# ROADMAP

RECOMMENDATIONS FOR PROMOTING MENTAL HEALTH AND EMOTIONAL WELL-BEING IN YOUNG PEOPLE





# REPORT AND ROADMAP ON THE STATE OF THE ART, NEEDS AND RECOMMENDATIONS FOR IMPROVING PSYCHOLOGICAL ASSESSMENT AND PROMOTING MENTAL HEALTH AND EMOTIONAL WELL-BEING IN YOUNG PEOPLE

Report developed by Red PROEM members and partners.

N.R.P.I (intelectual rights): 201899902658019

JAEN (SPAIN)

21 June 2018

#### **Red PROEM Member Institutions**











- University of Jaen (UJA), Jaen: Luís Joaquín García López, José Antonio Muela Martínez, Lourdes Espinosa Fernández, Maria Belén Díez Bedmar, Pere Castellví Obiols & Mar Díaz Castela.
- Complutense University of Madrid (UCM), Madrid: Antonio Cano Vindel.
- University of Cordoba (UCO), Cordoba: Juan Antonio Moriana.
- Deusto University, Bilbao: Esther Calvete Zumalde, Izaskun Orue Sola & Liria Fernández González.
- Miguel Hernández University (UMH), Elche: José Antonio Piqueras Rodríguez.
- University of the Basque Country (UPV/EHU), San Sebastian: Maite Garaigorbobil Landazabal.
- Rovira i Virgili University (URV), Tarragona: Josefa Canals Sans & Nuria Voltas Moreso.

#### **Red PROEM Associate Partners**

- Les Corts Mental Health Centre, Grup CHM Salut Mental, Barcelona: Rocío Casañas Sánchez & Lluís Lalucat Jo.
- Spanish Association for Mutual Assistance against Social Phobia and Anxiety Disorders (AMTAES): Enrique Vargas Osuna.
- Confederation of Psychopedagogy and Counseling Organizations in Spain (COPOE): Ana Cobos Cedillo.
- Provincial Technical Team for Educational and Vocational Guidance (ETPOEP), Education Department of Jaen, Jaen: Yolanda Caballero Aceituno.
- State Federation of Lesbian, Gay, Transsexual and Bisexual Individuals (FELGTB), Madrid: Antonio Alba Sempere, Integrated Healthcare Group, & Carlos Emilio Mella Casal, Youth Department.
- Malaga Biomedical Research Institute (IBIMA) / Andalusian Public Foundation for Research at Malaga (FIMABIS): Juan Miguel Gómez Zumaquero.
- Spanish Society for the Study of Anxiety and Stress (SEAS): Antonio Cano Vindel.
- Autonomous University of Madrid (UAM), Madrid: Manuel Gámez Guadix.
- University of Almeria (UAL), Almeria: Inmaculada Gómez Becerra & Juan Miguel Flujas Contreras.
- University of Coimbra (UC), Coimbra (Portugal): María do Céu Salvador.
- University of Jaen (UJA), Jaen: María Teresa Martín Valdivia & Luis Alfonso Ureña López, SINAI Research Group (Intelligent Systems for Information Access), IT Department; & Emilio José Martínez López, Research Group 'Physical Activity applied to Education and Health', Musical and Artistic Expression and Body Language Didactics Department.
- National University of Distance Education (UNED), Madrid: Miguel Ángel Carrasco Ortiz & Purificación Sierra García.

We would also like to extend our thanks to all those who participated (students, parents, counselors, endusers, ethnic minority associations, faculty staff, etc.) in the 1st Red Pro-Emotion-Y International and Interdisciplinary Conference, and for the valuable contributions made.

#### **Copyright: Red PROEM**

The Red PROEM network is funded by the Spanish Ministry of Economy, Industry and Competitiveness, the Spanish Ministry of Science, Innovation and Universities, the State Research Agency (AEI), and ERDF funding thanks to the following grants: PSI2015-70943-REDT and PSI2017-90650-REDT.

# Index

1.	The PROEM network4
	The network4
	Purpose of the PROEM network
2.	In context5
	Adolescence and youth: a crucial developmental stage5
	Epidemiology of adolescent mental problems and their cost to society
	Self-harm and suicidal behaviour7
	(Cyber)victimization in childhood and adolescence
	Vulnerable and social minority groups9
	Other areas of recent concern
	Mental health stigma
	School failure and its consequences
	Lack of healthy lifestyles during adolescence11
	Promoting mental health and emotional well-being12
3.	Objectives12
4.	Gaps and needs associated with adolescent health and emotional well-being13
	Poor adolescent health and emotional well-being literacy13
	Delay in the identification of mental health problems in schools and inadequate instruments14
	Lack of resources and coordination among different stakeholders and regions in the area of emotional health and well-being
	Excessive medicalization of mental health and the associated costs15
	Lack of health and emotional well-being policies coupled with an insufficient budget15
	Lack of awareness towards certain vulnerable and social minority groups15
	Increasing unhealthy lifestyles among youth and abusive use of new communication technologies 16

5.	Recommendations drawn from the previously identified gaps and needs16
]	Γο build adolescent health and emotional well-being literacy17
	To promote early detection in young people and effective, efficient and evidence-based psychotherapy nteventions and best practices
	To develop an efficient network to improve early detection, early intervention and the best treatment for emotional and mental health problems in youth
	To increase the budget for research into preventing and treating mental health problems and promoting nental health and emotional well-being
6.	Priorities for improving adolescent mental health19
7.	Conclusions22
8.	References

# **1. The PROEM network**

#### The network

The Interdisciplinary Network for the PROmotion of Mental Health and EMotional Wellbeing in the Young (PROEM; Red Interdisciplinar para la PROmoción de la Salud Mental y el Bienestar EMocional en los jóvenes) comprises various members and partners. These include Spanish research teams addressing mental health; participating individuals from the educational sector, young people, minority groups, policymakers, stakeholders and end-users; and professionals working in other fields such as epigenetics, linguistics, information and communication technologies (ICTs), nutrition, physical activity and public and community health. This report was developed from a meeting held at the University of Jaen (UJA), south-central Spain, on 23 April 2018 involving the aforementioned actors and a subsequent gathering in which experts attached to the PROEM network met to debate on the issues raised during the corresponding discussion.

More information can be found at <u>http://redproem.es/en/home/</u>, <u>https://www.facebook.com/RedPROEM/</u> and <u>https://twitter.com/ProEm\_Red</u>.

