

Psychological Recovery

After Hurricanes Irma and Maria
September 2017 on Sint Maarten

Insights, Information and Experiences from the Field



Information booklet presented from the:
Association of Psychologists
and Allied Professionals St. Maarten

Preface

Do you know what you will do when the storm hits? Or when the storm continues but in a different form? Do you know what it can bring, create, what it can destroy or, on the contrary, can inspire? What the psychological impact is and how this should be dealt with?

There are some things that you can only learn in a storm.

Let's make sure we document it.

This document, written by the members of the Association of Psychologists and Allied Professionals St. Maarten (APAP SXM), is a clustering of efforts and experiences during the psychological recovery and aftermath of Hurricane Irma and Maria in 2017.

It aims to provide information and the experiences concerning psychological recovery of hurricanes on Sint Maarten from the viewpoint of the Association of Psychologists and Allied Professionals St. Maarten. Focus is on what has been done on St. Maarten after the storms in 2017 within the domain of psychology, what is known from guidelines and research to inspire what can be done in future preparation for the different sectors (business, education, health, government etc.) and on individual and community level.

It cannot replace other guidelines documents but tries to offer an additional perspective from Sint Maarten specifically and from there hopes to be able to offer support from a psychological standpoint for future references. We hope it will be an interesting read for you.

"Coming together is a beginning, keeping together is process, working together is success"
Quote Henry Ford

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Chapter 1. Background information

1.1 Information about the hurricanes

People still mention the beautiful colours of the sky before the storm. It was purple and pink, something that a few had seen before. Some knew that what was coming would be different than anything they had ever experienced. But something like this was more than anyone could have had imagined.

It was the morning of September 6 when Irma changed everything on Sint Maarten. What was first there, was not there anymore. The island was turned upside down. Irma took her path right over the island, her eye leaving a moment of odd calmness before continuing to sweep away entire structures, damaging properties and blocking the road with debris. After that leaving the island silently in devastation, no energy or water available for a while.

Hurricane Irma was an extremely powerful and catastrophic hurricane that originated from Cape Verde but spread her devastating powers through the Caribbean and the United States of America. She reached her peak intensity with 185 mph (295 km/h) winds and caused widespread destruction across its path in September 2017. It was the first Category 5 hurricane on record to strike St. Maarten, followed by Hurricanes Jose and Maria only two weeks later. They were, fortunately for St. Maarten, not as catastrophic for this island as Irma but had a big impact, especially Maria, on other regions. It is even mentioned by some that Irma should be seen as a category 6, but the Saffir Simpson scale for rating hurricanes does not go further.

Irma is considered the worst natural disaster to have hit St. Maarten; the extent of its damage far exceeded that of any previous hurricane. At that time Prime Minister William Marlin estimated that at least €1 billion (\$1.2 billion) would be necessary to restore the destruction, and disaster analysts from CEDIM predicted at a later moment losses would exceed even more than \$1.5 billion.

Two weeks after, hurricane Maria and Jose added some extra rain to the damage that was done on the island, fortunately sparing us with further severe damage these hurricanes would be doing on other islands. The effect of the water is something to not underestimate either, since it created mold on different places and because of the damaged houses made the living situation for a big group of persons challenging to say the least.

Sint Maarten is located in a hurricane belt area. This area includes the Caribbean Sea and Gulf of Mexico. This means that each year there are risks of hurricanes during the season that is from the 1st of June until the end of November. It is not the first time St. Maarten has experienced a hurricane, there is a history of several where Louis is one of the most 'famous' and also devastating ones which occurred in September 1995.

The consequences of the hurricanes are still visible on the island, on a material level but it also left an imprint on psychological level. It changed the lives of many people, leading to a recovery phase that is still ongoing at this moment when we published this manual.

1.2 Background information of APAP SXM

APAP SXM stands for Association of Psychologists and Allied Professionals St. Maarten. The association has been striving to promote the practice and professional development of psychology and related fields since 2016. It also focuses on serving the social and professional interests of psychologists and related professionals.

How do we do that?

1. We follow the standards in the needed degree to be active in the field of psychology to guarantee the professional expertise of our members.
2. We invest in the professional development of our members with training, supervision and following the latest developments in the workfield.
3. We focus on establishing and maintaining the conduct of the profession of psychologists and related professions in the interest of proper professional ethics.
4. We build and maintain relationships with related organisations, both within and outside Sint Maarten
5. We promote the education of psychology in Sint Maarten
6. We provide information about psychology in Sint Maarten to different stakeholders
7. We encourage and empower the study of scientific and professional aspects of the different specialisation of psychology and promote the publication of writing on topics in the field of psychology and related topics.

The association is open for membership for all qualified psychologists and allied professionals working on or connected to St. Maarten. More information about the membership can be found on the website: <http://www.apapsxm.com>.

Involved members of APAP SXM concerning this guideline are: Sanne Gruijters, Caroline van Oost, Stephanie Haseth, Henriette Schreurs, Miranda Veltman, Alexandra van Luijken, Carmencita Chemont, Zuleima Violenus and Joyce Bregonje.

These members are working as psychologists and allied professionals within several organisations like the White and Yellow Cross Care Foundation, Mental Health Foundation, Mental Health Caribbean, Stichting Voortgezet Onderwijs van de Bovenwindse Eilanden (SVOBE) and private practices.

1.3 Collaborating partners in Sint Maarten's psychosocial care sector

APAP strives to connect with other organizations in order to jointly enhance and support local services for short- and long-term effectiveness. These organizations provide mental health care for a broad target group, groups of any age, cognitive ability or comorbidity. APAP also collaborates with several ministries of the government, e.g. Public Health, Social development and Labour (VSA), Ministry of Tourism, Economic Affairs, Transport and Telecommunication (TEATT) and with several organizations, divisions and initiatives in the area of psychosocial aid.

Some of the organizations that collaborated within this area are described below to get a better understanding of the actors within the local field on Sint Maarten, something that is important to know about before, during, but also after hurricane season, since mental health matters all year long! This publication however, will focus on the time after the hurricanes of 2017.

Mental Health Foundation

The Mental Health Foundation (MFH) is an organization that provides psychiatric support and treatment. They work in a team effort to provide the best psychiatric care the island of St Maarten can access. It is a secondary health care provider, meaning that care can only be given following a referral from a primary health care provider i.e. general practitioner or secondary healthcare providers i.e. a treating specialist. MHF's psychiatric care system offers care on St. Maarten as well as to other neighbouring islands like St. Eustatius, Saba and Anguilla. The Mental Health Foundation provides the following care products:

1. Admissions
2. Ambulant Care
3. Clinic Care
4. Crisis Intervention
5. Faraja Day Treatment Center
6. Information and Prevention
7. Short Stay/Long Stay Facilities

The Mental Health Foundation is involved in disaster management by being a partner at the Emergency Operation Center (EOC) meetings of the government. After the hurricanes in 2017 the staff of MHF also provided crisis intervention and support at shelters, to their clients and other persons in need in the different districts.

White and Yellow Cross Care Foundation

The White and Yellow Cross Care Foundation aims to provide trusted care for persons who are in need of extra support. They offer guidance, treatment, support and (residential and ambulant) care for seniors, persons with intellectual disabilities, clients who are in need of rehabilitation after for example having experienced a stroke or persons who need help at home in the various districts on St. Maarten. They offer the following care products:

1. St. Martin's Home: Elderly care, Nursing care, Hospice and Psycho-geriatric daycare.
2. District Nursing: Home care, Nursing care and Mother-Child care.
3. Sister Basilia Center: Residence, Day Activity Center, Guided Living.

The WYCCF was an active player after the hurricanes in different forms, like being involved with ESF-6 meetings, providing psychosocial help to their clients and other persons in need in the different districts with different projects (for example rebuilding houses of clients with funds from the Netherlands, or providing new furniture for clients and staff with donations).

Private psychological practices and consultancies

There are several private psychological practices and consultancies on the island, who offer psychological help and/or training and consultancy in this domain. For the clinical activities the professionals must be licensed by VSA to practice on the island and are with that license covered by most insurances. At moment of writing the following practices and consultancy businesses are active on the island to our knowledge:

- Resilience Psychology - Miranda Veltman
- Psychological Consultation and Treatment Center (PCTP) - Carmencita Chemont
- InterVision - Alexandra van Luijken
- MCA - collaboration of above mentioned psychologists to offer training and other consultancy activities in the psychological domain
- CvO Psychology - Caroline van Oost
- Inspired Psychology Practice & Consultancy - Caroline van Oost and Sanne Gruijters

Above mentioned practices are all members of APAP and actively involved in activities after the hurricanes with the association.

Government – Student Support Services Division (SSSD)

The Student Support Services Division (SSSD) is an executive entity working that falls under the Ministry of Education, Culture, Youth and Sports. Their services include prevention, intervention, transition and follow-up for students and their parents. SSSD provides psychological, speech language pathological, career and academic services, in-service training, parent education, community collaboration and carries out student service program management. They are available for both primary and secondary levels of the public and subsidized school system.

The teams of all public and subsidized schools were assisted by the SSSD during the aftermath of Irma in providing psychological first aid for their students, parents and staff. Meetings were also organized by SSSD for care team members from the different schools to share information, chart the way forward and for psychosocial assessment purposes.

Care in education

Several schools in Sint Maarten (both primary and secondary) have care teams with student care coordinators and school counselors. Psychologists and 'orthopedagogen' are present in some school care teams. The teams are responsible for the screening of psychological and academic problems and can refer students for example to external mental health care providers or SSSD. Depending on the function and education of the professional, counseling and psychological support can also be part of the care provided by the team itself.

Dr. J. Enterprises & Dr. J. Foundation

Dr. J Enterprises (DJE) offers a wide range of managerial consulting services for psychological, emotional, behavioral and therapeutic treatment programs for youth and adults within various communities, organizations, schools and clinical therapeutic Institutions:

- 1) employment and supervision of professionals in the field of counseling and related therapeutic guidance for outsourced placements
- 2) Supervisory and consulting services to professionals in the counseling and therapeutic field
- 3) Psychological evaluations of adults and children
- 4) Personal development training
- 5) Employee Assistance Programs

Dr. J. Foundation is a local and international Charity Foundation which has been established as of April 1st of 2015. The mission is to carry out the mandate: feed the hungry, clothe the naked, visitation to the isolated and provide shelter for the homeless. The Dr. J. foundation operates an emergency shelter for persons in temporary living crisis and provides counseling and assistance to its residents as they work towards regaining their independence. When necessary they offer resources or referral to community resources for assistance

After the hurricane this organization and foundation were involved with the Hurricane Irma Reintegration Program Shelter and several psychosocial activities to support the persons on the island affected by the storm and the devastations.

Mental Health Caribbean

Mental Health Caribbean provides mental healthcare for both old and young in the Dutch Caribbean islands Saba, St. Eustatius and Bonaire (BES islands). The nature of the problems may vary from simple and manageable to highly complex. They provide mainly non-residential personalised psychological and psychiatric care in cooperation with the formal and informal support system. MHC works closely together with partners in psychiatric care on the neighbouring Islands like Sint Maarten, Aruba and Curacao.

St. Maarten Foundation for Psychologists & Orthopedagogen (SFPO)

SFPO is a non-profit organization that was formed in August 2014 by like-minded individuals who believe in culture sensitive practice, education and research in the field of pedagogy and psychology. The foundation provides therapeutic, consultative, and training services to individuals, groups, and organizations. After the hurricane in 2017 SFPO representatives thought it necessary to address ways in which the community could bounce back collectively from the psychological wounds caused by natural disasters. For example through the collection of hurricane stories from persons within the community with emergent themes such as the importance of hurricane preparedness, the social and collective nature of hurricane preparedness and the power of local recovery and healing practices that foster resilience. They also engaged in meaningful conversations with members of the Nature Valley Association, in Colombier and local historian and pioneer, the late great Mrs. Daniella Jeffry in 2018. Other activities were sharing information via their Facebook page, in online media houses and through publication in the local newspaper and through the participation of SFPO representatives in various community initiatives such as town hall meetings and the Community Health Fair.

Aid organizations

Different aid organizations were and are active on the island after the hurricane with different activities related to psychosocial help. There are too many to mention, but three organisations the Association actively worked together with are the K1 Britannia, Red Cross St. Maarten and Unicef:

- ★ K1 Britannia got active with their K1 Direct Team, which provided shelter management and distribution.
- ★ The Red Cross had a food voucher program and roof repair program, together with several psychosocial activities.
- ★ Unicef got actively involved with the schools and rolled out several projects like the 'Return to Happiness' program, providing new play- and learning materials to daycares and afterschool programs and Life skills for football coaches and the 'Too Cool to Loot' -project.

Important to mention here as well, are the different churches on the island that made a big contribution to the recovery of the island through different initiatives. Some of the churches had their international groups come in to provide extra help and support. The association has been in contact for example with the ADRA, part of the Adventist Church, who had the Trinidad and Tobago Behavioural Health Trauma Team (TTBHTT) come in.



This list is meant to give you an impression of organizations active in the field after the hurricane in 2017. It is not meant as a complete overview or a social map, it can be that there were organizations that are important local players within the field, but are not mentioned. If so we ask them to contact us so we can mention them for further reference. Also we did not specifically elaborate on the different government departments, since we focussed more on the different active organizations outside of government for now but they are important as well to take in consideration for their respective roles.

Chapter 2. The effect of major disasters on psychological level

Major disasters have a wide range of effects on not only the individual, but also families, communities and society. Especially for vulnerable groups who already suffered pre-existing problems like for example: poverty, mental health problems and disability. Often experiencing a disaster is linked to trauma and post traumatic stress disorder specifically (PTSD). A disaster can destroy available resources and support systems and result in an increase of problems. This can lead to an increase of anxiety, inadequate coping skills like alcohol abuse and an increase of violence within the community and other mental health and psychosocial problems. Thus, mental health and psychosocial problems in emergencies encompass far more than the experience of PTSD (IASC Guidelines on Mental Health and Psychosocial support in Emergency settings, 2017).

2.1 Introduction psychological and social aid

The Inter-Agency Standing Committee (IASC) has issued guidelines to enable humanitarian actors to plan, establish and coordinate a set of minimum multi-sectoral responses to protect and improve people's mental health and psychosocial well-being in the midst of an emergency (2007). The psychological and social impacts of emergencies may be acute in the short term, but they can also undermine the long-term mental health and psychosocial well-being of the affected population. These impacts may threaten peace, human rights and development. One of the priorities in emergencies is thus to protect and improve people's mental health and psychosocial well-being. Achieving this priority requires coordinated action among all government and non- government humanitarian actors (IASC Guidelines on Mental Health and Psychosocial support in Emergency settings, 2007).

In the perspective of psychosocial help it is important for people to be well informed about the event and the consequences and to be reunited with loved ones. Acknowledgement of what people are going through, engagement and sympathy, is necessary, irrelevant what phase. Directly after the event first aid will focus on safety, taking care of vulnerable people in need and providing for the necessities of life.

After the first period, when life is going back to its normal routine, people still face difficult challenges. Financial, emotional and practical problems are very common. This means informing people and organizing help is not sufficient. To be able to provide the support and care that fits the needs of the population, research and assessment to acquire insight in (mental) health risks in certain vulnerable target groups, is necessary.

