such as the San Marino Commission for the implementation of UNCRPD, have been extremely effective in enabling the pursuit of

a common vision and practical objectives through different synergistic initiatives in San Marino. They have helped to overcome fragmentation and maximize collaboration between institutions and civil-society organizations, and they have been used as an interface between local needs and international networks. They constitute a precious tool for connecting and integrating frameworks at the macro (2030 agenda (18), Health 2020 (1), European and global recommendations and guidelines on disability), meso (national regulations), and micro (local initiatives) levels.

Strengthening the role of digital technologies

Digital technologies enable networking at the individual and community levels and have been used in San Marino to spread awareness about the rights of people with disabilities, disseminate relevant information, and help people with disabilities feel that they are part of a global community. A further step in this area could be the implementation of distance-learning courses and virtual-learning platforms for professionals and civil society. San Marino plans to expand the use of digital technologies for awareness-raising activities in connection with the implementation of Health 2020 and the 2030 agenda (1,18) and to speed up the adoption of good practices to this end.

Strengthening data collection and promoting monitoring and accountability

Effective monitoring and reporting systems are needed to assess policy impact and progress. Therefore, one of the priorities of the NHP is to monitor and report on progress made in the area of disability, which is indispensable to improving future efforts in this area.

The need for a network of resources in resilience building

In small-population countries, it is essential to be active in international networks, such as the Small Countries Initiative (1). The network was formally launched in 2014 as an initiative of the WHO European Office for Investment for Health and Development in partnership with San Marino, which is co-leading the initiative (19). The San Marino example shows that an effective resilience strategy requires a network of resources that cooperate with each other.

Overall conclusions

Discussion on and exchanges of experience in implementing Health 2020 in small-population countries has always been at the core of the activities of the WHO Small Countries Initiative (2). The importance of Health 2020 priority area 4 (creating community resilience and supportive environments for health and well-being) was on the table at both the second and third high-level meetings of countries participating in the WHO Small Countries Initiative (1,3,4). This publication has expanded on the discussions held at these events.

The publication emphasizes the importance of strengthening resilience and supportive environments for population health. Based on the existing evidence, it describes the practicalities involved in this issue and why it is so crucial, especially in relation to national and subnational efforts to align policies and reforms with the implementation of Health 2020 and the 2030 agenda (1,18). It has, therefore, addressed a number of issues related to the rationale behind Health 2020 priority area 4, including conceptual frameworks related both directly and indirectly to strengthening resilience.

The scientific literature on resilience points to its relationship to processes, resources and skills that have a positive effect on health outcomes at the individual and community levels, even in the face of negative events, such as serious threats and hazards. The information contained in this publication has identified the importance of resilience at another level, namely the system or society level. Resilience at this level is particularly pertinent to the achievement of the SDGs (18).

There is evidence that building resilience requires the development and sustainment of environments that are supportive of health and well-being. The analysis behind this report provided evidence that population health and well-being can be strengthened by strengthening resilience at three levels: individual, community and system/society. It also identified four resilience capacities that are important to efforts to this end, namely, participatory, absorptive, adaptive, anticipatory and transformative resilience. The inspirational examples of three countries participating in the WHO Small Countries Initiative (2) – Iceland, Malta and San Marino – have illustrated ways of strengthening resilience at the three levels, as well as the importance of the four resilience capacities.

The experiences of these three countries in strengthening resilience through activities to: prevent the retraumatization and revictimization of children who have suffered abuse (Iceland); reduce the vulnerability of the health workforce (Malta); and develop a supportive multilevel infrastructure to safeguard the rights of children with disabilities and their families (San Marino) will surely be useful to other countries participating in the WHO Small Countries Initiative (2). They might also be encouraged to share their own experiences in this area and foster cooperation on various aspects related to the implementation of Health 2020 priority area 4 (1).

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This publication was developed under the framework of the WHO Small Countries Initiative, which is coordinated by the WHO European Office for Investment for Health and Development, Venice, Italy, of the WHO Regional Office for Europe. It reviews the scientific basis for strengthening resilience, which is central to Health 2020, the WHO European policy framework for health and well-being.

The publication explains the concept of resilience and its implications for health at three levels (individual, community and system/society). It presents knowledge gained on strengthening resilience in three countries participating in the WHO Small Countries Initiative (Iceland, Malta and San Marino). It describes on-the-ground action taken in these countries and the main lessons learnt in strengthening resilience and developing supportive environments for population health and well-being.

The material presented in this publication is intended to inform other countries participating in the WHO Small Countries Initiative and encourage them to share their own experiences in strengthening resilience for health and well-being.

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