## Purpose of the PROEM network

Emotional disorders in young people are a public health problem not only because of the consequences and negative impact they have on youth quality of life, well-being and development, but also because of the socioeconomic and health costs they entail. However, despite the considerable research advances made in recent years into the diagnosis and treatment of these disorders, promotion of mental health and emocional well-being, and mental health prevention, it continues to be marked by fragmentation arising from mostly isolated and/or divided work carried out by different professionals and researchers. For this reason, greater collaboration is needed from involved actors: mental health and other discipline researchers and professionals as well as the youth themselves, their families and policymakers, with particular interest paid to those associated with, or part of, minority groups at potential psychosocial risk. Acknowledging this need, the present document emerges with a view to ensuring that the efforts, know-how and experience of each individual involved can not only deliver more impact and recognition, but also wider applicability and more guarantees of success in order to achieve the ultimate objective: improving the emotional well-being and mental health of our youth. To move forward in this direction, the primary objective of the PROEM network is to establish and promote the actions and activities undertaken by research groups working in this field as well as to create synergies with other professionals, stakeholders and associations with a role to play in promoting youth mental well-being.

The interdisciplinary approaches and objectives of the PROEM network align with other national and international associations and networks that call for improved mental health in youth and/or at other stages of life. These include:

- (i) ADOCARE (Adolescent mental health care in Europe): state of the art, recommendations, and guidelines by the ADOCARE network(1);
- (ii) *ROAMER: roadmap for mental health research in Europe*(2);
- (iii) Mental Health Promotion in Young People an Investment for the Future, delivered by the World Health Organization(WHO)(3); and
- (iv) IAYMH: International Association for Youth Mental Health)(4).

Furthermore, the PROEM network appears as a signatory to the following document: *Boosting impact of mental health policies and services for European people, communities and economies: Joint statement to invest in mental health research and a European Implementation Partnership on Mental Health and Wellbeing*(2).

# 2. In context

This section briefly covers the underlying context in which the psychological and psychosocial reality facing adolescents is set, as well as the most prevalent key problems and needs among this age group today and those less prevalent whose consequences are so severe that action must be taken to identify and address them.

### Adolescence and youth: a crucial developmental stage

According to the WHO, every adolescent and young person has the right to grow in the best way possible to become a healthy and responsible adult, to contribute to society, and to lead a happy and fulfilling life(5). Adolescence is a period that involves specific psychosocial and developmental needs and characteristics that should be addressed within the framework of children's and adolescents' rights. It is also an appropriate period to develop knowledge and skills, learn how to manage emotions and relationships, and ultimately acquire attributes and abilities that will be important for enjoying the adolescent years and in preparation for assuming adult roles(3).

# Epidemiology of adolescent mental problems and their cost to society

According to WHO data, 4.4% of the world's population had depression and 3.6% had anxiety in 2015(6), a figure that represents a total of 615 million people(7). Depression is by far the single largest contributor to global disability (7.5% of all years lived with disability in 2015), whereas anxiety is ranked sixth at 3.4%(6).

In Europe, the Organisation for Economic Co-operation and Development (OECD) reported that one in three Europeans experience some form of mental health problem. Depression prevalence is approximately 4.5%, which translates into 21 million people and a cost of 118 billion euros per year; in other words, 1% of member states' gross domestic product GDP(7). These data indicate that such mental health problems carry a high socioeconomic cost, while it is estimated that it will cost five million US dollars for every working year until 2030 for the global economy and one billion US dollars in lost productivity in Europe(8). These problems are also responsible for 28% of the cost per disability-adjusted life years. This equates to 461 billion euros in 2010 in Europe(9), encompassing direct costs linked to healthcare resource consumption, diagnosis, treatment, prevention and rehabilitation, and indirect costs, for example, lower education levels, higher school dropout rates, substance abuse, unemployment, poverty, risk of social exclusion, and the impact on families, partners and friends(10).

Adolescence is a particularly vulnerable period for developing mental health problems. Recent meta-analysis studies put worldwide prevalence rates for emotional disorders at between 6.5% for anxiety disorders and 2.6% for depressive disorders in children and youth (6 to 18 years of age)(11). It is estimated that 75% of all people with a mental illness developed one before the age of 25(12)(13), 50% during adolescence(14), and that symptom prevalence increased with advancing age. Thus, depressive symptom prevalence rose from 8.4% at age 13 to 15.4% at age 15(15).

Depression and anxiety problems in young people have short-term (e.g., poor academic performance, lack of motivation, early school dropout, peer problems, low self-esteem, victimization, and stigma) and long-term consequences (e.g., incidence of several mental disorders, alcohol abuse, substance use, suicidal ideation and behaviour, and unemployment). Early and appropriate detection would help to tackle these symptoms more efficiently(16). However, and notwithstanding these data, emotional disorders are the least identified mental health problems among the young, which places them at risk of developing related problems. And despite the efficacy of treatment and psychotherapy interventions, we can add that around 40% of adolescents with anxiety and 60% with depression do not receive an appropriate treatment; rather, we observe a growing trend towards excessive medicalization(17). For example, 18.9% of Spanish people over 15 take benzodiazepines or tranquilizers and 8.4% take

antidepressants or stimulants. Against this backdrop, we find little collaboration among different professionals, observing fragmentation between researchers and education and health sector actors. Furthermore, little attention is paid to what end-users, stakeholders, associations of affected people and counseling associations working to promote youth mental and emotional health have to say. In addition, there is funding for research into mental health in Europe that does not cover the impact these disorders have on the population (e.g., severe personal, family, social and financial consequences). This occurs despite the fact that mental health research investment yields a return similar to other areas of healthcare. Reports suggest that for every euro that goes into mental health research, a return of 0.37 euros is achieved each year — a return similar to that of research into cardiovascular diseases(18). According to the Social Observatory of "la Caixa", an initiative led by this Spanish financial institution, depression is among the least invested-in health problems despite the impact it has on the population(19).

#### Self-harm and suicidal behaviour

Suicide is one of the three leading causes of non-accidental deaths worldwide(20). According to WHO estimates(21), in 2020 more than a million and a half people will die this way and there will be a twenty-fold increase in people attempting suicide. This figure represents one death by suicide in the world every 20 seconds and a suicide attempt every 1–2 seconds(22). Over the last 45 years, suicide rates have increased by 60% worldwide, and the group registering the highest increase has been the adolescent population(23), with suicide being the second leading cause of death from ages 15 to 29 worldwide(22).