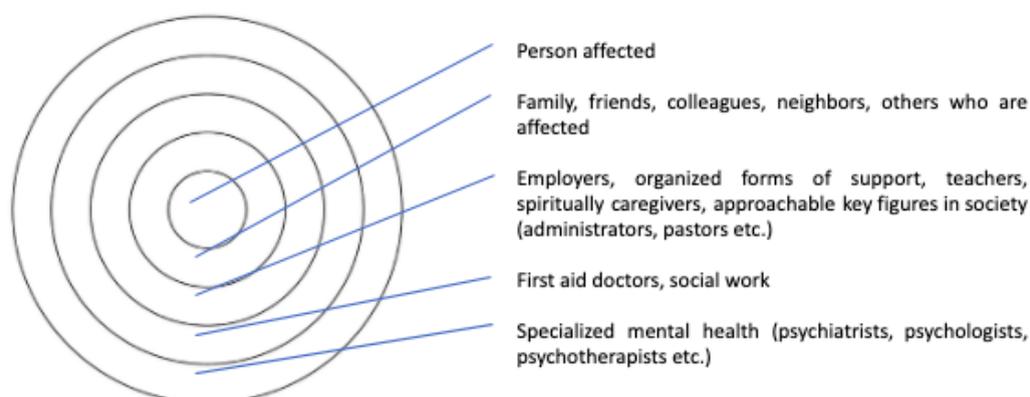
Local health care can provide prevention, support and care. When the local services cannot provide help to all people in need, it can be necessary to reinforce the capacity for the time needed (Dr. M. Dückers, 2017).

The World Health Organization advises to develop national and community health emergency risk management systems with emphasis on primary prevention, vulnerability reduction and strengthening community, health facility, and health system resilience by reinforcing a community-centered primary health care approach. Strengthen partnerships, institutional capacities and coordination mechanisms among health and related sectors for

global, regional, national and community emergency risk management for health.¹

Self-reliance is a key component as a starting point of organizing mental health care after a disaster, according to the multidisciplinary guideline of psychosocial care after a disaster or crisis (Dr M. Dückers, 2014). Figure 1 explains the four circles of help around the affected person.

FIGURE 1: THE CIRCLE MODEL



2.2 Psychological first aid

Psychological First Aid (PFA) is a term that is often misunderstood or misused. Most people think that it is something only for psychologists or psychiatrists to use. Also, that it is a complex technique that has to do with talking intensively about what you have been through. But actually, that is not true. But what is it then? And who can use it?

It is a first line (that means the first thing to do) psychosocial support approach to help people in the immediate aftermath of a disaster. It focuses on humane, supportive and practical assistance to others who have been in severe stress.

It is NOT counseling or therapy. It is NOT putting pressure on sharing your story (because that can lead to actual trauma if you did not have it already!). But what CAN you do with PFA? To understand that, you must first know the most important elements of PFA. Those are:

- **Look**
- **Listen**
- **Link**



¹https://www.who.int/hac/techguidance/preparedness/risk_management_overview_17may2013.pdf

- **Look** stands for: » Check for safety. » Check for people with obvious urgent basic needs » Check for people with serious distress reactions.
- **Listen** stands for: » Approach people who may need support. » Ask about people's needs and concerns. » Listen to people, without pressuring them to share their story, and help them to feel calm.
- **Link** stands for: » Help people address basic needs and access services. » Help people cope with problems. » Give information. » Connect people with loved ones and social support.

PFA can be used by mental health and other disaster response workers, but also by others who assist (like family members, neighbors, teachers, community members). Like medical 'first aid' it is not enough on its own, but it is a first and very important step to provide first support. This text is an introduction, further training and practice is recommended to familiarize yourself with the Look - Listen - Link steps.

Psychological first aid (PFA) of good quality accommodates and addresses the different needs and problems of affected people. Every event is different. Since circumstances and impact are never the same, needs and risk factors will vary. Besides that, every phase after a disaster asks for a different approach. In planning and carrying out PFA, risk factors need to be taken into account. The guideline by Impact (2014) has an overview of the risk factors.

It is expected that the major part of the affected people will overcome the consequences of a disaster on their own without professional help. Governments, organizations and healthcare providers need to watch out ('watchful waiting') for the natural ability of people to recover and for vulnerabilities. This will prevent helping too much or not enough.

Even though there are general patterns recognizable in the population, every individual is unique. This is reflected in needs, the ability to recover, vulnerabilities and problems of the individual that is affected. In offering PFA, the context of the individual needs to be taken into account as much as possible. Persons should not be negatively impacted because of a group wise approach for example while this could have been prevented. Despite what is often believed, it is not recommended to do group interventions at first, only when indicated and guided by qualified professionals in the field.

Probably there are already familiar people around in the area of the event that can support the affected person. It also may be assumed that professional health care providers are able to assist (see the circular model Figure 2). When present, it is recommended to make use of assistance available locally before deciding to get additional PFA providers.

Evaluation is needed to check whether 'watchful waiting' or PFA has the intended output. It is also important to evaluate the quality of the PFA. Analyze possible explanations and learn from this to be able to improve the quality. From every disaster lessons can be learned in regards to providing PFA (Dr. M. Dückers, 2017)

There are various ways of learning it through training. Those are available here on the island by the psychologists who are practicing here. There are also guides and modules online available (see for example website of World Health Organisation or National Child Traumatic Stress Network). With informing yourself you can help with this when needed and that can also help yourself to feel more in control. **Look** for it, **Listen** to it, and **Link** where you need it to link to!

2.3 Categories of psychosocial help

Dr. M. Dückers et al. (2017) refer in ‘Psychosociale hulp bij rampen en crises’ to the multidisciplinary guideline by Impact (2014). This guideline is distinguishing 5 categories of psychosocial help which are needed in the different phases of/after a natural disaster:

1. Basic help
2. Information
3. Emotional and social support
4. Practical help
5. Health care

These categories of help are presented in Table 1 which gives an overview of what help is needed, for whom, when and by whom.

TABLE 1. OVERVIEW CATEGORIES OF HELP AFTER NATURAL DISASTER.

| <i>What</i> | <i>For whom</i> | <i>When</i> | <i>By whom</i> |
|--|---|---|---|
| Basic help (safety, medical care, nutrition, medication, shelter) | In the beginning for every citizen. After a while for those who cannot provide for themselves. | Urgent in acute phase but also after acute phase. | Uniformed first aid response, rescue services, Red Cross, and every other care worker who can provide in the needs of basic help. |
| Information (about the event, current situation, loved ones, possible stress reactions) | All people affected. | Regardless what phase. | Every care worker who can provide in the needs of this help. |
| Emotional and social support (someone to talk to, social involvement, recognition) | All people affected. | Regardless what phase. | Every care worker who can provide in the needs of this help. |
| Practical help (administration, household, legal advice, financial support) | People affected by event and cannot provide for themselves. | After phase. | Social work, legal and financial experts. |

| | | | |
|--|--|---|---|
| Health Care (prevention, signaling, diagnose and treatment) | People affected by an event with (an increased risk for) psychological problems. | Preventive regardless of what phase, curative after a few weeks and in case of acute stress symptoms. | <i>Preventive and signaling:</i> Every care worker who can provide in the needs of this help <i>Diagnose and treatment:</i> Only health care professionals (doctors, specialized psychologists and therapists) |
|--|--|---|---|

Health sector and multisectoral coordination mechanisms at local and national levels are needed to facilitate joint action on risk reduction, response and recovery by the various health and non-health actors (the World Health Organization, 2013).

The IASC Guidelines (2007) illustrate this in a pyramid that shows a layered system of complementary supports that meets the different needs of different groups (see figure 2). All layers of the pyramid are important and should ideally be implemented concurrently.

The IASC gives the following information about each layer:

i. Basic services and security

The well-being of all people should be protected through the (re)establishment of security, adequate governance and services that address basic physical needs (food, shelter, water, basic health care, control of communicable diseases). In most emergencies, specialists in sectors such as food, health and shelter provide basic services. An MHPSS (Mental Health and Psychosocial Support) response to the need for basic services and security may include: advocating that these services are put in place with responsible actors; documenting their impact on mental health and psychosocial well-being; and influencing humanitarian actors to deliver them in a way that promotes mental health and psychosocial well-being. These basic services should be established in participatory, safe and socially appropriate ways that protect local people’s dignity, strengthen local social support and mobilise community networks.

ii. Community and family supports

The second layer represents the emergency response for a smaller number of people who are able to maintain their mental health and psychosocial well-being if they receive help in accessing key community and family support. In most emergencies, there are significant disruptions of family and community networks due to loss, displacement, family separation, community fears and distrust. Moreover, even when family and community networks remain intact, people in emergencies will benefit from help in accessing greater community and family support. Useful responses in this layer include family tracing and reunification, assisted mourning and communal healing ceremonies, mass communication on constructive coping methods, supportive parenting programmes, formal and non-formal educational

activities, livelihood activities and the activation of social networks, such as through women's groups and youth clubs.

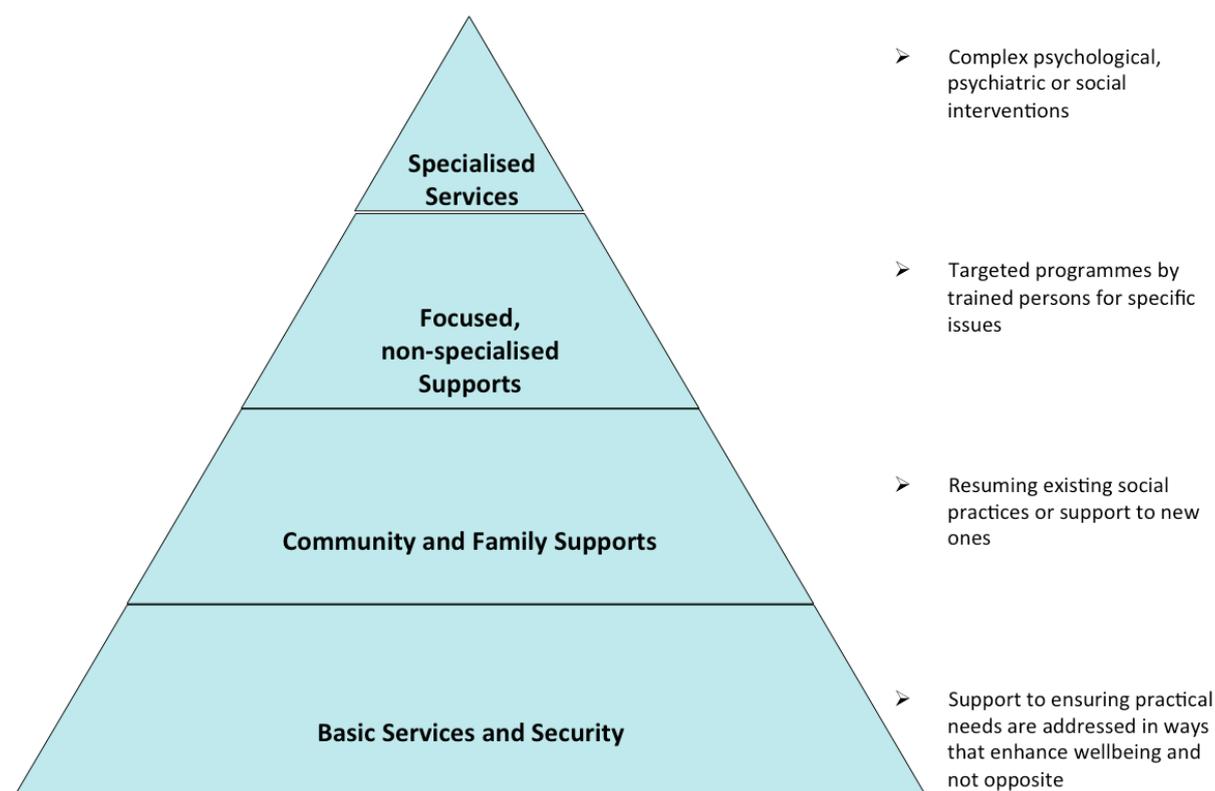


FIGURE 2: INTERVENTION PYRAMID FOR MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT IN EMERGENCIES.

iii. Focused, non-specialised supports

The third layer represents the support necessary for the still smaller number of people who additionally require more focused individual, family or group interventions by trained and supervised workers (but who may not have had years of training in specialised care). For example, survivors of gender-based violence might need a mixture of emotional and livelihood support from community workers. This layer also includes psychological first aid (PFA) and basic mental health care by primary health care workers.

iv. Specialised services

The top layer of the pyramid represents the additional support required for the small percentage of the population whose suffering, despite the support already mentioned, is intolerable and who may have significant difficulties in basic daily functioning. This assistance should include psychological or psychiatric support for people with severe mental disorders whenever their needs exceed the capacities of existing primary/general health services. Such problems require either (a) referral to specialised services if they exist, or (b) initiation of longer-term training and supervision of primary/general health care providers. Although specialised services are needed only for a small percentage of the population, in most large emergencies this group amounts to thousands of individuals.

2.4 Principles of Hobfoll

It is important that interventions after devastation caused by disasters and mass violence are based on the most updated research findings. The heterogeneity of traumatic events and their aftermath makes it difficult to develop specific guidelines that can be used. A worldwide panel of experts was assembled on the study and treatment of those exposed to disaster and mass violence to extrapolate from related fields of research, and to gain consensus on intervention principles. They identified five empirically supported intervention principles, also called the Hobfoll principles, that should be used to guide and inform intervention and prevention efforts at the early to mid-term stages. These are promoting:

- 1) a sense of safety,
- 2) calming,
- 3) a sense of self- and community efficacy,
- 4) connectedness
- 5) hope.

The researchers give examples in their article on how each principle can be addressed with different activities, like psycho education, supporting self efficacy and problem solving appraisal. More information can be found in: “Five Essential Elements of Immediate and Mid-Term Mass Trauma Intervention: Empirical Evidence” (Hobfoll et al., 2007).

2.4 Background information on psychological treatment

Type of treatment

Psychologists and other appropriate mental health providers can help educate people about normal responses to extreme stress and make a plan for moving forward. It is important they provide evidence-based treatments to help people manage their emotions around traumatic events. Most commonly, psychologists use therapy (mostly referred to as psychotherapy or talk therapy). The Association of Psychology mentions on their website that there are many different styles of therapy, but the psychologist will have to choose the type that best addresses the person’s problem and best fits the patient’s characteristics and preferences. Therapy can be for an individual, couples, family or other group. For some conditions, therapy and medication are a treatment combination that works best. For people who benefit from medication, psychologists should work with primary care physicians, pediatricians and psychiatrists on their overall treatment.²

Eye Movement Desensitization and Reprocessing (EMDR)

Eye movement desensitization and reprocessing developed by Shapiro in 1989 is a trauma therapy that can be used whether the trauma occurred several years back or more recently. EMDR therapy aims to activate the individual’s ability to process memories, feelings, and thoughts, thus eliminating memory-related distress, and thereby to cope and thrive in daily life. The method follows a phased protocol involving assessment, stabilization, trauma

² <http://www.apa.org/helpcenter/hurricane-stress.aspx>

processing, and consolidation. Meta-analyses have demonstrated that EMDR is effective with adults (Bisson et al., 2007; Bradley, Greene, Russ, Dutra, & Westen, 2005; Seidler & Wagner, 2006), and EMDR, together with cognitive-behavioral therapy, is the recommended treatment for posttraumatic stress disorder (PTSD). EMDR therapy has also been adapted and used with traumatized children and adolescents with good results (de Roos et al., 2011; Rodenburg, Benjamin, de Roos, Meijer, & Stams, 2009).