In many EU countries, suicide is the leading cause of death in adolescents and young people. For every individual who loses their life to suicide, 25 people attempt suicide(22), with emotional distress-related symptoms as a the leading risk factor for suicidal behaviour(24). Depression is the risk factor that most contributes to suicide, accounting for almost 800,000 deaths annually(6). Thus, the WHO views suicide prevention as a public health priority, especially among adolescents and young people(22).

In Spain, suicide is the leading external cause of death(25). Adolescent suicide has increased by almost 50% since 2004, and is also the primary external cause of mortality in this age group(25).

Suicide in adolescence is not only a tragedy for the victim but also causes immense suffering to their family and those closest to them. The consequences of suicide for the victim's family and friends are so devastating that they trigger untold damage to their lives, plunging them into a state of grief that, as a general rule, is highly traumatizing and prolonged in nature(22).

To suicide we can also add non-suicidal self-injury. Although the highest non-suicidal self-injury rates are reported in clinical samples, the results of recent studies show it to be an emerging phenomenon

among society's young. Moreover, it represents a transdiagnostic issue linked to a wide range of psychological problems that also cause considerable suffering and stigma(26).

### (Cyber)victimization in childhood and adolescence

Over a million people die every year and many more suffer serious injuries due to a preventable problem such as interpersonal violence(27). Children and adolescents are the groups most at risk of becoming victims to this type of violence(28). Interpersonal violence is inflicted upon a person by someone else or a small group of individuals(27) and encompasses various kinds of interpersonal violence at the early stages of life. These include: (i) child maltreatment, which covers physical, emotional and sexual abuse and neglect; (ii) school and online harassment (bullying and cyberbullying); (iii) dating violence; and (iv) community violence.

Interpersonal violence towards children and young people is relatively common. Studies report that between 5% and 13% of children and adolescents were victims of child maltreatment; 21% of females and 10% of males have experienced physical and/or sexual violence in a dating relationship; and among adult victims of rape, physical violence and/or harassment perpetrated by a romantic partner, 22% of females and 15% of males were first-time victims between 11 and 17 years of age(29).

Furthermore, between 5% and 30% of all adolescents have experienced school bullying, between 2% and 16% have suffered severe school bullying, and between 1% and 10% have had experience with online bullies(30). Research studies that have also analyzed the consequences of peer violence have reported serious negative effects for all involved, not just for the victims of school bullying but also for the perpetrators(30), which on many occasions continue long into adulthood (30). Along these lines, new victimization problems are emerging. One such example is sexting, which refers to the sending of sexually explicit messages, photos and videos via a mobile phone, online posting and other new technologies. We also see online sexual harassment methods such as grooming, which is when an adult befriends a minor online in order to establish sexual relations or make some kind of exchange involving sexual content(31).

As previously mentioned, adolescence is a crucial developmental stage associated with future emotional and behavioural consequences(32). Children and adolescents that are victims of interpersonal violence, whatever the type, experience problems related to trauma exposure which may result in severe mental disorders, antisocial and criminal behaviour, alcohol and substance abuse, and even an increased risk of suicidal behaviour or death by suicide(33,34).

### Vulnerable and social minority groups

Individuals and groups in vulnerable situations are those whose characteristics place them at a disadvantage given their age, sex, civil status, educational level, ethnic background, physical and/or mental condition or situation, and need for extra outside help to enable them to develop and enjoy coexistence. This group can include persons with disabilities, women, children, ethnic minorities, people with mental illness, people living with the human immunodeficiency virus (HIV) and/or have developed AIDS, migrant workers, refugees, individuals with sexual diversity and/or a different gender identity, persons imprisoned for commiting a crime, among other minorities. Vulnerable and social minority groups have a greater risk of suffering from mental health problems or disorders given their disadvantaged situation as opposed to other predominant groups or the social majority (*'minority stress'*). For example, immigrant communities may come up against acculturation obstacles in the receiving country, as well as greater socioeconomic problems and being more deprived of their basic needs, leading to increased prevalence of mental disorders(35). Other vulnerable groups, including the lesbian, gay, bisexual, transgender and intersex (LGBTI) community, and people living with HIV, are at a higher risk for discrimination, stigma and victimization. Thus, the risk of having a major depressive disorder or suicidal intent in this group is almost three times higher compared with the heterosexual population(36,37). Similarly, women are largely exposed to higher rates of victimization(38), less access to the labour market and lower salaries compared with their equally qualified male counterparts. All of these factors inherent in our society are percieved as a context of vulnerability that entails emotional problems for the afflicted youth.

### Other areas of recent concern

The development of new technologies and universal access to every strata of the population, children and adolescents included, is creating new problems. Besides emerging forms of violence such as online bullying, we are seeing increasingly more young people turning to pornography. This is causing a growing trend of premature sexualization among our youth that translates into increased risk for the early onset of sexual intercourse, unwanted pregnancies, sex without emotions, and dehumanized or violent sexual practices(39). It alerts us to the need to intervene by means of sex education programmes.

Other recent violence-related problems such as excessive and even addictive use of the Internet, social networking sites, videogames and mobile phones, coupled with bottom-up or child-to-parent violence, are a current concern(40). They are also joined by an increase in early substance use, for example, alcohol and cannabis(41), another factor to take into account when developing adolescent-oriented prevention policies.

#### Mental health stigma

The term stigma refers to ascribing negative and derogatory qualities to a group of people that come to be seen, conceived and treated through a prism shaped by prejudices and a lack of information(42). Many people with mental health issues suffer not only from the symptoms and disability brought on by these problems, but also from the stereotypes and prejudices associated with mental illness. As a consequence, individuals with mental illness may find themselves deprived of the same educational, social, family, work and economic opportunities otherwise enjoyed by others without a mental illness. The associated stigma and discrimination are some of the main factors behind why adolescents with mental health problems do not seek treatment(43) and, as previously mentioned, adolescents are among the groups most at risk for stigma(44).

There are two overriding types of stigma that adolescents are exposed to: (i) social stigma, which stems from people's reactions towards those with a mental illness; and (ii) self-stigma, which refers to the prejudices that people direct towards themselves. Both kinds of stigma comprise stereotypes, prejudices and discrimination(42). Stigma and discrimination are the main obstacles that patients with mental disorder face when it comes to their recovery, well-being and, ultimately, leading a full and normal life.