Cognitive Behaviour Therapy (CBT)

As mentioned on the website of the American Psychologists Association (APAP): “Cognitive behavioral therapy (CBT) is a form of psychological treatment that has been demonstrated to be effective for a range of problems including depression, anxiety disorders, alcohol and drug use problems, marital problems, eating disorders and severe mental illness. Numerous research studies suggest that CBT leads to significant improvement in functioning and quality of life. In many studies, CBT has been demonstrated to be as effective as, or more effective than, other forms of psychological therapy or psychiatric medications”. (Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A., 2012). CBT has been researched scientifically and further developed in clinical practice over the years, making it a specific form of psychotherapy technique that is evidence based and effective. It is focused on changing thinking, emotional and behaviour patterns.

Cognitive Processing Therapy (CPT)

Cognitive Processing Therapy (CPT) is a specific type of cognitive behavioral therapy that has been effective in reducing symptoms of PTSD that have developed after experiencing a variety of traumatic events. This treatment is strongly recommended for the treatment of PTSD, by the American Psychological Association (2017). Traumatic Events can dramatically alter basic beliefs about the world, the self and others. The therapy focuses on how trauma survivors integrate traumatic events into their overall belief system through assimilation or accommodation. There are 5 major dimensions that may be disrupted by traumatic events: 1) Safety. 2) Trust. 3) Power and Control. 4) Esteem. 5) Intimacy. CPT is generally delivered over 12 sessions and helps patients learn how to challenge and modify unhelpful beliefs related to the trauma. In doing so, the patient creates a new understanding and conceptualization of the traumatic event so that it reduces its ongoing negative effects on current life

Mindfulness Based Cognitive Therapy (MBCT)

In the late 1970s, Jon Kabat-Zinn's pioneering research found remarkable effects of mindfulness on chronic pain and stress. Early in the 1990s, psychologists John Teasdale and Mark Williams (United Kingdom) and Zindel Segal (Canada) reasoned that mindfulness training could have powerful effects in preventing relapse in recurrent depression. They created the 8 week Mindfulness program and began to research its effectiveness. Over the past 20 years, they and others have continued this research. As a result, mindfulness has become part of mainstream evidence-based psychological treatments. Further research is showing that Mindfulness not only prevents serious recurrent depression; it can build resilience that can help people suffering from a wide range of emotional problems: from anxiety, social phobia, panic, and agoraphobia to bipolar disorders and chronic depression.

The Mindfulness course is an 8-week group intervention combining meditation techniques with psycho-education to improve an individual's capacity to manage stress, reduce the

impact of physical and psychological symptoms, and maximize the ability to thrive through all of life’s circumstances. The intervention consists of eight 2.5-hour classes conducted once a week and a 9th session for a guided retreat.

Amount of sessions

The amount of sessions is based on the guidelines of IVP (an organization that is specialized in treatment of traumatic events).

| | |
|--|---|
| No risk factors for disturbed processing of traumatic event: PTSD Type I | EMDR basic protocol: 5 sessions of each 1/2 hours, total of 10 hours |
| Risk factors for disturbed processing of traumatic event: Complicated PTSD Type I | CBT combined with EMDR 15 sessions of each 1 hour, total 15 hours |
| Previous traumatic experiences Complicated PTSD Type 1 Complex PTSD Type II | Or: CBT combined with EMDR 15 sessions of each 1 hour, total 15 hours Or: after intake being referred back with advice |

Compensation

When the client is insured the assessment and treatments will most of the time be covered by the insurance. The psychologist needs a referral letter from the doctor and a copy of the insurance card. The psychologist will write a letter to the insurance to request a guarantee letter. The estimate is, before hurricane Irma hit Sint Maarten, that 80% of the citizens of Sint Maarten were insured. According the site Caribtourism³ at least 2,000 people lost their jobs in the tourist industry during Hurricane Luis in 1995. Including the other industries, we expect that also with Hurricane Irma thousands of people lost their jobs and are now uninsured. There was already a population that had no insurance. Most of these people can’t afford the treatments. Other forms of compensation are required and this has been brought to the attention of the government by the association.

Indication of the costs

How many people need psychological help?

Studies have looked at severe natural disasters, such as the Armenian earthquake, mudslides in Mexico, and Hurricane Andrew in the US. The findings show that at least half of these survivors suffer from distress or mental health problems that need clinical care⁴. A study by Psychologist Annette La Greca and her collaborators (2011) of the University of Miami looked at 384 children who experienced Hurricane Charley, a Category 4 hurricane that slammed into Florida’s Charlotte County in 2004 shows the following. Of the 384 children involved in the study, 35 percent of them showed signs of moderate to very severe post-traumatic stress disorder nine months after the event, and 29 percent reported having comparable levels of PTSD 21 months after the event. Research of professor of Psychology and Pediatrics at the

³ <https://www.onecaribbean.org/#>

⁴ https://www.ptsd.va.gov/understand/types/disaster_risk_resilience.asp

University of Miami, Annette M. La Greca and colleagues focused on the impact of disasters on youth since Hurricane Andrew struck South Florida in 1992. They found that two-thirds of children who are initially distressed after a disaster recover naturally over the course of the school year (BreAnne A. Danzi, Annette M. La Greca, 2017). According to research between 30 and 50% of the people who experienced a hurricane (natural disaster) need psychological guidance (Rhodes et al, 2010). The expectation is that not all people in Sint Maarten who need psychological help will go to a psychologist. One of the reasons for that is that there still seems to be a taboo to find help for mental health problems. Research on the amount of people with PTSD actively asking for help after a shocking event, finds this is only 10%.⁵ This means 90% still suffer from PTSD a year after the event, with all consequences in their life, their daily routine and their job.

⁵ <http://emdrmagazine.nl/2014-1/14-SIG%20in%20beeld.pdf>

Chapter 3. APAP in action after the hurricanes

After the hurricanes in 2017 the members of APAP SXM came together to discuss how we could contribute to the recovery on the island with a focus on our mental well being. When the dust settled, a call out was done on the radio for the members of the association who were on the island to come together. We wish to thank here officially Mrs. Bregje Boetekees (operational manager White and Yellow Cross Care Foundation) who delivered this message on behalf of one of our members and the radio station Laser 101 that was going strong all through and after the storm and was willing to broadcast our message. This made it possible for us to get together and set up a plan.

After checking in with each other how everyone was doing, we brainstormed what we could offer and reached out to other stakeholders to be of assistance where needed. This led to multiple experiences and activities that can be found in this guideline, that we are proud to be able to share with you and hope that it will be of benefit in dealing with the psychological well being of a nation following a natural disaster.

The association invested in giving advice to the government and/or other entities on how to react after the hurricanes concerning the psychological recovery.



Picture 1. First meeting APAP members after the storm

3.1 Psychological Support Plan APAP SXM 2017

The members designed a plan, ordering the activities the members decided to help with as volunteers to be of help to the community. This led to the following psychological support plan that was put in place in the time after the hurricanes:

Goal(s)

- Stimulating, providing and referring to adequate psychological support for the people of St. Maarten (Dutch side) who experienced the hurricanes and the aftermath to prevent or decrease psychological complaints and PTSD, and stimulate an adequate psychological recovery process.

In the direct support and follow up after a disaster three sub goals are distinguished that we follow concerning providing the psychological aid:

- + Stimulating adequate processing and coping of psychological consequences of the disaster.
- + Early recognition of trauma related disorders (like Acute Stress Disorder and Post Traumatic Stress Disorder)

- + Treating these trauma-related disorders as soon as possible with evidence based therapy interventions.

Strategy

We want to stimulate that mental health care on St. Maarten is given with a stepped care approach. Stepped Care is a system of delivering and monitoring treatments, so that the most effective, yet least resource intensive treatment is delivered to people first; only 'stepping up' to intensive/specialist services when clinically required. Essentially, it is about having the right service in the right place, at the right time, delivered by the right person. The following focus areas are formulated:

Prevention

Prevention is the first focus in stepped care. It is common for people to experience very strong emotional reactions with the arrival of a hurricane and its accompanying damage to people's lives, homes and community infrastructure.

Appropriate and available information is very important to have people better informed about what is happening and to get to know their possibilities to cope with it. Furthermore, with this, society can be supported to understand trauma and its consequences, thereby also reducing stigma and discrimination associated with trauma and mental health issues. Again working in collaboration is essential to be able to address the whole population in a stepped care approach.

The message that is advised to be sent out concerning psychological recovery is: "If you are experiencing distress in the wake of the recent hurricanes, you are not alone." Understanding common responses to extreme events can help to cope effectively with feelings, thoughts, and behaviors⁶. We want to provide this information in an outreaching manner.

Indicated psycho education

The step after prevention is indicated psycho education. The focus hereby lies on specific risk groups who are vulnerable to developing psychological complaints. It is generally known that those who have a thorough understanding of the challenges they are facing as well as knowledge of personal coping ability, internal and external resources and their own areas of strength, are often better able to address difficulties, feel more in control of the condition(s), and have a greater internal capacity to work toward mental and emotional well-being.⁷

Specialized trauma treatment

The third step is specialized trauma treatment. Based on the document 'Multidisciplinaire Richtlijn psychosociale hulp bij rampen en crises' (2014) it is advised that people go to the doctor when the complaints are persistent after 4 weeks to get referred to a psychologist. When a client suffers severe acute stress symptoms, an immediate referral to a psychologist is recommended. The doctor will refer to a psychologist/psychiatrist when (s)he suspects a development of a disorder like ASD, PTSD, anxiety or depression. Psychologists not specialized in EMDR use the method cognitive behavior therapy and/or refer to an

⁶ <https://www.apa.org/helpcenter/hurricane-stress>

⁷ <https://www.goodtherapy.org/blog/psychpedia/psychoeducation>

EMDR-specialist when needed. This information will be enclosed by APAP members to the involved professionals through different communication channels (platform meetings, ESF meetings, radio messages, social media etc.).

APAP SXM wants to stimulate the professionals to adhere to the dynamic, phased, empowerment and self-reliance of the client. With this every client can expect an individual approach as it is stimulated to work according to the multidisciplinary guidelines of psychosocial help by disasters and crises.

Investment will be put in place from the association concerning training of the members on the island by being able to get funding for this in the latest advised psychotherapy techniques and to organize these training for their members.

Specific actions

There is a distinction made between the general community and specific risk or target groups that need a more specific approach considering their specific needs. This will be done as follows, translated to the Sint Maarten situation after the hurricane by members of APAP:

General community

- Developing and handing out information brochures, posters and flyers (see attachments) to inform the community of the psychological recovery process after a disaster, stimulating adequate coping mechanisms and recognition when specialized psychological treatment is needed.
- Doing outreaching activities in the community to inform the public verbally about the above mentioned, by joining the health bus which visits the different communities, and getting in contact with government and media outlets (of which, multiple radio stations) to have information spread.
- Stepping up as an association to have initiatives and efforts considering psychological wellbeing after the hurricane collaborated, stimulating good practice and having the activities integrated with local professionals to have positive short and long term effects.
- Informing house doctors about how to stimulate adequate psychological recovery processes with their clients and providing them with indications for referral for psychological trauma treatment with giving workshops and providing them information.
- Keeping in contact with house doctors about referrals and give support where needed (within EOC meetings and outside)
- Providing psychological support and trauma therapy on referral and need.

Specific risk groups

Specific risk groups consist of first aid professionals/first responders, organizations who were active during and just after the hurricane possibly experienced possible traumatic situations and immense pressure. These departments will be offered the following extra support next to the support focused on the general community:

- Providing a psychological information session at the department where the psychological recovery process will be discussed more in detail and the specific needs of the group with active offering of psychological support/trauma therapy.
- Screening of trauma (related) disorders with a trauma screening questionnaire.
- Providing individual therapy sessions, by private practices and Mental Health Foundation and White and Yellow Cross Foundation, where needed (on request or actively offered when indicated according to screening results).

Specific target groups (schools, daycares)

- Reaching out to the different organizations in education and specific daycares to assess the need for additional support
- Providing information about stimulating adequate psychological recovery and when and how to refer for more specialized psychological help to be able to give the right care as soon as possible

Financial support

Based on the literature and our experience we think that at least 30% of the people of Sint Maarten could benefit from professional help from a psychologist or allied professional(s). The current population of Sint Maarten is 40,225 as of Thursday, September 28, 2017, based on the latest United Nations estimates (not including the illegal population). This results in 30% of the 40.225 people, around the 12000 people who are expected to be in need of psychological help in the upcoming years. This asks for sufficient availability of budget and professionals on the island, so that needs advocating for this on different levels.

Funds are needed to make sure that all people, also the uninsured, receive the psychological care that is necessary to prevent bigger emotional problems in the longer term. That in the end will cost the society/ government more money. It is recommended to make this part of the government recovery plan. Endorsement from the government is required to be able to take these steps and provide APAP SXM a platform to inform the public. Furthermore, working together with the different organizations is a key element in this process. Support from the government to stimulate this will contribute to the results in the short term and long term and is therefore very important. This will be done by voicing this message to the government and public and referring to the activities of APAP SXM.

3.2 Looking back on the activities of APAP

Build back better. #SXM Strong. Rebuilding our nation. The years 2018 and 2019 have been very important for the Association concerning building back stronger. In these years members of the association continued to come together to unite their knowledge, effort and ideas to support the community, organizations and government of Sint Maarten in the aftermath of the hurricanes in 2017 on the psychological well being.

This resulted in writing and executing the earlier mentioned action plan with activities that were offered by the members as volunteers shortly after the hurricane. They joined meetings with different stakeholders to discuss the importance of mental health in the recovery phase,

contributed at different events like the Hurricane Expo in 2018 and 2019 with providing information about psychological recovery, designing and handing out flyers and posters about this topic and giving presentations about this topic to interested persons. The members actively supported, in collaboration with the Ministry of TEATT and VSA, several organizations with workshops to provide psychoeducation and actively screened for persons who are at risk to give more tailored advice and/or be able to refer them to more individualized help.



Picture 2, 3 and 4. Some impressions of the activities after the hurricanes

There were also project plans that received funding. APAP was able with funding of the 'Ministerie van Volksgezondheid, Welzijn en Sport' of the Netherlands and of the 'National Disaster Fund (NRF)' to organize training and supervision in CBT, EMDR and Mindfulness for their members to enhance their therapy-skills. Besides this they organized mindfulness community training for multiple groups of persons at risk for psychological problems in dealing with stress. This manual is also a result of funding from the NRF, to share the knowledge and experiences in a broad manner.

In collaboration with the Department of Communication (DCOMM), APAP SXM was able to go on radio and in the end resulting our own radio show Next Level Thinking (NLT). In 2018/2019 10 episodes and for 2019/2020 another 5 episodes were recorded at the DCOMM, a department that falls under the Ministry of General Affairs. As mentioned in the press release (Government of St. Maarten, 5th of November 2019) NLT came about after the group, APAP SXM, was recognized as an instrumental key stakeholder by the Ministry of Public Health, Social Development & Labour (Ministry VSA), post Hurricane Irma, to help the general public at large to understand and deal with Posttraumatic stress disorder (PTSD) among other mental health topics.

Several APAP SXM members collaborated with several stakeholders, like the government, care organizations, Red Cross and volunteer organization K1 Direct, to train persons in psychological first aid. To make them able to address it in the current situation and how you can prepare to address this manner for future situations. For example some departments in government received training and also the volunteer team K1 DIRECT from K1 Britannia, who could immediately put it in use when being deployed to the Bahamas in 2019 after hurricane Dorian.



Picture 5, 6 and 7. Some impressions of the activities after the hurricanes

Also steps were taken to invest in the quality of the profession on the island. A process where the Association is building back stronger and is noticeably also more and more recognized by the government and other entities as an important stakeholder within the field. To conclude, 2018 and 2019, years to be proud of, years in which the Association has shown her own resilience and supported the resilience on the island where possible.

Are we then done concerning the activities related to this topic? No, it is a step towards a better situation, but it will need ongoing attention and investment from all parties involved to keep this going and get the attention it deserves. The association hopes that with this manual mental health will get the attention it needs, that it will continue the discussions and inspire other entities and professionals to join APAP SXM improving mental health, in specific the psychological recovery and resilience to deal with natural disasters and its aftermath.

It also serves as a plea that this topic is integrated in the preparation and recovery plans concerning disaster management, where the psychosocial aspect needs to have the attention in the form of different activities. Like the psychological first aid, to (continue to) invest(ing) in having persons trained in this skill and/or linking professionals in a network to be able to collaborate in a swift manner when needed. On a personal level, what can you do yourself in your private circle to support the persons around you, but also on an organizational level: what can you implement to address the psychosocial needs of your staff when needed. It is time to think about this, after the lessons learned it is clear that this needs to be addressed. We hope this manual is shared and read by all involved in this topic and that it gives inspiration to involve activities in your activities related to the recovery and/or preparation of (natural) disasters.

Chapter 4. First scientific findings concerning epidemiology

4.1 Beginning of the research activities

After the hurricane in 2017, APAP distributed questionnaires to gather information about the psychological well-being of people. With this data APAP was aiming to write a scientific article to provide first findings about the percentage of people that need additional assistance after a natural disaster in the Caribbean. This is valuable information for the country of Sint Maarten. A research workgroup of 4 APAP members was established to work on this article. The data was collected, the introduction and method was set up in 2018. Analyzing the data and finishing the research article was on the agenda for 2019. This was all done in volunteer time of the members, without funding and/or outside support of other institutions.

4.2 Research article

The psychological impact of Hurricane Irma on individuals living on St. Maarten: a first exploration of the numbers

Introduction

“I remember the day before [...] when I was standing in front of my house and watched the waves.. throwing themselves on the beach where the water was already touching my feet. The ocean was rough, it was like they were already warning us of the monster... that was finding her way to our island. I was just standing there... little did I know at that moment how different it all would be a day later, that Irma literally would throw everything upside down. That i would be sitting next to my house a day later, looking at my belongings scattered around while the sunlight kisses my skin due to the missing roof that went with Irma.”

“The wind took the door and my body started to shiver uncontrollably from the cold rain and the fear. I kept my dog close to me while I was trying to remain safe under the bed. At some moments it feels like I am back at that spot, even when the storm is long gone now. A hint of the wind, a sudden noise that reminds me of the storm. And there I see the door going again in my minds’ eye.”

“I can’t believe that I slept through the whole experience. When I woke up, the world was upside down. Trees fell down, houses were damaged and people were walking around with a dazed look in their eyes. My house is fine, it survived, but not everyone has been that lucky. I invited some of the people in my house for shelter. It is busy now. Some social gathering of a kind, but for a reason we rather would not want to have experienced: the storm of the worst kind: a devastating monster’.

These are some of the stories that were told by persons after going through a natural disaster that is called a hurricane. The experience can be intense, and different among persons. Just as the outcome: on both physical/materialistic as psychological level.

Natural disasters are hardly a novelty in the Caribbean region. When you live in a hurricane prone area you can experience tropical storms, rowdy ocean waves and high speed wind yearly in the

season. However, for the past hurricane seasons the Caribbean has been tormented with more severe hurricanes than before.

For a country and its citizens, experiencing a hurricane can have severe negative short- and long-term effects. A natural disaster, such as a hurricane can overwhelm local response capacity and seriously affect the social and economic development of a country (Anderson, 1990). According to the United Nations Development Program (UNDP, 2004) as stated in Bourque et al. (2006), hurricanes have a direct effect on the public's health by causing deaths, injuries, infectious diseases and psychological distress. Overall, the closer the person is to the actual disaster, the greater the risk of long term mental health problems (Galea, Nandi and Vlahov, 2005). Also according to Anderson and Woodrow, 1989, as cited by Céline Charvériat (2000), sudden disasters such as hurricanes can have a profound psychological impact on victims, which results in higher stress symptoms, increase of alcohol use, violence and depression. Exposure to a disaster directly or indirectly can have various personal and communal consequences. Personal consequences might include loss of property, health, health care routines and family members who died or moved away. Communal consequences could be loss of jobs, social networks, schools, sports and culture. According to Giarratano et al. (2014) feelings of loss and grief can become more complicated when experiencing sudden personal and communal losses simultaneously because this can result in the loss of support structures such as social networks, churches and other places of rituals or comfort. In 1980 the term Post-Traumatic Stress Disorder (PTSD) was introduced in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (American Psychologist Association, 1980). Since then, the professional relief community has started more and more recognizing the importance of tending to both physical and mental health care after a disaster. In the post-disaster period the priority of the immediate responders is to save lives, rescue those at risk for further injury and begin psychological first aid (Giarratano, 2014). However, on an island like Sint Maarten mental health care still seems to be stigmatized and to a certain extent you even might say undervalued. The importance of psychological help before, during or after a disaster needs further attention on different levels; this article intends to offer more insight in this matter for St. Maarten specifically .

Setting

Sint Maarten is a small multicultural island in the Caribbean, with a population of 42,083 (est. 2017) on an area of 13 square miles. It is a constituent country in the Kingdom of the Netherlands. Hurricane Irma made landfall on the island with wind speeds of 185 miles per hour on September 6th, 2017. The hurricane caused extensive damage internationally and devastated the community of Sint Maarten. According to a survey of the Red Cross nearly a third of the buildings in Sint Maarten had been destroyed and over 90 % of the structures on the island had been damaged (Deutsch, 2017). Reports indicate that nine thousand people had evacuated the island after the passing of the hurricane. Two people reportedly lost their lives. Two days after the disaster a state of emergency was called on Sint Maarten. Despite the fact that the Emergency Operations Center (EOC) had one of their Emergency Support Function (ESF) groups focusing on public health and the matter did get attention, it quickly became evident that the specific mental health after-care required for those affected by hurricane Irma was something that needed to be further developed.

Post-traumatic Stress Disorder

According to Norris, Friedman, & Watson (2002), most victims of disasters, terrorism or other shocking events recover on their own volition. Although not everyone who experiences a disaster will develop psychopathology, all persons affected by the disaster will experience some degree of stress, anxiety or fear (Giarratano et al., 2014). These symptoms can develop into Post-traumatic Stress Disorder (PTSD). As described in the DSM-V (American Psychologist Association, 2013), PTSD is a

psychiatric disorder resulting from experiencing or witnessing a traumatic event. Research has shown that there are several factors which can contribute to the development of PTSD. According to Berwin et al. (2000), factors operating during or after the shocking event, such as severity of the event, lack of social support and additional life stress have stronger effects on the development of PTSD than factors present prior to the shocking event, such as gender, race, education, age at trauma, intellectual level, social status and psychiatric history. Furthermore, Deahl and Bisson (1995) state that accident and emergency personnel, hereinafter called first responders, can experience psychological symptoms such as fatigue, sadness, dysphoria, poor concentration, heightened arousal and anxiety, guilt, anger and feelings of helplessness, identification with victims and intrusive thoughts that interfere with work. Nonetheless, psychological distress may also occur in 'second-line' support workers, such as administrators, volunteer workers and the families of emergency staff.

There is little information available from epidemiologically-based studies on the prevalence of PTSD or impact for persons on psychological level of disasters in the Caribbean. As Sint Maarten is located in a high risk area for hurricanes, insight in the consequences of a hurricane is very important. Furthermore, understanding the effects of disasters such as Hurricane Irma on an island like Sint Maarten is crucial to the planning and organization of mental health care in disaster relief. Therefore, the aim of this study was to take some first steps in gathering information regarding mental health consequences of a disaster for persons residing on St. Maarten. The following research questions were formulated:

- To what extent do people experience posttraumatic stress symptoms?
- What is the impact on the general psychological well being of persons?

We are hoping to support healthcare providers and policy makers in matching aftercare services to the problems of the target group and instituting appropriate measures for future disasters, with a better understanding of the psychological impact on individual and community health.

Method

The information was gathered during the months October, November and December 2017 on Sint Maarten with the use of paper questionnaires.

Respondents:

The data for the present study was collected from a group of employed citizens of Sint Maarten after the passing of hurricanes in 2017 on the island. All attendees were given a questionnaire to fill out after an information session, requested by their employers, given by the Association of Psychologists and Allied Professionals (APAP). APAP members offered these sessions, free of charge, to provide psychoeducation about psychological recovery after a natural disaster and to do additional individual screening for psychological well-being and personal and organizational follow up advice. This initiative was voluntarily set up by the members of the association to assist the community during the aftermath of the hurricanes.

Instruments:

Impact of Event Scale Revised (IES-R)

The IES-R is a 22-item self-report measure that assesses subjective distress caused by traumatic events. It is a revised version of the 15-item IES (Horowitz, Wilner, & Alvarez, 1979). The IES-R contains seven additional items related to the hyperarousal symptoms of PTSD, which were not included in the original IES. Items correspond directly to 14 of the 17 DSM-IV symptoms of PTSD (Weiss & Marmar, 1997).

Respondents were asked to identify a specific stressful life event and then indicate on a 5-point scale ranging from 0=not at all to 5=extremely, how much they were distressed or bothered during the past seven days. The IES-R yields a total score (ranging from 0 to 88). In general, the IES-R is not used to diagnose PTSD, however, cutoff scores for a preliminary diagnosis of PTSD have been cited in the literature (“Impact of Event Scale - Revised”, n.d.).

Demographic variables / Global Assessment of Functioning (GAF)/Traffic Light Score

Demographic variables were included to get a better understanding of the characteristics of the respondents. Assessed was: gender, age, marital status, earlier experience of hurricanes, living situation, educational attainment, birthplace and years of living on St. Maarten. They were assessed with additional question items to the IES-R.

The Global Assessment of Functioning (GAF) was added to the questionnaire as a self report score. The GAF score is an assessment instrument that is known and utilised worldwide. It is widely used for rating the severity of illness, by mental health professionals but also seems to be a good indicator when used as a self report (Monrad Aas, 2014). The higher the score, the better the psychological well-being is perceived to be for the person. The general psychological well-being was added to the questionnaire as a scoring item: persons were asked to score themselves on a 10 point-Likert-Scale how they feel at this moment in general.

The GAF score together with the total scores on the IES-R resulted in a ‘green’ ‘orange’ or ‘red’ score. Respondents received a follow-up email, letter or call by the involved APAP member with their results and advice related to this specific score. By adding the GAF-score not only respondents with PTSD symptoms were traced but also the respondents who experienced no PTSD symptoms but still felt worse because of secondary complaints.

| Score | IES-R | GAF-score |
|--------|---------------------------|-------------------------------|
| Green | Low scores <24 | Positive functioning = 8 - 10 |
| | | |
| Orange | High scores ≥ 33 | Positive functioning = 8 - 10 |
| | Clinical scores = 24 - 33 | Average functioning = 6 - 7 |
| | Low scores = < 24 | Negative functioning = < 6 |
| | | |
| Red | High scores ≥ 33 | Negative functioning = < 6 |
| | High scores ≥ 33 | Average functioning = 6 -7 |

Table 1. Norms IES-R and GAF-Score

Statistical analyses

To answer the research questions, descriptive statistics were determined and visual charts were made to give a better insight in the specifics of the data. This was also done for the involved

Results

As a first step the dependent and independent variables were examined on accuracy of data input and missing values. There were several missing values found for the IES-R, the GAF score and several demographic values.

The variable 'Experienced Other Disasters' has been deleted from further use in the analysis, because of the high amount of missing values (31 of 294). The use of this question in the questionnaire was also reviewed as not reliable after use and decided not to use anymore. There was no clear definition given about 'other disasters', making this question open for interpretation. Furthermore another question in the questionnaire focused on experiencing other hurricanes prior. This question gives more insight in an individual's former experiences with hurricanes.

The IES-R allows a maximum of 10 (%) percent of missing values. Unfortunately the data of 25 respondents had more of that. It was checked if it would matter significantly to leave the data out. For this the PTSD symptoms were compared with the demographic variables (with an Independent Samples T test). This was not the case, leading to the assumption that the missing data was completely at random and were deleted from the dataset. For the remaining respondents, the mean of the total scale has been used for further analysis for continuous variables if data was missing (below 10 %).

Descriptive statistics

Gender:

The eventual set of respondents used for analysis consisted of 294 persons: 36.99 % were males and 63.01% were females. They worked at the different participating companies and organizations on St. Maarten.

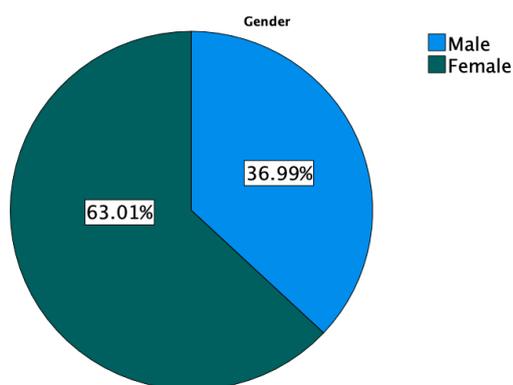


Figure 1. Gender

Living situation:

The majority of respondents indicated to live with others (family, friends or partner): 82.3 %. Out of all respondents, 15 % indicated to live alone. A small percentage of 2.7 % of the respondents did not fill out this question.

Marital status:

Additional examination of the data showed that a plurality of respondents was single and never married (47,4 %). A percentage of 42.56 % was married or in a domestic partnership. Some of the respondents were divorced (6.8%), widowed (1.4%), or seperated (1.7%). A small percentage of 1.7 % of the respondents had missing values for this question.