The consequences most commonly associated with stigma and discrimination are: (i) social isolation, where individuals often find it difficult talking about their mental health for fear of being misunderstood and, at times, are rejected or ignored when they express themselves; (ii) exclusion from social and interpersonal life by refusing to participate in social and interpersonal activities (e.g., studying, shopping, renting shared accommodation, going on holiday, joining an association or club); (iii) difficulties in getting and holding onto a job, and being dismissed when their mental disorder comes to light; (iv) difficulties in asking for help for fear of being labeled – it takes a severe crisis for them to turn to mental health services, which entails a slower and tougher recovery process; and (v) internalizing external social prejudices and stereotypes as their own. From the point of diagnosis, they engage in self-limiting behaviours, their self-esteem drops and they lower their expectations about recovery.

According to the WHO, stigma on the grounds of mental health is a global problem and the fight to eradicate it should be a priority on any democratic and free society's agenda(21).

#### School failure and its consequences

The Universal Declaration of Human Rights, adopted by the United Nations, proclaims in Article 26 that everyone has the right to a free education under conditions of full equality; that it shall be directed to the full development of the human personality and to the strengthening of respect for human rights and

fundamental freedoms; and that it shall promote understanding, tolerance and friendship among all racial or religious groups(45).

Positive health and well-being during adolescence largely depend on the opportunities available for developing certain emotional and cognitive abilities that enable the highest degree of autonomy possible. This is achieved due to a well-rounded education and a smooth and successful transition to employment that ensures a lasting network of connections. However, Spain is the country with the highest early school dropout rate (23.5%) in the EU according to 2016 data(25).

Health and education are closely related. Schools not only give learners the opportunity to acquire certain cognitive abilities and knowledge, but they are also a setting that promotes health capable of equipping them with knowledge essential to their emotional, personal and mental health. Therefore, school provides an environmental framework that encourages an individual's cognitive, emotional and social development. Education helps to prevent poverty and illness, minimize health risks, and promote full development potential, warding off emotional problems, abusive alcohol and substance consumption, suicide and death(46).

Adolescents with emotional problems are less likely to make it to high school education, are more at risk for school dropout, and therefore are less likely to achieve good academic performance. The European Commission, fully aware of the importance of adolescents receiving adequate schooling, intends to reduce the percentage of school leavers by at least 10% and wants to see at least 40% tertiary education attainment among 30- to 40-year-olds by 2020(47).

Mental health problems usually go undetected more so than physical health problems in the school environment. In fact, primary care protocols tend to focus on physical variables and indicators. Similarly, awareness-raising activities are generally geared towards the importance of physical health, focusing on nutrition, hygiene and sport. However, even though the occurrence probability of physical and mental health problems is similar, the latter is less frequently addressed in the school context(48).

### Lack of healthy lifestyles during adolescence

Recent decades have witnessed a decline in healthy lifestyles in Western countries, Spain included, especially among children and young people, and which may affect health in the future. Childhood excess weight and obesity are high-profile social, psychological and health concerns in the industrialized world given their significant impact on health. This problem has seen dizzying growth, particularly over the past decade. It is currently estimated that around 40% of Spanish children are overweight or obese(49). From a psychological perspective, childhood excess weight and obesity are

associated with the risk for disturbed eating behaviours, body image distortions, and misconceptions about its possible control(50).

A significant correlation between childhood obesity and a sedentary lifestyle has also been observed. This is characterized by little physical activity, too much time in front of the television, playing videogames and on the computer as a basic form of entertainment. In turn, this type of leisure activity explains shortened hours of sleep and other related problems(51).

#### Promoting mental health and emotional well-being

Increasingly more interest is being shown in emotional well-being as a progress indicator of people's health(52). Bodies such as the OECD, the European Commission and the United Nations organization include emotional well-being as an indicator of social progress. Emotional well-being is a construct defined as a positive attitude that allows the individual to improve their mental health, even under adverse conditions. This construct is conceptualized as a composite of two main components: (i) hedonia, which is defined as a psychological and subjective state of happiness referring to pleasurable over painful experiences; and (ii) eudaimonia, which centres on cognitive and moral aspects that come into play when related activities align with their values in a global, committed sense(53).

Emotional well-being impacts on various health and social outcomes: high levels of emotional well-being are associated with a better quality of life in terms of health; it prevents different illnesses and mental disorders; it correlates with less disability and less use of healthcare services; and it is associated with reduced all-cause mortality(54,55).

Thus, the development of positive emotional well-being in young people (and in any age group) would be associated with healthy lifestyles, good physical activity, an appropriate social and family support network, and the acquisition of social skills as well as coping and learning strategies that will help them to face the challenges of adulthood.

# **3. Objectives**

The general objective of this report is to design a priority-based roadmap aimed at improving adolescent health and emotional well-being and preventing emotional problems.

To achieve this, the following specific objectives have been set: (i) to identify the gaps and needs associated with adolescent health and emotional well-being; (ii) to draw up recommendations based on the previously identified gaps and needs; and (iii) to establish priorities for improving adolescent health

and emotional well-being. This means taking on board the perspectives and opinions of not only clinicians, experts and researchers belonging to the PROEM network, but also the educational sector, social service professionals, policymakers, public and community health specialists, not to mention the young themselves, parents and end-users.

# 4. Gaps and needs associated with adolescent health and emotional well-being

In line with Specific Objective I, the gaps and needs associated with emotional health identified at the Red Pro-Emotion-Y International and Interdisciplinary Conference, and at the Red PROEM members and partners gathering, are described below.

### Poor adolescent health and emotional well-being literacy

The data collected reveal the limited knowledge held by adolescents, parents and education sector professionals regarding the relevance of mental health to full personal development; in other words, what mental health and mental disorders are. Furthermore, primary care doctors and nursing staff, while aware of the current mental health crisis, lack the necessary skills, time and resources to carry out effective psychotherapy interventions that can reduce the excessive and sometimes irresponsible use of pharmaceutical drugs.

Adolescents and their parents report not knowing much or anything about what mental disorders are and the associated emotional problems, and do not know how to react when adolescents exhibit these problems nor where to go. Because of this lack of knowledge, when emotional problems surface, they do not know how to respond to or handle these difficulties properly. Furthermore, researchers from other disciplines highlight the potential role of epigenetics, social network analysis and language analysis in young people when it comes to detecting emotional problems early and the importance of healthy lifestyles for prevention purposes.