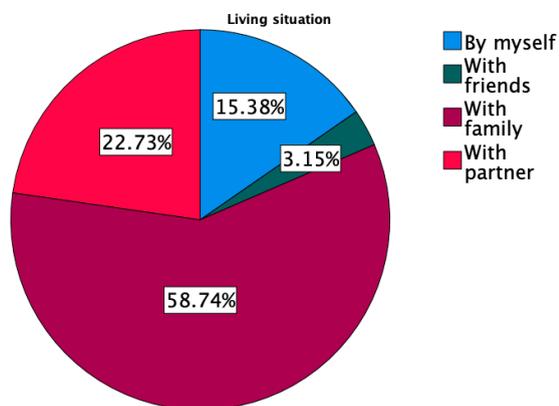


Figure 2. living situation

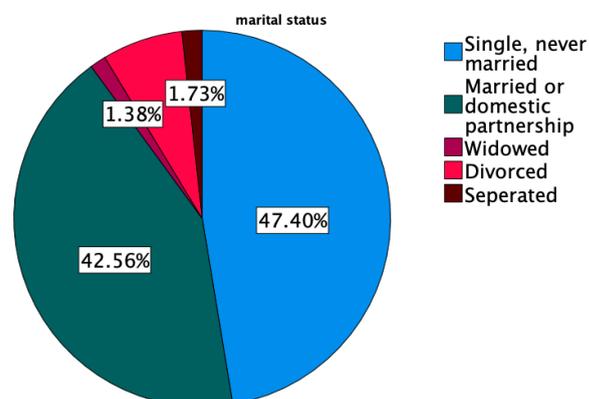


Figure 3. marital status

Birthplace:

A plurality of respondents reported to be from St. Maarten (46.6%). There were various other birthplaces reported from all over the world. However most respondents reported to be from Curacao (11.3 %), Aruba (9.25 %) and Europe (6.16%). Only two persons (0.7 %) did not fill out this question in the questionnaire.

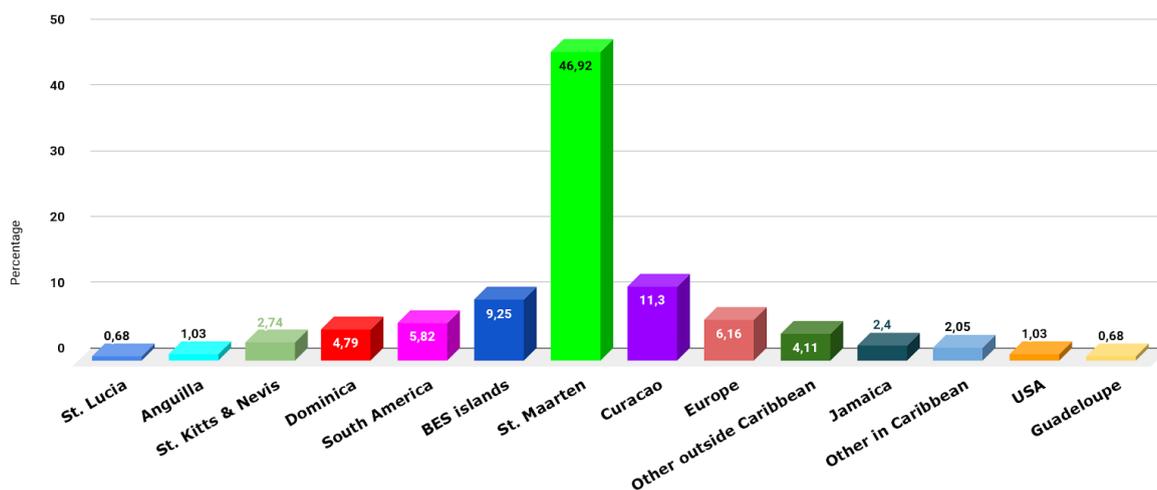


Figure 4. Birthplace

Educational level:

A total of 4.4% left this question unanswered. Of the ones answered, a plurality of respondents indicated to have their high school diploma (29.89). A percentage of 21.71% reported to have a bachelor degree. Further details can be seen in table 2.

In table 3 the descriptive statistics are presented from the other analyzed variables: the total score of the IES-R, the GAF score, age of the respondent and the amount of years living on St. Maarten.

| | Percentage (%) |
|--------------------------|----------------|
| No formal education | 3.2 |
| Basic education | 6.05 |
| Secondary education | 52.31 |
| Post Secondary education | 9.96 |
| Tertiary education | 28.48 |

Table 2. Educational level

| | N | Minimum | Maximum | Mean | Standard Deviation |
|-----------------------------|-----|---------|---------|-------|--------------------|
| IES-R score | 294 | 0 | 86 | 18.52 | 16.07 |
| GAF score | 243 | 0 | 10 | 7.39 | 2.08 |
| Age | 288 | 17 | 71 | 39.11 | 11.19 |
| Years living on St. Maarten | 272 | 1 | 58 | 26.91 | 13.46 |

Table 3. Descriptive statistics IES-R score, GAF score, age, years living on Sint. Maarten

Post Traumatic Stress Reactions

With the IES-R the post traumatic stress reactions of the respondents were inventorized. The data showed that 28,06 % of the respondents report post traumatic stress reactions that can be considered a clinical score or above the cut off score. This could indicate a Post Traumatic Stress Disorder (PTSD). A percentage of 71.95 % report scores that are not of clinical concern.

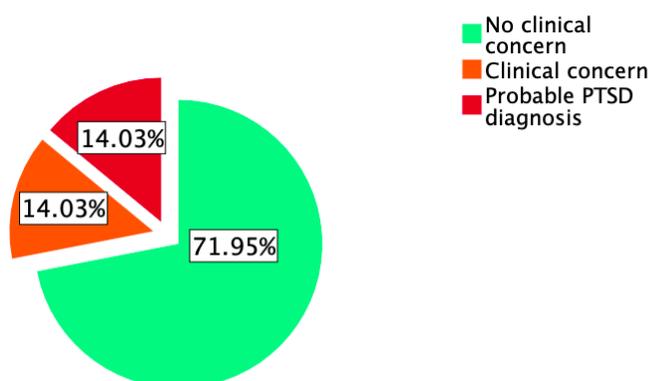


Figure 6. level of PTSD symptoms reported

Global Assessment Functioning

Concerning the Global Assessment Functioning a total of 82.7 % scored themselves. From these scores the following information is relevant to know: 17.3 % of the respondents score themselves below 6. The majority (82.7 %) give their level of global functioning a score of 6 or higher.

Traffic Light Score

The GAF scores in combination with the scores on the IES-R, - were divided in three groups. Each participant received information about their current psychological well-being and specific advice according to their needs, based on the group they were classified into. The groups were given the colours of a traffic light: green, orange and red. Out of all respondents, 65.76 % fell within the 'green' group. They were informed and given general advice concerning self care. A group of 27.17 % of the respondents scores were categorized as orange. This group was advised to invest extra in self care, actively monitor their complaints and functioning and seek extra support if needed. A smaller group of 7.07 % were categorized as red, which indicated a probable PTSD diagnosis and a functioning below average in general. This led to the advice to seek professional help immediately.

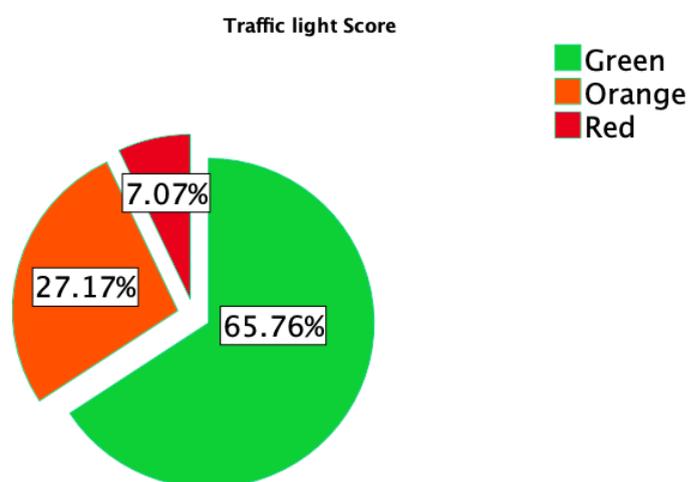


Figure 7. Traffic light scores.

Discussion

In total 294 persons filled out a questionnaire regarding experienced symptoms after exposure to Hurricane Irma. Despite that this sample cannot be seen as a total representation of the community of St. Maarten, it can offer some insight in the local experience concerning the psychological impact of a natural disaster on Sint Maarten.

Looking at the number of persons reporting post traumatic stress reactions that could indicate a diagnosis of PTSD or at least to be of clinical concern, results are in line with the literature elsewhere in the world. A systematic research study shows that the body of research conducted after disasters in the past three decades suggests that the burden of PTSD among persons exposed to disasters is substantial (Neria, Nandi & Galea, 2008). Other literature shows more specifically that experiencing a natural disaster can lead to increased prevalence of mental illnesses in the range of 5 to 40 % (Galea, Brewin, Grever et al., 2007). From the respondents in this study that filled out the questionnaire after the hurricanes in 2017 in Sint Maarten, approximately 28 % showed a clinical concern. This is a substantial amount of persons experiencing post traumatic stress complaints. The majority (82.7%) scored themselves on a sufficient level in general functioning, leaving 17.3 % who felt not able to

generally function adequately at the time of the screening. When these numbers are combined a group of 34.24 % indicates having problems functioning and/or coping with the situation on either a general level, post traumatic stress reactions and/or both. The group of 7.07 % that report to have a probable amount of symptoms that could warrant a diagnosis of Post Traumatic Stress Syndrome together with low score of global functioning indicate to be seriously affected. Looking at the difference between the percentage that scores on a sufficient level in general functioning (82,7%) and the percentage of respondents that report symptoms of PTSD of clinical concern plus the percentage of respondents with a probable PTSD diagnose (total 28,06%), it appears there is a quite large group of respondents that experience severe symptoms of PTSD but still manage to function generally. This raises hypotheses about whether this group is very resilient and possesses (or even because of) adequate coping strategies, or whether this group is suppressing or ignoring the symptoms and/or might avoid stressors in daily life to continue functioning. This is an interesting find, as it leads to new research questions concerning coping strategies they might not only use after experiencing a hurricane, but also to deal with other stressors in life. Since inadequate coping strategies generally only result in short term solutions but can add (secondary) problems like financial problems, relational problems and addiction) in the long term (Zimmer-Gembeck, Skinner, 2016), follow-up research would be recommended that includes assessing coping strategies right after a major disaster like a hurricane or earthquake, next to symptoms of PTSD, and a follow-up that includes both to see whether long lasting symptoms are related to the coping strategy that has been applied.

Further statistical analysis has not been done due to time limitations and experience in this matter, next to other methodological limitations in the research design (like small sample size leading to small power, no normal distribution of the variables and a high amount of missing values). It is important that further training and research will take place on this matter, to get a better local understanding of the impact of this matter so policies and interventions can be more specifically tailored to the local situation.

A footnote is that the research design and information discussed is limited. The time investment of the psychologists was on a voluntary basis and has been more focused on giving the information and services to the individual persons at the time. Additionally, the questionnaire was not specifically designed for a research study. More detailed information can probably be assessed with the collected data with more time and knowledge concerning the statistical procedures available. It is therefore recommended to further analyze this data as it could lead to interesting insights, for example whether having experienced disasters before influences the psychological functioning of the persons and in what matter. Another insight could be whether there are other factors we need to be aware that can positively or negatively influence the psychological impact so more specific targeting of needed support and interventions can take place.

Another remark is the timing of the screening. Just like it has been explained during the sessions itself: 'it is normal to feel abnormal at first after an abnormal event'. The aftermath of the hurricane was still unfolding itself during the time that the sessions and this screening took place, rebuilding and recovery was ongoing and many persons were still in stressful situations related to the consequences of the hurricane. Having psychological complaints can be expected and should not be seen as abnormal directly after the event. What would really give more insight is to do a follow up and to see how the complaints develop over time. When the dust starts to settle, more insight can be gained on the psychological imprint. Some clarity could be gained on how post traumatic stress disorder symptoms develop for persons or how their general functioning seems to be affected over time. Another note is on the selected target group. The respondents in this research still had a job and an income. It can only be imagined how this natural disaster must have impacted the persons

without a job or those who lost their job. It can be expected that this group would have a higher increase of psychological complaints and/or decrease of functioning. Nonetheless, it will remain difficult to establish a control group as there is no general data available to compare those who experienced a natural disaster to those who did not. Despite that, even without a control group, it can at least give some insight and more specifically justification for specific decisions and interventions or allowing sufficient professionals to practice within the field. As mentioned before, mental health seems to be still a taboo among the majority of people, it has been only described in the national recovery plan and even with an increase in psychological complaints after a natural disaster the number of practicing psychologists on Sint Maarten is unfortunately still restricted to a small group by the manpower planning by the government. Continuing to advocate for sufficient time, programs, funds and support of professionals remains important for this matter going forward.

Conclusion

All together, these numbers clearly show the psychological impact of the hurricane for Sint Maarten in the first months after the hurricane. It underscores that it is important that this gets the attention it deserves with psychological services and/or psychosocial support programs because at least a third of the persons are impacted by it in a substantial manner. It hopefully inspires professionals to collect data to substantiate policy decisions, even during the challenging time of the aftermath. Further actions and initiatives would be recommended in this matter to build on this, where extra time and expertise would probably even lead to more interesting insights within the psychological field. We invite and stimulate everyone within the field to continue on this path. The ambition of members of our association is to continue on this route ourselves, with the intention to further develop our skills in this matter and where this data or possible new data in the future..

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Endnote

With this document, being a clustering of background information, efforts and experiences during the psychological recovery and aftermath of Hurricane Irma and Maria from 2017-2019, we aimed to provide general insight into the consequences of these hurricanes on our mental health and the importance of including mental health in our National Recovery Plan.

APAP SXM wants to emphasize an important statement made by the World Health Organization (2013) saying that the health sector and multisectoral coordination mechanisms at local and national levels are needed to facilitate joint action on risk reduction, response and recovery by the various health and non-health actors. Be informed about the different categories of psychosocial help which are needed in the different phases of/after a natural disaster (Dr. M. Dückers et al., 2017) and incorporate stepped care in the recovery plan.

The association hopes that this manual contributes to the inclusion of mental health and that it will inspire other entities and professionals to join APAP SXM in improving mental health, in specific the psychological recovery and resilience to deal with natural disasters and its aftermath. The data collected substantiates the importance of continuing the efforts made and raises even more questions about our mental well being and how we cope with disasters. Sint Maarten people might be resilient, but that does not mean it doesn't need investment. Resilience is not a never ending source, it needs nourishment and care. Rebuilding is something we do together, by being connected and empowered.

Especially in these times that we are in in 2020, where the pandemic of COVID-19 gives us multiple challenges on several levels that can impact our mental health, we find it is important to bring this message forward.