Education and primary healthcare professionals express real concern that they lack the sufficient and/or necessary knowledge to be able to properly treat adolescents when they display emotional problems, and especially when they exhibit behaviours that demand specialist attention, for example, self-injuries and suicidal conduct.

What is more, this limited training and perhaps poor literacy leads to an increase or maintaining of the mental health stigma, labeling patients at an institutional level; an increased risk of peer

victimization; and delays in specialist consultation, thus undermining any chances of a successful intervention.

# Delay in the identification of mental health problems in schools and inadequate instruments

Adolescents with emotional problems and adolescent victims of violence are detected too late. It is often the case that when the problem surfaces, a mental disorder or other more serious problems have already been triggered, which make symptom remission and intervention effectiveness more difficult. Education and primary healthcare professionals have little to no information about quick, valid and reliable available instruments for adolescents and those around them, from parents to educational establishments, in order to detect emotional problems early on.

A lack of attention paid to the student's use of language at school has also been detected. By examining the language used, this can help identify members of the school community at risk of experiencing problems or those already in this situation.

Furthermore, it is claimed that healthcare professionals and their corresponding health network are too far removed from the school environment, thus hindering early detection, the use of suitable detection tools, and the use of appropriate psychotherapy interventions. This, in turn, opens the door to school-based professional intrusion, where we see underqualified and non-specialist groups performing functions beyond their skill set.

# Lack of resources and coordination among different stakeholders and regions in the area of emotional health and well-being

Healthcare and education professionals express concern about the limited resources and time available that would allow them to attend to the needs of adolescents and to detect and intervene early and effectively. Furthermore, when adolescents with emotional problems are identified, referrals by schools and healthcare providers requesting assessment and treatment are often not made in a timely fashion (and sometimes not at all), resulting in a delay from when the individual meets with the school counselor to when an appointment with a healthcare professional is scheduled. This lack of timeliness comes down to not only little or no coordination and communication between the various professionals, but also limited health and educational resources often coupled with no pedagogical educators, educational psychologists or psychologists in the school setting. These shortcomings work to the detriment of adolescents whose needs are not being addressed, thus exacerbating their symptoms and worsening their mental health, well-being and quality of life.

Within the public sphere, this means that only severe problems and disorders are addressed while mild to moderate ones go undetected, and they are only acted upon when significant clinical deterioration occurs.

# Excessive medicalization of mental health and the associated costs

The little or no psychotherapeutic skills, time and resources held by education and healthcare professionals facilitates overmedicalization in adolescents and the side effects involved. What is more, because the tools to manage mental health-related symptoms are not being taught, there is a risk of symptom deterioration, which brings with it increased healthcare costs related to excessive medicalization.

Another important aspect is that standardized interventions are adminstered less effectively when the patients' specific characteristics – their unique symptoms, the people around them and their life experiences – are ignored; patients are also dehumanized and less intervention adherence is observed. Additionally, more often than not the best intervention or treatment of choice according to the child's problem or disorder is not properly selected, as reported in recent research and evidence-based clinical treatment trials.

# Lack of health and emotional well-being policies coupled with an insufficient budget

There is widespread agreement that policies to promote and detect mental health early and to prevent mental disorders and suicidal behaviour are lacking, despite the real picture showing us a high prevalence of adolescent emotional problems and an allocated budget which does not match that designated for physical illnesses. As for current mental health policies, not enough money is set aside to implement these programmes aimed at promoting mental health and emotional well-being whose purpose is to have a significant impact on adolescents' quality of life and to improve education and healthcare services. This situation worsens if we compare the mental health resources and measures for adults with those available to children and young people. For example, the number of Child/Youth Mental Health Units (USMIJs) and associated professionals is well below the potential to-be-attended target population, especially if we compare it with the adult population.

# Lack of awareness towards certain vulnerable and social minority groups

Lastly, mention needs to be made of the current lack of awareness towards several vulnerable and social minority groups; these include child–youth groups under the system for the protection of children

and adolescents, women, the LGBTI community, ethnic minorities and migrant groups, among others. These collectives are at a greater risk of emotional problems, victimization and stigma, not only during adolescence but also in older people. As a whole, we are dealing with a high-risk group for incidence of mental disorders and increased suicidal behaviour. Preventative and psychotherapy interventions aimed at these populations should take into account the specific characteristics of each one of these groups when it comes to administration in order to improve intervention effectiveness. Members of the education community need to be made aware of the importance behind students' language use as well as the language used with them.

# Increasing unhealthy lifestyles among youth and abusive use of new communication technologies

Many young people from developed countries are reported to spend too much time doing sedentary activities and consuming processed and high-calorie foods, eating at any hour of the day and however they like, thus increasing obesity. The little physical activity practiced is considerably light. Furthermore, adolescents go to bed much too late, which affects their academic performance and their emotional health, while most of these sedentary activities revolve around the widespread, disproportionate and uncontrolled use of new communication technologies.

Responsibility for this lack of healthy lifestyles should not only fall to the youth themselves, but also to their parents or legal guardians, education and healthcare staff, as well as to policymakers tasked with developing healthy lifestyles in this population.

# 5. Recommendations drawn from the previously identified gaps and needs

Regarding Specific Objective II, this section covers the recommendations raised by experts and participants who attended the Red Pro-Emotion-Y International and Interdisciplinary Conference and by members and partners of the PROEM network. The goal is for these recommendations to form a roadmap aimed at helping to improve health and emotional well-being in the young and to reduce the rates of mental disorder and suicidal behaviour identified in this population.

To achieve this aim, a series of to-be-implemented recommendations and actions have been set:

### To build adolescent health and emotional well-being literacy

• Designing health literacy interventions for students and parents/guardians about mental health, its risk and protective factors, as well as knowing how to identify and manage its symptoms properly. These interventions should cover all prevention stages: universal, selective and indicated.

• Raising awareness of the importance behind emotional well-being and healh promotion among adolescents and adults, as well as the maintaining and contributing factors: healthy lifestyles (physical activity, nutrition, sleep habits, appropriate use of new technologies), family, social, school support networks, etc.

• Promoting respect and reducing related stigma towards vulnerable and social minority groups and individuals with mental illness; building adolescents' empathy and tolerance towards what is 'different' and diversity.

• Raising awareness among members of the education and health community about the importance behind students' and end-users' language use as well as the language used with them.

• Involving the media by disseminating information via networks made up of mental health professionals and counselors, parents' associations, end-users, etc. to eliminate any type of stigma.