Learn about psychological first aid, what you as an individual can do for your loved ones, for your neighbor, for a stranger. Practice the Hobfoll principles while providing your support. Know how to look, listen and link to the next step in stepped care when necessary. On an organizational level be prepared in taking care of your staff, provide preventative training in stress regulation and the recommended psychosocial first aid training in case a disaster strikes. Have a plan set in place in advance of hurricane season. To continue your business, you need your team! Are you part of a (mental) healthcare organization? Make sure you reach out to partners in the field, set up collaboration in advance, so we can continue to rebuild together. Together we can achieve more!

It also serves as a plea that this topic is integrated in the preparation and recovery plans concerning disaster management, where the psychosocial aspect needs to have the attention in the form of different activities besides only being described. Like the psychological first aid, it would be recommended to (continue to) invest(ing) in having persons trained in this

skill and/or linking professionals in a dynamic and up to date network to be able to collaborate in a swift manner when needed.

It is time to not only think about this, after the lessons learned it is clear that this needs to be addressed. So time for action. How many projects do we currently have focusing on Mental Health on St. Maarten? We say it is time for some more. If not now more than ever.

We hope this manual is shared and read by all involved in this topic and that it gives inspiration to involve activities in your activities related to the recovery and/or preparation of (natural) disasters. We thank you for your time investment in reading this manual and we would specifically like to thank the members of the association for their work and the National Disaster Fund to be able to publish this document.

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- <https://www.apa.org/helpcenter/hurricane-stress>
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Appendices

Appendix 1: Overview of information by APAP

APAP developed several information materials doing outreach activities in the community to inform the public verbally about psychological recovery after hurricanes, by joining a health bus and getting in contact with government (ESF 6 meetings) and media outlets (of which, multiple radio stations) to have information spread. Several businesses and organizations received information sessions and screenings. Information developed by APAP SXM:

- Press release (appendix 2)
 - o Facebook APAP SXM
 - o Daily Herald
- Radio (SXM, SABA, Statia)
 - o Public Service Announcement (PSA) (appendix 3)
 - o Interviews on several radio stations
- Social Media
 - o FaceBook APAP SXM
 - Shout out (appendix 4)
- Brochure: Psychological Recovery of a Disaster (appendix 5)
 - o Version for GP's and on facebook APAP SXM
- Drieluik (appendix 5)
- Flyer (A5) (appendix 6)
 - o Op government site
 - o Shared during different events
- Posters (appendix 7)
 - o Adolescents (2)
 - o Parent version
 - o Regular (hurricane brain with coping advice)
 - o Parent version for kids

Appendix 2: Press-release

In the early morning of September 6, 2017, Hurricane Irma made landfall on the island of Sint Maarten. When she left, she took a great deal with her. She took lives, roofs, cars and complete buildings. Next to these material goods, she also took the island's feeling of safety, predictability and control, leaving the people of St. Maarten with a lot of questions and worries on how to move ahead.

Experiencing such a shocking event can severely impact the citizens of Sint Maarten emotionally. In the aftermath of Irma, The Association of Psychologists and Allied Professionals of Sint Maarten (APAP SXM) is focusing on providing psychological help and support to the community.

By means of stepped care, we are initially reaching out and providing the community with information on the process of psychological recovery. Via various media outlets we are explaining the people of Sint Maarten what to expect and how to deal with the psychological impact Irma made on them. We also offer workshops/presentations to health care workers and other private businesses on the psychological effects of experiencing a disaster. Furthermore, we aim to collaborate with the various organizations and entities that have a role in the psycho-social recovery of Sint Maarten. Organizing and streamlining these many efforts into one, will not only strengthen the **support that is offered** but also ensure quality mental health care.

It is important to realize that stress reactions are normal at first and are needed to process the disaster you have experienced. Some people might experience stress reactions such as anxiety, getting easily frustrated, anger, difficulty concentrating, tiredness or not being able to sleep. In most cases these stress reactions decrease over time. Additionally, to help the process it is important to give yourself time to adjust. It will take some time for things to go back to normal, so it will also take some time before you will feel normal. In the meantime try to share your experiences and express yourself. Try to get back to your regular routine as soon as possible and do not hesitate to ask for support from others.

In case the stress reactions you are experiencing are very severe or do not seem to decrease over time, please contact your house doctor, who can refer you to one of our specialists for trauma therapy. There are proven techniques and therapies available on the island that can help. You can find us on Facebook or contact us via email (info@apapsxm.com), or your house doctor!

APAP SXM

Appendix 3: Public Service Announcement

After a natural disaster it is normal to feel abnormal. During a disaster most people function on auto pilot. This ensures our survival by helping us do what is necessary. Once the dust settles we may start to feel different stress reactions like:

- Exhaustion
- Panic attacks
- Feelings of guilt
- Overwhelming sadness
- Feelings of being lonely or withdrawing
- Becoming easily angered

Realize that these reactions are normal at first. In most cases it is expected they will decrease within a few weeks. Here are some helpful tips you can use to cope:

- 📄 **Be patient with yourself.** Realize that this is a difficult time and allow yourself to mourn the losses you have experienced.
- 📄 **Share your experience.** Communicate in any way you feel most comfortable by talking with others or writing it down.
- 📄 **Take good care of yourself.** Do activities that you like, eat healthy and regularly, get enough sleep, exercise and help others where you can.
- 📄 **Express your emotions.** Don't ignore your feelings, crying can help
- 📄 **When your emotions overwhelm you, find healthy distractions** Avoid use of drugs and excessive alcohol.

If your stress reactions are severe, the tips mentioned before have not proven helpful, or your symptoms do not decrease in time, it is important to seek professional help. Speak to your house doctor, they can refer you to a specialist or support figures. There are proven techniques and therapies available on the island that can help.

This public service announcement has been brought to you by the Association of Psychologists and Allied Professionals of Sint Maarten. Find us on Facebook at A.P.A.P SXM

Attachment 4: Shout-out

“Coming together is a beginning, keeping together is process, working together is success” - Quote Henry Ford

APAP is reaching out to:

- all professionals (on and off the island)
- people who are taking initiatives to help out
- businesses, organizations and individuals who need support in regards to the psychological recovery after the hurricanes.

APAP wants to bring all initiatives together, in an effort to guarantee good quality while serving the psychological needs of the people of St. Maarten.

APAP is not a business but an association of psychologists and allied professionals. Our members are affiliated with (mental) health care and educational institutions, have various backgrounds and are equipped to support the diverse needs of our community. Our association promotes the use of high quality, consistent and structural practices in the field of mental health care. We strive to ensure that the interventions used on the island are following the latest scientific guidelines.

We aim to bridge gaps between the different organizations and professionals on the island. We are currently working together with the government, Red Cross and various organizations to set up psychological services with follow-up. In collaboration with the Student Support Services Division we are offering the educational field assistance where needed. From the Netherlands we get support from Maartje Bakker, who used to work on the island as a psychologist.

By collaborating we can join forces and knowledge to better serve the people of Sint Maarten to get them the help they deserve to get back on their feet. Are you an organization or individual who is working in the mental health care field? Or are you looking to contribute? Please contact our association in an endeavor to streamline our efforts.

Last but not least we are asking the people on St. Maarten who are looking for psychological help to contact us. If you know someone or you notice that others need help you can also reach out to us. With this information we can find you the right help.

Appendix 5: Information brochure + folder



Psychological recovery of a disaster



Nobody can fully prepare for a disaster or the aftermath of a disaster. Even when you have not acquired a physical injury as a result of a disaster, it can take an emotional toll on you. This folder is written to inform you about this. Understanding the responses to these abnormal events can aid in coping effectively and help you along the path to recovery.

What actually happens?

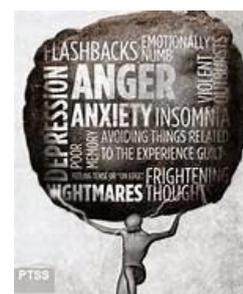
During a disaster most people tend to function on 'automatic pilot'. This mode of functioning ensures you do that what is needed to survive. While one person might feel as if they were watching a movie, another does not remember much of it. The way a person experiences a disaster is caused by fear. Fear is a normal reaction when there is realistic danger and is often accompanied by physical features (like a faster heartbeat, shortness of breath, hyperventilation and muscle tension). This bodily response to danger is caused by the activation of the autonomic nerve system: your body is preparing to fight or flight. Some people experience a 'freeze'. It is difficult during this mode to process what you are experiencing. After the disaster some people get into shock. They can experience numbness and/or be in denial at first. When the first shock has passed most people experience disbelief or astonishment. Other stress reactions can occur like:

- **Fear and anxiety or feeling tired/ fatigue, nausea or panic attacks**
- **Difficulty concentrating, headaches and shaking**
- **Overwhelming sadness or feelings of guilt**
- **Anger/easily frustrated or heightened awareness**
- **Feelings of being lonely, withdrawing yourself**

How to cope with it?

It is important to realize that the stress reactions listed above are normal at first and are needed to process the disaster you have experienced. Some people experience these reactions just for a few minutes but for others it can last a few hours to even days. When you are on 'auto-pilot' while experiencing a disaster your system needs to reprocess everything properly afterwards which can give the above mentioned reactions as a side effect. These stress reactions can also have a delayed expression. In most cases it is expected for the stress reactions to decrease (in principle) within 8 hours to a few weeks after exposure by itself. Things that you can do that can help to cope with it are:

- 📖 **Give yourself time to adjust.** Realize that this is a difficult time in your life and allow yourself to mourn the losses you have experienced. Be patient with yourself and the emotional rollercoaster you might be on.
- 📖 **Ask for support.** Share your needs with people around you who can listen and empathize. This can be family, friends or your general practitioner. Who can refer you for extra support if necessary.
- 📖 **Share your experience.** It helps to communicate about it, do this in the manner that you feel most comfortable with. This can be talking about it with others, but it could also be writing about it. Communicating about it can help you find out that others have similar reactions and emotions like you.
- 📖 **Express your emotions.** It is important to give yourself the permission to have those feelings and not ignore them. Crying at moments can help to relieve them.
- 📖 **Take good care of yourself.** Do activities that you like. Eat healthy and regular and get enough rest. Exercise or try relaxation techniques. Help others where you can (practical). Avoid excessive use of alcohol and drugs. **Try not to avoid** things that remind you of the disaster. This will in time only increase the fear and anxiety. **Try to take your rest** and sleep at least 8 hours **during night time**. Your sleep will also help you to reprocess what you experienced
- 📖 **Reintegrate as soon as possible and** make sure you have a day rhythm. Your day activities give you some distraction and prevent you from getting isolated.
- 📖 **When your emotions overwhelm you, try to focus** on what you see, hear and feel around you or start doing something practical. For example make an inventory of your food and water stash and make a



priority list of groceries, what to do in and around the house etc. By engaging in two simultaneous tasks that require the same working memory resources, the vividness of memories will decrease. You can also try to focus on your breathing by counting and putting your hand on your stomach and chest. This helps you gain back control over your feelings and thoughts. When you are able to control your breathing you are better able to control your thoughts and feelings.

What can you do when you worry about someone else?

When you are worried about someone in your surroundings it is important to pay attention and offer support to this person. Make sure this is sincere and that you take the time for the person. When in contact with this person be aware of your own emotions. Realize and respect that everybody deals with a disaster in their own manner. Furthermore, try to listen to their entire story first before giving advice. Offer practical support where that is needed, help with providing structure and overview. Make sure the person takes enough rest or does relaxing activities. Invite them to join in those activities. Lastly avoid criticising or making jokes about the disaster or the experience the person is going through.

When to seek professional help?

When you experience severe distress in the first period after the disaster and the above mentioned not proven helpful or the stress reactions you are experiencing have not decreased over time, something more serious is going on. In this case it is important to seek professional help. Sometimes a stressor related disorder can develop. The disorders are named:

- ASD: Acute stress disorder (*when symptoms stay for more than two days but not longer than 4 weeks*)
- PTSD: Post traumatic stress disorder (*lasts longer than ASD or has a delayed expression*)

It is common after a disaster for people to experience symptoms of ASD and PTSD. These disorders can have a serious effect on your life and require specific treatment from specialists. Most of the time people experience recurring flashbacks, getting scared easily and/or experience severe negative feelings (such as fear it will happen again, irritability, being preoccupied with the experience, avoiding everything that has to do with the experience or feeling depressed, disconnected or lonely). They can avoid everything that has to do with the experience. These symptoms make it difficult to return to normal life.

If you experience this it is important you discuss it with your general practitioner. They can refer you to specialists for trauma therapy or support figures to help you recover. There are proven techniques and therapies for this that can help. Please, do not hesitate to take this step when needed. The Association of Psychologists and Allied Professionals of St. Maarten is here for you.

Psychologists: Sanne Gruijters, Alexandra van Luijken, Miranda Veltman, Stephanie Haseth, Caroline van Oost, Carmencita Chemont, Zuleima Violenus, Henriette Schreurs



Our professionals

Please do not hesitate to go to your house doctor when you feel your symptoms are not decreasing or worsening. Your house doctor can refer you to specialists for trauma therapy or support figures to help you recover. The Association of Psychologists and Allied Professionals of St. Maarten is here for you!

Miranda Veltman, Henriette Scheurs,
Sanne Gruijter, Alexandra van Luijken,
Zuleima Violenus, Caroline van Oost,
Carmencta Chemont en Stephanie
Haseth



*Association for
Psychologists and Allied
Professionals
Sint Maarten*

Facebook page:
APAP SXM

E-mail address:
sxmipap@gmail.com

*Association for
Psychologists and Allied
Professionals
Sint Maarten*

Psychological recovery of
a disaster



This flyer provides you with information about recovery after a disaster. It is written for people who have experienced a disaster themselves, but also for the people around them. Understanding the responses to these abnormal events can aid in coping effectively and help you along the path of recovery.



Association for Psychologists and Allied Professionals Sint Maarten

What actually happens?

During a disaster your mind is so focused on surviving that it tends to function on 'automatic pilot'. After everything calmed down, your mind gets the chance to realize what just happened. This is the moment in which some people go into shock, where they can experience numbness and/or denial at first. After this initial shock, other stress reactions can be experienced, such as:

- Fear and anxiety or feeling tired/fatigue, nausea or panic attacks
- Difficulty concentrating, headaches and shaking
- Overwhelming sadness or feelings of guilt
- Anger/easily frustrated or heightened awareness
- Feelings of being lonely, withdrawing yourself

How to cope?

Experiencing stress reactions shortly after experiencing an abnormal event is normal. Everyone is different, as some people might experience these reactions just for a few minutes but for others it can last a few hours to even days. Then again other people might start experiencing stress reactions after a period of time. However most of these stress reactions will decrease by itself over time.

TIPS

- One step at a time
- Ask for help and support
- Share your experience
- Express your emotions
- Get enough rest
- Get back to your daily routine ASAP
- Do not isolate yourself



When to seek professional help?

If the stress reactions you are experiencing are very severe, do not decrease over time or even worsen, you are advised to seek professional help. Sometimes a trauma and stressor related disorder can develop;

- ✓ **ASD: Acute stress disorder**
(when symptoms stay for more than two days but not longer than 4 weeks)
- ✓ **PTSD: Post traumatic stress disorder** (lasts longer than ASD or has a delayed expression)

These disorders can have a serious effect on your life and require specific treatment from specialists. Having to deal with reoccurring flashbacks, being easily startled and/or experiencing severe negative feelings (such as fear it will happen again), irritability, being preoccupied with the experience, avoiding everything that has to do with the experience or feeling depressed, disconnected or lonely), can make it very difficult to return to normal life.