To promote early detection in young people and effective, efficient and evidence-based psychotherapy inteventions and best practices

• Providing a repository of assessment and intervention instruments to improve early detection and scientifically supported interventions aimed at increasing transparency and reducing professional intrusion (unqualified practice).

• Involving adolescents, families and all other social actors in decision-making efforts to promote mental health and to prevent and treat mental disorders.

• Developing and implementing early detection selective and indicated prevention protocols and evidence-based psychotherapy interventions in schools and health interventions designed to treat mental disorders, (cyber)victimization, self-harm, and suicidal ideation and behaviour in adolescents by specialist mental health professionals.

• Employing language analysis and developing decision-support computer systems to help professionals detect adolescent emotional problems early on.

• Developing universal prevention programmes aimed at promoting mental health, emotional wellbeing and healthy lifestyles (e.g., physical activity, nutrition, sleep habits), as well as encouraging peer-topeer respect and tolerance. • Developing interventions aimed at reducing all associated stigmas, whether directed at vulnerable or social minority groups, the mental disorder itself, or any other type.

• Developing programmes aimed at preventing victimization or any other kind of interpersonal violence.

• Encouraging collaboration among teams to conduct multi-centre trials using rigorous designs across different contexts (primary healthcare, schools, etc.).

• Assessing the potential role of interdisciplinary approaches (e.g., ITCs, epigenetics, language analysis) in early detection and the development of psychotherapy interventions.

• Helping people with emotional problems and those at risk of developing them transition from adolescence to adulthood.

• Developing promotion, early detection and treatment programmes that adhere to the Convention on the Rights of the Child.

### To develop an efficient network to improve early detection, early intervention and the best treatment for emotional and mental health problems in youth

• Bringing the mental health network and healthcare professionals closer to the educational environment and the general population in order to: (i) empower citizens; (ii) improve early detection; and (iii) develop better, individual-oriented psychotherapy interventions.

• Enabling education and healthcare professionals to explore the needs of young people with emotional problems.

• Increasing efforts to involve all actors to improve health network efficiency. It is recommended that not only the voices of researchers and mental health professionals are heard, but also the voices of professionals belonging to other disciplines, the educational sector, the social and community setting, parents, young people, end-users and policymakers.

• Increasing mental health training among education and health professionals and those from a social and community setting (all actors/agents in contact with young people) led by mental health specialists (e.g., health psychologists).

• Addressing ICT use and abuse among adolescents, given that much social interaction takes place online where different mental health problems are channeled (depression, anxiety, etc.).

To increase the budget for research into preventing and treating mental health problems and promoting mental health and emotional well-being

• Providing schools, health systems and social services with the knowledge and resources to identify and treat adolescents exhibiting emotional problems or those at risk of developing them, paying particular attention to vulnerable and minority groups and addressing the specific needs of adolescents.

• Increasing funding to bridge the gap between mental and physical health, taking into account not only healthcare needs and the burden of disease, but also the prevalence and severity of emotional disorders in youth.

• Promoting the development and implementation of mental health psychotherapy interventions in adolescents and schools, as well as psychoeducational programmes that emphasize interdisciplinary and inclusive approaches instead of medicalization as the only and/or priority alternative.

• Undertaking social and educational policies and increasing efforts to implement them more effectively so as to address inequalities among youth with emotional problems or those at psychosocial risk.

• Encouraging funding from public and private bodies and institutions to research and offer emotional health prevention programmes in schools and health clinics, including the early identification of emotional problems, (cyber)victimization, self-harm and suicide.

• Implementing policies that make health and emotional well-being more easily accessible to young people (mental health literacy, inclusion in school curricula, online assessment and treatment).

• Increasing the budget for developing educational and social policies aimed at preventing inequality in youth with emotional problems.

# 6. Priorities for improving adolescent mental health

Lastly, and in line with Specific Objective III of this report, a list of **actions** has been drawn up that the PROEM network considers as **priority** for improving adolescent health and emotional well-being:

#### **Table 1.** List of actions in order of highest to lowest priority as agreed by the PROEM network

Priorities	Dimension
Developing and implementing early detection selective and indicated prevention protocols and evidence-based psychotherapy interventions in schools and health interventions designed to treat mental disorders, (cyber)victimization, self-harm, and suicidal ideation and behaviour in adolescents by specialist mental health professionals.	Promoting early detection and psychotherapy intervention
Designing health literacy interventions for students and parents/guardians about mental health, its risk and protective factors, as well as knowing how to identify and manage its symptoms properly. These interventions should cover all prevention stages: universal, selective and indicated.	Building literacy and well-being
Providing a repository of assessment and intervention tools to improve early detection and scientifically supported interventions aimed at increasing transparency and reducing professional intrusion (unqualified practice).	Promoting early detection and psychotherapy intervention
Increasing mental health training among education and health professionals and those from a social and community setting (all actors/agents in contact with young people) led by mental health specialists (e.g., health psychologists).	Developing an efficient network
Promoting respect and reducing the stigma towards vulnerable and social minority groups and individuals with mental illness, building adolescents' empathy and tolerance towards what is 'different' and diversity.	Building literacy and well-being
Providing schools, health systems and social services with the knowledge and resources to identify and treat adolescents exhibiting emotional problems or those at risk of developing them, paying particular attention to vulnerable and minority groups and addressing the specific needs of adolescents.	Increasing the budget
Increasing awareness of the importance of emotional well-being and health promotion among adolescents and adults, as well as the maintaining and contributing factors: healthy lifestyles (physical activity, nutrition, sleep habits, appropriate use of new technologies), family, social, school support networks, etc.	Building literacy and well-being
Developing universal prevention programmes aimed at promoting mental health, emotional well-being and healthy lifestyles (e.g., physical activity, nutrition, sleep habits), as well as encouraging peer-to-peer respect and tolerance.	Promoting early detection and psychotherapy intervention
Implementing policies that make health and emotional well-being more easily accessible to young people (mental health literacy, inclusion in school curricula, online assessment and treatment).	Increasing the budget
Involving the media by disseminating information via networks made up of mental health professionals and counselors, parents' associations, end-users, etc. to eliminate any type of stigma.	Building literacy and well-being

Increasing efforts to involve all actors to improve health network efficiency. It is recommended that not only the voices of researchers and mental health professionals are heard, but also the voices of professionals belonging to other disciplines, the educational sector, the social and community setting, parents, young people, end-users and policymakers.	Developing an efficient network

#### **Table 1.** List of actions in order of highest to lowest priority as agreed by the PROEM network (continued)

Priorities	Dimension
Bringing the mental health network and healthcare professionals closer to the educational environment and the general population in order to (i) empower citizens; (ii) improve early detection; and (iii) develop better, individual-oriented psychotherapy interventions.	Developing an efficient network
Encouraging funding from public and private bodies and institutions to research and offer emotional health prevention programmes in schools and health clinics, including the early identification of emotional problems, (cyber)victimization, self-harm and suicide.	Increasing the budget

# 7. Conclusions

Thanks to the efforts made by members, partners and other users of the PROEM network, a mental health problem in adolescents and gaps on how to tackle it in both a health and educational setting have been observed. These shortcomings manifest themselves as limited resources, training and available health literacy programmes; a lack of measures to detect at-risk individuals early on and scientifically supported psychotherapy interventions; and an inefficient healthcare network when it comes to making referrals.