Appendix 6: Flyer

LIFE AFTER SURVIVING A DISASTER

During the disaster your mind is only on surviving and you are glad to be alive and safe...

away from harm's way. However after everything calms down, you notice that things around you have drastically changed. Possibly your whole life has been turned upside down. Your normal daily routine has been altered and you are trying to find a new balance in the just developed chaos. As things around you have become abnormal, it is normal for you to experience certain stress reactions.

Feeling abnormal after an abnormal event is expected!

You might experience stress reactions such as; anxiety, tiredness, easily frustrated, difficulties concentrating or wanting to withdraw yourself.



Give yourself time to adjust!

These stress reactions will most probably decrease by itself over some time.



How to cope?

- ▶ Ask for support
- ▶ Share your experiences
- ▶ Get back into your daily routine ASAP
- ▶ Get enough rest
- ▶ Avoid excessive use of alcohol and drugs



If your stress reactions are not decreasing or they are getting worse, do not hesitate to ask for help. Your house doctor can refer you to one of our psychologists.

APAP is here for you!

sxmapap@gmail.com or
find us on Facebook (apapsxm)



Association of Psychologists
and Allied Professionals
St. Maarten



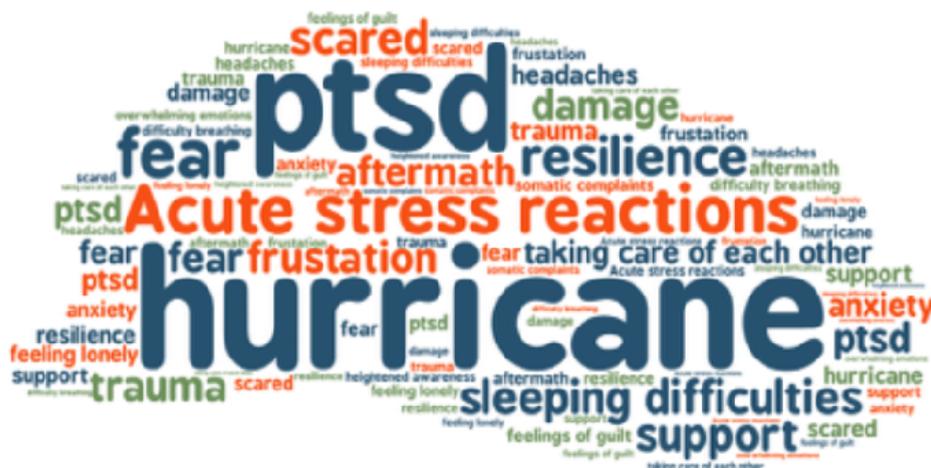
Are you worried about your child?

After a disaster it is normal to feel abnormal at first.
Children can show stress reactions or abnormal behaviour for a while.
Things you can do to support your child in these times:

- **Be aware of your own emotions and well being.**
Take good care of yourself and seek help if needed
- **Let them know they are safe now**
Explain that the hurricane has passed and do things that comfort them
- **Let them express their emotions**
(you can do this with talking or drawing. There is also a story available online that you can use to talk about feelings and worries they may have: Trinka and Sam. The Rainy Windy Day)
- **Do practical things with them and spend time together**
(Like games, schoolwork, letting them help with tasks in and around the house)
- **Get into a "normal" routine as soon as you can**

Do the stress reactions persist? Do they increase in severity?
Ask your house doctor to be referred for psychological help.
There are psychological interventions that can help you and your child.

The Association of Psychologists and Allied Professionals of St. Maarten (APAP) is here to help. To get in contact with us you can email sxmapap@gmail.com or find us on Facebook (apapsxm)



Post hurricane psychological recovery: How is your hurricane brain doing?

After a disaster it is normal to feel abnormal for a while. You can experience acute stress reactions like feeling down, anxiety or easily frustrated. With adequate coping and support this usually goes away after a few weeks.

- Express your feelings
- Do practical things
- Eat and sleep well
- Get into a routine

Do the stress reactions persist? Do they increase in severity? Ask your house doctor to be referred for specialised psychological help. There are interventions that can help you.

The Association of Psychologists and Allied Professionals (APAP) of St. Maarten is here to help you. Contact us at sxmapap@gmail.com or visit our Facebookpage (apapsxm)

What to do if a hurricane comes?

Try to breathe in through your nose and out your mouth.



Ask to hug or hold hands with your brother, sister, or family.



You can also squeeze a ball or a toy.



If you feel scared it's okay to cry. Crying can help you let go of bad feelings.



After the hurricane is gone. Talk to an adult about your feelings.





Hurricane stress, it's a real thing!

The Association of Psychologists and Allied Professionals recommends to pay diligent attention to the psychological part of preparing for and/or dealing with hurricane season. Experiencing a natural disaster can leave an imprint on your psychological well being. Sometimes this does not show immediately, but it could creep up on you especially when stress starts to rise again with a new threat. It is important to invest in self care and if needed to get professional help. There are several opportunities for this on the island. APAP recommends:



LISTEN



CARE



- FEEL: Being alert on sufficient self care during stressful times. Think about what works for you to stay in control?
- LISTEN: Thinking about how you address this part in preparing your business for this, for example with including training and/or workshops for employees on this domain. You can email us for more information.
- CARE: Connecting to qualified professionals for psychological support if needed when experiencing severe stress. Your housedoctor can refer you to those persons or you can contact us for recommendations.

Visit our website on <http://www.apapsxm.com> or email at info@apapsxm.com

Appendix 8: Proposal psychological support organizations

The department of Public Health has asked the Association of Psychologists and Allied Professionals to support in the psychological first aid of companies and organizations in connection with the passing of hurricanes Irma and Maria. This document provides information about the psychological support offered by APAP SXM. This is based on the latest research and knowledge concerning psychological support after a disaster.

After a disaster there are specific risk groups that are more likely to develop (trauma related) psychological complaints such as, first responders and others whose jobs are directly linked to disaster management. It is important that employers provide such workers with the possibility to get adequate support to be able to process these experiences or psychological consequences in an adequate manner. This will contribute to the wellbeing of their staff in general and indirectly also the wellbeing of the organization (lower absenteeism, higher job satisfaction, loyalty to company, etc).

Psychological support, based on stepped care/triage method:

- **Psychological first aid information session** for staff (group meeting where psycho education about psychological recovery process after a disaster will be provided)
- **Screening of employees and staff** to examine people at risk for developing a trauma related disorder (*with a psychological questionnaire during the information session, option to sign for consent to share results with manager/occupational physician or anonymous*)
- **Follow-up of employees/staff at risk** by email from APAP SXM with advice to seek help
- **Feedback and consultation session with management** with information about the amount of employees/staff at risk and information regarding the stimulation of adequate psychological recovery of the staff

For employees/staff at risk the advice is to contact their occupational physician or housedoctor

- Individual psychological therapy to those who have been referred for additional support (by screening and/or own request) can be provided by several organizations, foundations and private practices on the Island covered by insurance. A referral by either the occupational physician or general practitioner is needed.

It is furthermore recommended that organizations start, if not implemented already, developing a method for peer support by training specific staff members. This fosters a supportive environment to deal with possible traumatic events. These trained staff members can offer practical and emotional support at all times when needed in a low profile manner and function as a bridge to the Association of Psychologist and Allied Professionals and specialized Health care organizations.

Created By: APAP SXM, 1st of October, 2017

Facebookpage: APAP SXM

Email: info@apapsxm.com

Attachment 9: Screening Questionnaire



Questionnaire concerning your wellbeing

How are you doing?

After Hurricane Irma it is normal to experience stress reactions at first. This is also part of processing the disaster you have experienced. Most of these stress reactions will decrease by itself within the first 4 weeks. You are then able to get back to your normal routine.

But sometimes this does not happen and more specialized support is needed. It could be that a Post-Traumatic Stress Disorder (PTSD) develops. When this is the case, the sooner you get help is better to minimize long term negative effects.

This questionnaire is a screening about your well-being. It is important you answer in all honesty. In this manner, you can get the guidance you *need* to *prevent* further problems.

Also the results of the questionnaires will help the Association of Psychologists and Allied Professionals to gather scientific data to assess in what extent PTSD-symptoms are seen at this moment with different groups on the island. This information is helpful to get a better insight in what is happening and needed. This will be done anonymous.

This questionnaire will be treated with confidentiality by our association. We will not share the individual results with your employer, only with you. We will follow-up by email to give the results and follow up advice.

Your employer will only receive the general information of all staff (so anonymous), so they can be advised by us if more support is needed.

IMPACT OF EVENTS SCALE-Revised (IES-R)

INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to _____

_____ (event)
 that occurred on _____ (date). How much have you been
 distressed or bothered by these difficulties?

| | Not at all | A little bit | Moderately | Quite a bit | Extremely |
|---|------------|--------------|------------|-------------|-----------|
| 1. Any reminder brought back feelings about it | 0 | 1 | 2 | 3 | 4 |
| 2. I had trouble staying asleep | 0 | 1 | 2 | 3 | 4 |
| 3. Other things kept making me think about it. | 0 | 1 | 2 | 3 | 4 |
| 4. I felt irritable and angry | 0 | 1 | 2 | 3 | 4 |
| 5. I avoided letting myself get upset when I thought about it or was reminded of it | 0 | 1 | 2 | 3 | 4 |
| 6. I thought about it when I didn't mean to | 0 | 1 | 2 | 3 | 4 |
| 7. I felt as if it hadn't happened or wasn't real. | 0 | 1 | 2 | 3 | 4 |
| 8. I stayed away from reminders of it. | 0 | 1 | 2 | 3 | 4 |
| 9. Pictures about it popped into my mind. | 0 | 1 | 2 | 3 | 4 |
| 10. I was jumpy and easily startled. | 0 | 1 | 2 | 3 | 4 |
| 11. I tried not to think about it. | 0 | 1 | 2 | 3 | 4 |
| 12. I was aware that I still had a lot of feelings about it, but I didn't deal with them. | 0 | 1 | 2 | 3 | 4 |
| 13. My feelings about it were kind of numb. | 0 | 1 | 2 | 3 | 4 |
| 14. I found myself acting or feeling like I was back at that time. | 0 | 1 | 2 | 3 | 4 |
| 15. I had trouble falling asleep. | 0 | 1 | 2 | 3 | 4 |
| 16. I had waves of strong feelings about it. | 0 | 1 | 2 | 3 | 4 |
| 17. I tried to remove it from my memory. | 0 | 1 | 2 | 3 | 4 |
| 18. I had trouble concentrating. | 0 | 1 | 2 | 3 | 4 |
| 19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart. | 0 | 1 | 2 | 3 | 4 |
| 20. I had dreams about it. | 0 | 1 | 2 | 3 | 4 |
| 21. I felt watchful and on-guard. | 0 | 1 | 2 | 3 | 4 |
| 22. I tried not to talk about it. | 0 | 1 | 2 | 3 | 4 |

How do you function at the moment? Give it a score between 0 and 10
 (0 = very bad, 10 =very good)

My score:

Attachment 10: Scoring Guideline and format letter with results screening

Scoring guideline screeningsvragenlijst APAP PTSD Adults

Document of Association of Psychologists and Allied Professionals St. Maarten, Oct 2017

Information scoring revised version of the Impact of Event Scale (IES-r)

The IES-R is very helpful in measuring the affect of routine life stress, everyday traumas and acute stress.

Items are rated on a 5-point scale ranging from 0 ("not at all") to 4 ("extremely"). The IES-R yields a total score (ranging from 0 to 88) and subscale scores can also be calculated for the Intrusion, Avoidance, and Hyper arousal subscales.

The authors recommend using means instead of raw sums for each of these subscales scores to allow comparison with scores from the Symptom Checklist 90 - Revised (SCL-90-R; Derogatis, 1994). In general, the IES-R (and IES) is not used to diagnosis PTSD, however, cutoff scores for a preliminary diagnosis of PTSD have been cited in the literature.

The items are clustered as following:

INT (Intrusion) : 1, 2, 3, 6, 9, 14, 16, 20
 AVD (Avoidance) : 5, 7, 8, 11, 12, 13, 17, 22
 HYP (Hyperarousal): 4, 10, 15, 18, 19, 21

On this test, scores that exceed 24 can be seen as quite meaningful.
 High scores have the following associations.

| Score (IES-r) | Consequence |
|---------------|--|
| 24 or more | PTSD is a clinical concern. Those with scores this high who do not have full PTSD will have partial PTSD or at least some of the symptoms. |
| 33 or more | This represents the best cutoff for a probable diagnosis of PTSD |
| 37 or more | This is high enough to suppress your immune system's functioning (even 10 years after an impact event). |

Information GAF-score considering general functioning

There is a moderate link found in research between clinical GAF scores and self report GAF scores. The clinical GAF scores are to be interpreted as following:

| Score | Interpretation |
|--------|--|
| 90-100 | Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities |
| 80-90 | Absent or minimal symptoms (e.g., mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g. an occasional argument with family members). |

| Score | Interpretation |
|-------|--|
| 70-80 | If symptoms are present, they are transient and expectable reactions to psychosocial stressors (e.g., difficulty concentrating after family argument); no more than slight impairment in social, occupational or school functioning (e.g., temporarily falling behind in schoolwork). |
| 60-70 | Some mild symptoms (e.g. depressed mood and mild insomnia) OR some difficulty in social, occupational, or school functioning (e.g., occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships. |
| 50-60 | Moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with peers or co-workers). |
| 40-50 | Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job). |
| 30-40 | Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood (e.g., depressed man avoids friends, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home, and is failing at school). |
| 20-30 | Behavior is considerably influenced by delusions or hallucinations OR serious impairment in communication or judgment (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g., stays in bed all day; no job, home or friends). |
| 10-20 | Some danger of hurting self or others (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement) OR occasionally fails to maintain minimal personal hygiene (e.g., smears feces) OR gross impairment in communication (e.g., largely incoherent or mute) |
| 0-10 | Persistent danger of severely hurting self or others (e.g., recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death. |

With the interpretations of the clinical GAF scores in mind, the following distinction is agreed to use for the self-report GAF score:

- 0 - 3: severe functioning, strong indication for need professional help
- 4 - 5: below average functioning, indication for need professional help
- 6 - 7 : average functioning, monitoring needed to assess need of professional help
- 8 - 10: good functioning, no indication for need professional help

Overall scoring

Traffic light score:

- Green:
 - low scores on the IES (<24) en good functioning

Positively reinforce the current level of functioning and adequate coping. Extra support is not indicated.

- Orange:
 - High scores on the IES (≥ 33) and good functioning
 - Clinical scores on the IES (24-33) but average functioning

Advise is to continue like person is doing, but with active advise to make sure person uses the adequate coping skills who also will be good for the long run. Monitor PTSS symptoms and GAS-score. When PTSS symptoms does not improve in the next two weeks or GAS score becomes lower, it is advised to have an intake with a psychologist.