The PROEM network calls for mental health to be promoted in all adolescents and those in contact with this group; for symptoms to be detected early; and for intervention on incidence of mental disorders to be prioritized, establishing synergy among adolescents, adults and education professionals by promoting interdisciplinary approaches and synergies.

In order to remedy these gaps, the message being sent out is that it is necessary to build mental health literacy; take on more mental health specialists in schools; provide training for education and primary healthcare professionals; increase the budget for mental health policy implementation; develop a more efficient health network; and encourage research that works towards identifying the risk factors, promoting positive mental health and developing efficient and effective interventions.

The actions set out in this report seek to engage all stakeholders and lead to the formation of interdisciplinary working groups tasked with carrying out the measures proposed.

# 8. References

- 1. Coppens E, Vermet I, Knaeps J, de Clerck M, de Schrijver I, Matot JP, et al. Adolescent mental health care in Europe : state of the art, recommendations, and guidelines by the ADOCARE network. 2015.
- ROAMER. Boosting impact of mental health policies and services for European people, communities and economies Joint statement to invest in mental health research and a European Implementation Partnership on Mental Health and Wellbeing. 2017;1–14.
- 3. Organización Mundial de la Salud. Mental health promotion in young people: an investment for the future. Who. 2010.
- 4. Coughlan H, Duffy M, Gavin B, Keeley H. The International Declaration on Youth Mental

Health: Summary. 2011.

- 5. World Population Prospects. Health for the world's adolescents: a second chance in the second decade. 2017.
- Organización Mundial de la Salud. Depression and other common mental disorders: global health estimates. World Heal Organ [Internet]. 2017;1–24. Available from: http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf
- Chisholm D, Sweeny K, Sheehan P, Rasmussen B, Smit F, Cuijpers P, et al. Scaling-up treatment of depression and anxiety: a global return on investment analysis. WwwThelancetCom. 2016;0366(16):1–10.
- 8. Prince M, Patel V, Saxena S, Maj M, Maselko J, Phillips MR, et al. No health without mental health. Lancet. 2007;370(9590):859–77.
- Gustavsson A, Svensson M, Jacobi F, Allgulander C, Alonso J, Beghi E, et al. Cost of disorders of the brain in Europe 2010. Eur Neuropsychopharmacol [Internet]. Elsevier B.V.; 2011;21(10):718– 79. Available from: http://dx.doi.org/10.1016/j.euroneuro.2011.08.008
- European Action for Mental Health. European Framework for Action on Mental Health and Wellbeing. 2016.
- Polanczyk G V, Salum GA, Sugaya LS, Caye A, Rohde LA. Annual research review: A metaanalysis of the worldwide prevalence of mental disorders in children and adolescents. J Child Psychol Psychiatry. England; 2015 Mar;56(3):345–65.
- Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. United States; 2005 Jun;62(6):593–602.
- Jones PB. Adult mental health disorders and their age at onset. Br J Psychiatry Suppl. England; 2013 Jan;54:s5-10.
- Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J, Lee S, Ustun TB. Age of onset of mental disorders: a review of recent literature. Curr Opin Psychiatry. United States; 2007 Jul;20(4):359–64.
- 15. UNICEF. Bienestar Infantil en España 2016 [Internet]. Unicef. 2016. Available from: http://www.webquestcreator2.com/majwq/public/files/files\_user/49695/indicadores\_de\_bienestar\_ infantil\_2016.pdf

- 16. Glied S, Pine DS. Consequences and correlates of adolescent depression. Arch Pediatr Adolesc
   Med [Internet]. 2002;156(10):1009–14. Available from: http://www.ncbi.nlm.nih.gov/pubmed/12361447
- 17. University of Rochester Medical Center. Mood Disorders in Teens [Internet]. 2018 [cited 2018 May 14]. Available from: https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=90&ContentID=P016 34
- 18. Wykes T, Haro JM, Belli SR, Obradors-Tarragó C, Arango C, Ayuso-Mateos JL, et al. Mental health research priorities for Europe. The Lancet Psychiatry. 2015;2(11):1036–42.
- Observatorio Social de La Caixa. ¿Responde la investigación a las necesidades de salud? [Internet].
   2018 [cited 2018 May 14]. Available from: https://observatoriosociallacaixa.org/es/print/-/asset\_publisher/edPcfhH3hjBh/content/responde-la-investigacion-a-las-necesidades-de-salud
- 20. Mokdad AH, Forouzanfar MH, Daoud F, Mokdad AA, El Bcheraoui C, Moradi-Lakeh M, et al. Global burden of diseases, injuries, and risk factors for young people's health during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet (London, England). England; 2016 Jun;387(10036):2383–401.
- Organización Mundial de la Salud. The European Mental Health Action Plan 2013-2020 [Internet].
   2015. Available from: http://www.euro.who.int/\_\_data/assets/pdf\_file/0020/280604/WHO-Europe-Mental-Health-Acion-Plan-2013-2020.pdf
- 22. Organización Mundial de la Salud. Preventing suicide. CMAJ. 2014;143(7):609–10.
- Organización Mundial de la Salud. Mental Health: Facing the Challenges, building solutions.
   [Internet]. 2005. 195 p. Available from: http://www.euro.who.int/\_\_data/assets/pdf\_file/0008/96452/E87301.pdf
- Stein D, Apter A, Ratzoni G, Har-Even D, Avidan G. Association between multiple suicide attempts and negative affects in adolescents. J Am Acad Child Adolesc Psychiatry. United States; 1998 May;37(5):488–94.
- Instituto Nacional de Estadística. Instituto Nacional de Estadística (INE) [Internet]. 2018 [cited 2018 May 14]. Available from: http://www.ine.es/
- Mollà L, Vila SB, Treen D, López J, Sanz N, Martín LM, et al. Autolesiones no suicidas en adolescentes: Revisión de los tratamientos psicológicos. Rev Psicopatol y Psicol Clin. 2015;20(1):51–61.

- Daher M. World report on violence and health. J Med Liban [Internet]. 2002;51(2):59–63. Available from: http://www.ncbi.nlm.nih.gov/pubmed/15298158
- 28. Breslau N. The epidemiology of trauma, PTSD, and other posttrauma disorders. Trauma Violence Abuse. United States; 2009 Jul;10(3):198–210.
- Centers for Disease Control and Prevention. Understanding teen dating violence: Fact sheet 2012.
   2012;0–1. Available from: http://www.cdc.gov/ViolencePrevention/pdf/TeenDatingViolence2012a.pdf
- Garaigordobil M. Bullying y Ciberbullying: Definición, prevalencia, consecuencias y mitos.
   Fundació per la Universitat Oberta de Catalunya, editor. Barcelona: Fundació per la Universitat
   Oberta de Catalunya; 2017.
- Gamez-Guadix M, de Santisteban P, Resett S. Sexting among Spanish adolescents: Prevalence and personality profiles. Psicothema. Spain; 2017 Feb;29(1):29–34.
- Cushing BS, Kramer KM. Mechanisms underlying epigenetic effects of early social experience: the role of neuropeptides and steroids. Neurosci Biobehav Rev. United States; 2005;29(7):1089– 105.
- 33. Organización Mundial de la Salud. Preventing youth violence: an overview of the evidence [Internet]. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181008/1/9789241509251\_eng.pdf
- 34. Castellvi P, Miranda-Mendizabal A, Pares-Badell O, Almenara J, Alonso I, Blasco MJ, et al. Exposure to violence, a risk for suicide in youths and young adults. A meta-analysis of longitudinal studies. Acta Psychiatr Scand. 2017;135(3):195–211.
- 35. Bas-Sarmiento P, Saucedo-Moreno MJ, Fernandez-Gutierrez M, Poza-Mendez M. Mental Health in Immigrants Versus Native Population: A Systematic Review of the Literature. Arch Psychiatr Nurs. United States; 2017 Feb;31(1):111–21.
- 36. Miranda-Mendizabal A, Castellvi P, Pares-Badell O, Almenara J, Alonso I, Blasco MJ, et al. Sexual orientation and suicidal behaviour in adolescents and young adults: systematic review and meta-analysis. Br J Psychiatry. England; 2017 Aug;211(2):77–87.
- 37. Lucassen MF, Stasiak K, Samra R, Frampton CM, Merry SN. Sexual minority youth and depressive symptoms or depressive disorder: A systematic review and meta-analysis of population-based studies. Aust N Z J Psychiatry. England; 2017 Aug;51(8):774–87.
- 38. Organización Mundial de la Salud. Violencia contra la mujer. Respuesta del sector de la salud

[Internet]. Available http://apps.who.int/iris/bitstream/10665/87060/1/WHO\_NMH\_VIP\_PVL\_13.1\_spa.pdf

- Collins RLR, Lamb S, Roberts T-A, Tolman DL, Ward LM, Blake J, et al. Report of the APA Task Force on the Sexualization of Girls APA Task Force on the Sexualization of Girls. Am Psychol Assoc [Internet]. 2007;1–72. Available from: http://www.psych.yorku.ca/leeat/3480/documents/SexualizationofWomentaskforce.pdf
- 40. Krug EG, Dahlberg LL, Mercy J a, Zwi a B, Lozano R. Informe mundial sobre la violencia y la salud. Rev Inst Med Trop Sao Paulo [Internet]. 2003;45:130–130. Available from: http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S0036-46652003000300014&lng=es&nrm=iso&tlng=es
- 41. Eurosurveillance editorial team. EMCDDA publishes 2012 report on the state of the drugs problem in Europe. Vol. 17, European communicable disease bulletin. 2012.
- 42. Corrigan PW, Watson AC. Understanding the impact of stigma on people with mental illness. World Psychiatry. Italy; 2002 Feb;1(1):16–20.
- 43. Gulliver A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental health helpseeking in young people: a systematic review. BMC Psychiatry. England; 2010 Dec;10:113.
- 44. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. Psychol Med. England; 2015 Jan;45(1):11–27.
- 45. Naciones Unidas. Declaración de los derechos humanos [Internet]. Nueva York; 1948. Available from: http://www.un.org/es/documents/udhr/UDHR\_booklet\_SP\_web.pdf
- 46. Davidson LE, Rosenberg ML, Mercy JA, Franklin J, Simmons JT. An epidemiologic study of risk factors in two teenage suicide clusters. JAMA. United States; 1989 Nov;262(19):2687–92.
- 47. Comisión Europea. EUROPE 2020: A strategy for smart, sustainable and inclusive growth. 2014.
- 48. Comisión Europea. Focus on: Mental Health in education: an unspoken issue of our age [Internet].
   2017 [cited 2018 May 14]. Available from: https://eacea.ec.europa.eu/national-policies/eurydice/content/focus-mental-health-education-unspoken-issue-our-age\_en
- 49. Agencia Española de Seguridad Alimentaria. Estrategia NAOS. Madrid; 2005.
- 50. Amigo I, Concepción V, Rodríguez F, Rodríguez E, Ana N, Santamarta R, et al. Creencias sobre las estrategias para el control del peso. 2005;17:418–21.

- 51. Busto R. La relación entre la falta de sueño, el ocio sedentario y el sobrepeso infatil. Análisis y Modif Conduct. 2006;32:391–401.
- 52. New Economics Foundation. Measuring well-being: a guide for practitioners. 2011.
- 53. Diener E, Diener M. Cross-cultural correlates of life satisfaction and self-esteem. J Pers Soc Psychol. United States; 1995 Apr;68(4):653–63.
- 54. Keyes CLM, Dhingra SS, Simoes EJ. Change in level of positive mental health as a predictor of future risk of mental illness. Am J Public Health. United States; 2010 Dec;100(12):2366–71.
- 55. Keyes CLM, Simoes EJ. To flourish or not: positive mental health and all-cause mortality. Am J Public Health. United States; 2012 Nov;102(11):2164–72.