- Low scores on the IES (<24) and low scores on functioning (so no indications for PTSS symptoms but indication for difficulties coping in general)

Advise is to seek active support in environment to feel better and/or actively try to implement extra self care. When situation has to do with psychological well-being (like mood) and this stays like this despite extra support and or self-care: go to house doctor to get referral for psychologist.

- **Red:**

- High scores on the IES (≥ 33) and low scores on functioning
- High scores on the IES (≥ 33) and average scores on functioning

Strongly advise to psychologist to assess further the need and possibility trauma treatment

Format text to report back to persons who filled the questionnaire

RED

Dear – NAME –,

Thank you for filling in the screening questionnaire about your wellbeing. This is a general email concerning your results.

You scored in the red zone. This result means that you indicated you are still experiencing symptoms of distress and that they impact your functioning. It could indicate the development of a Post-Traumatic Stress Disorder (PTSD).

You are probably still trying to recover from the hurricane and in a stressful situation. Considering the timeframe and the type of complaints it is strongly advised to seek extra support to experience less of the symptoms and improve your well-being. It is advised to have a meeting with the psychologist to discuss the results and what is possible to do in your situation.

The list of psychologists is included. You can get a referral by your house doctor. Please bring this email with you to show and discuss it with him/her to get this referral.

With kind regards,

Association of Psychologists and Allied Professionals St. Maarten (APAP SXM)

Orange

- High scores on the IES (≥ 33) and good functioning
- Clinical scores on the IES (24-33) but average functioning

Dear – NAME –,

Thank you for filling in the screening questionnaire about your wellbeing. This is a general email concerning your results.

You scored in orange zone. This result means you indicated that you are still experiencing symptoms of distress but that you are coping adequately to feel okay. You seem to be able to process and manage the current situation.

Our advice is to keep providing good self-care. Some tips for that are:

- take one step at a time
- ask for help and support around you

- *share your experiences*
- *express your emotions and thoughts*
- *get enough rest*
- *get back to your daily routine asap*
- *do not isolate yourself*

Considering the symptoms we furthermore advise you to keep monitoring your well-being in the next two weeks to make sure the psychological recovery goes as desired. If you feel like the symptoms persist over time and do not decrease and/or your feeling of well-being in general worsens we advise you to have a meeting with a psychologist to discuss your situation and assess if further support could be of help. Attached is a list with contact information of psychologists. You need to go to the house doctor first to get a referral. It could help to bring this email for information.

With kind regards,

Association of Psychologists and Allied Professionals St. Maarten (APAP SXM)

- ...
- o *Low scores on the IES (<24) and low scores on functioning (so no indications for PTSS symptoms but indication for difficulties coping in general)*

Dear – NAME –,

*Thank you for filling in the screening questionnaire about your wellbeing.
This is a general email concerning your results.*

You scored in orange zone. This result means you indicated you are not experiencing many symptoms of distress but that you seem to have been affected in your well-being severely. This could indicate that you have a lot of stressors and/or difficulties coping. Extra support is indicated. We advise you to seek active support in your environment (friends, family, church or other support groups) and/or actively try to invest in providing enough and sufficient self-care. Some tips for that are:

- *take one step at a time*
- *ask for help and support around you*
- *share your experiences*
- *express your emotions and thoughts*
- *get enough rest*
- *avoid excessive use of alcohol and drugs*
- *get back to your daily routine asap*
- *do not isolate yourself*

If you feel your general well-being does not improve despite this, we advise you to seek extra help. A meeting with a psychologist could be of help to support you in this. Attached is a list with contact information of psychologists. You need to go to the house doctor first to get a referral. It could help to bring this email for information.

With kind regards,

Association of Psychologists and Allied Professionals St. Maarten (APAP SXM)

Green

Dear –NAME–,

Thank you for filling in the screening questionnaire about your wellbeing.
This is a general email concerning your results.

You scored in the green zone. This result means that you are not experiencing a lot of complains and/or that you seem to be coping adequately to feel well. You seem to be able to process and manage the current situation. It is important to keep in mind to continue to provide good self-care. Some tips for that are:

- take one step at a time
- ask for help and support around you
- share your experiences
- express your emotions and thoughts
- get enough rest
- get back to your daily routine asap
- do not isolate yourself

If the situation changes for you in the future, you can always get in contact with your housedoctor to discuss your situation and if necessary a psychologist.

With kind regards,

Association of Psychologists and Allied Professionals St. Maarten (APAP SXM)

Format text to report back to management organisations

Not available yet. Will be added when first report is written.

Be alert: only on group level, no individual reports description.

Sources

<https://www.ptsd.va.gov/PTSD/professional/assessment/adult-sr/ies-r.asp>

https://www.emdrhap.org/content/wp-content/uploads/2014/07/VIII-E_Impact_of_Events_Scale_Revised.pdf

https://www.researchgate.net/publication/15327266_Axis_V--Global_Assessment_of_Functioning_Scale_Evaluation_of_a_self-report_version

<https://link.springer.com/article/10.1023/A%3A1024068007558>

Attachment 11: Letter to Government National Recovery Plan

To the Workgroup National Recovery Plan (W-NRP):

- Joane Dovale-Meit (chair)
- Dennis L. Richardson (vice-chair)
- Cassandra Janssen (secretary)
- Makini Persaud-Hickinson (member)
- Fernando William (member)
- Jan Beaujon (member)

To the Parliament of St. Maarten

To the Department of Public Health (Ministry of VSA)

To the Government of St. Maarten

For information to the people of St. Maarten

St. Maarten, November 7 2017

St. Maarten has been confronted with the largest natural disaster in its history. The highest wind speeds ever recorded and tsunami like flooding had a catastrophic impact on the structures of the island. Inevitably, the people of St. Maarten and their mental well being were also severely impacted. Experiencing a natural disaster of this magnitude, no matter how resilient a community, may have been traumatizing for many individuals in several ways.

The Association of Psychologists and Allied Professionals of St. Maarten (APAP) is a collaboration of registered psychologists and allied professionals on the island of St. Maarten. The overall objectives of the association are to make mental healthcare available to all and to guard the quality of care, while working together towards one approach. The members of APAP work at different care and educational organizations and private practices on the island.

In the wake of hurricane Irma, APAP immediately recognized the consequences a disaster of this magnitude could have on the mental well being of the people. In the spirit of all hands on deck, APAP voluntarily initiated different approaches targeted at informing the population and contributing to the mental care for the people of St. Maarten. With a sense of urgency guided, the members united to offer informative, preventive and curative care for the community at large. APAP partnered with the Department of Public Health to offer free information sessions regarding psychological first aid after a disaster to several large organizations. A public service announcement was recorded with the intention to target a large cross section of the community. Brochures targeting different age groups have been developed. APAP is also working on screening to actively follow up with advice concerning

the psychological well being of each individual who fills out our questionnaire. In this way we gather anonymous data that gives an indication of the status of our mental well being. Members have been working tirelessly to answer the urgent demand.

It is clear to APAP that the hurricane and the aftermath have had an impact on the well-being of the people of St. Maarten on different levels, not the least on their psychological well being. Research⁹ shows that approximately 30-50% of the people that experience a natural disaster will be in need of psychological guidance and are at risk of developing long term negative effects on their functioning. These statistics indicate an increase in mental healthcare demand in addition to the normal demand. These statistics may also be applicable to the aftermath of a catastrophe like Irma. Based on these numbers and the population of St. Maarten, it is expected that more than 20.000 people might be in need of psychological care as a consequence of experiencing this storm.

As it stands, mental health care needs are only partly covered by the health insurances on St. Maarten. Over the last few years the Government's subsidies for mental health care have been limited. Mental health care is the building block of a society; without it we are unable to function adequately to make our society thrive, yet somehow mental health care seems to be last on the list of priorities. Additionally, many people have or will lose their job as a consequence of hurricane Irma and their health insurance with it.

APAP has been organizing many initiatives pro bono and will continue to do so. However, APAP strongly urges the Government to pay more attention to mental health care in general but especially considering this acute need for mental health care in the aftermath of Irma. In the same way that information is provided for those who may have financial needs following this storm, information on obtaining assistance with psychological recovery should be just as readily available.

APAP represents several of the mental healthcare workers in the field of St. Maarten and as such we wish to collectively make clear that the absence of psychological recovery on the budget of the Ministry of VSA and in the National Recovery Plan does not fully take into account the fundamental needs of this society. Not only do the houses have to be rebuilt but also investment in resilience and psychological well being is critical. This should be in alignment with the needs and circumstances of the people on St. Maarten and advised by guidelines for psychosocial disaster responses. For example on an individual level therapy should be available if indicated but also a community oriented approach can be helpful in facilitating psychological recovery. More boots are needed on the ground to go into communities and assess the (psychological) needs of the people. Our information campaign alone may not reach vulnerable groups such as the senior citizens. Coordination in the implementation of effective interventions in collaboration with local professionals is needed to ensure positive long term effects.

⁹ Neria, Y., Nandi, A. & Galea, S. (2008). Post-Traumatic Stress Disorder Following Disasters: A Systematic Review. *Psychological Medicine*, 38(4): 467-480. [Further research information available on request as well as background information about guidelines for psychosocial support after disasters.](#)

Again we urge the Government to make mental health care on St. Maarten part of the National Recovery Plan and this topic part of future budgets of the Ministry of VSA. We realize this is the first draft of the National Recovery Plan, APAP has a framework for mental health care and is willing to collaborate with all parties involved. Together we can further develop a plan that truly serves all the fundamental needs of the people of St. Maarten.

With kind regards,

The members of the Association of Psychologists and Allied Professionals

Attachment 12: Presentations

1. 'After the shock...'
Presentation ESF-6 (General practitioners, pharmacies and others)

2. Information sessions

Specific risk groups consist of first aid professionals/first responders, organizations who were active during and just after the hurricane possibly experienced possible traumatic situations and immense pressure.

Hurricane Expo: community information sessions for recovery and preparation activities in the hurricane season

1. After the shock

After the shock..

Social, Emotional and Behavioral consequences
And what to do!

Alexandra van Luijken, Sanne Gruijters, Caroline van Oost, Miranda Veltman en
Stephanie Haasth
Psychologists APAP

Introduction

- Your patients have experienced an extreme event, either directly (you were present), indirectly (it's being talked about or witnessed) or both.
- Presentation on:
 - Possible effects on psychological wellbeing.
 - How to help patients cope with these effects.
 - When to refer to psychologist.

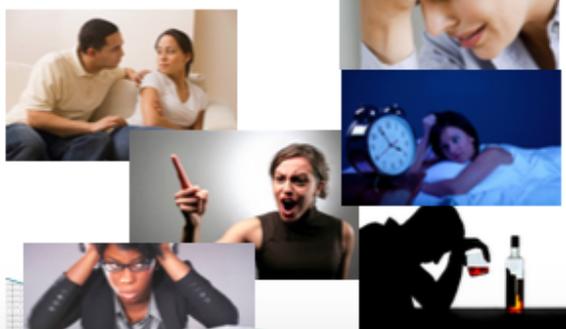
Acute Stress

- Stress is an inevitable, and in some cases a desirable, fact of everyday life.
- Some stressors, however, are so catastrophic and horrifying that they can cause serious psychological harm.
- Such **traumatic stress** is defined in DSM-V as an event that involves: actual or threatened death, sexual violence or serious injury to self or others and creates or increase (intense feelings of fear, helplessness, or horror) intrusion, negative feeling, dissociation, avoidance and heightened arousal.
- Not every extreme event necessarily causes a trauma.

Everybody is different

- No one likes feeling powerless! But;
- Everyone reacts differently to a shocking event, based on:
 - History of traumatic events.
 - The degree to which you feel you are able to cope.
 - Degree of social support at home, work & community
 - Which coping mechanisms you use like:
 - Talking about it to others
 - Avoiding the subject altogether
 - Distracting yourself with work/sports/drinks etc.
 -

Everybody reacts differently



Stress reactions could be...

- Physical
 - Fatigue
 - Loss of appetite
 - Muscle pains
 - Headaches
 - Physical anxiety, such as sweating and faster heartbeat
 - Loss of physical functions
 - fainting
- Emotional
 - Helplessness
 - Feeling Numb
 - Denial ("this should not happen")
 - Anxiety
 - Heightened awareness
 - Being easily startled / "jumpy"
 - Feeling guilty
 - Memory problems
 - Being withdrawn, feeling lonely
 - Restlessness,
 - including sleeping problems

Reactions to stress are normal

- ▶ Different reactions to a shocking event are normal.
- ▶ However it might become a problem when the symptoms don't decrease over time.
- ▶ In such case your patients might have developed **Acute stress disorder (ASD)** or **posttraumatic stress disorder (PTSD)**
- ▶ To make sure you know what (red flags) to look out for, here are the criteria:

Acute Stress Disorder

▶ Acute stress disorder (ASD):

Occurs within 4 weeks after exposure to traumatic stress and is characterized by:

- **Intrusion symptoms like:**
 - Re-experiencing the event: flashbacks, sudden memories, feeling as if it's happening again.
 - Intense or prolonged psychological distress in response to internal or external cues that resemble an aspect of the traumatic events
- **Negative mood: persistent inability to experience positive emotions**
- **Dissociative Symptoms like:**
 - An altered sense of the reality of one's surroundings or oneself (e.g. feeling less aware of their surroundings, feeling dazed, feeling cut-off from yourself or your environment)
 - Difficulty recalling important aspects of the traumatic experience.
- **Avoidance symptoms: Attempt to avoid thoughts or feelings related to the event, or people, places or activities that remind them of the trauma.**
- **Arousal symptoms:**
 - Heightened startle response.
 - Irritable behavior and angry outbursts
 - Problems with concentration
 - Sleep disturbance

Posttraumatic Stress Disorder

- ▶ **Posttraumatic stress disorder (PTSD):**
 - The same symptoms that occur in ASD but they last beyond 4 weeks or have a delayed onset.

ASD and PTSD in children

Developmental age

- **0-3 years:**
 - Loss of recently obtained skills (Language, only limited)
- **4-6 years:**
 - Guilt, self-blame, confusion which can manifest in anger tantrums
- **6-12 years:**
 - Somatic complaints (stomach aches/ headaches/ dizziness)
 - Anxiety
 - Sleeping problems
 - Intrusive thoughts/nightmares
 - Time taken, time-consuming, trouble related events when recalling
 - Dream simulation (the belief that there were warning signs that a)
 - Reenactment of the event in play/drawings or behavior
 - Difficulties concentrating
- **12-18 years:**
 - Irritable and aggressive behavior
 - Withdrawn behavior
 - Changed or limited perspective on the future
 - Anxious for the loss of control
 - Altered and long abuse

moet overzicht. Ik zou bij leeftijden nog stellen dat het developmental age betreft. Bij kinderen/adolescenten met PTSD zie je ook vaak symptomen van jongere leeftijdscategorie terug.

Prevention methods for the GP

- ▶ **Normalize emotional and or physical reactions to a shocking event**
 - Explain that the stress reaction is normal and expected in such a situation.
 - Explain that those reactions are expected to decrease in frequency and intensity over time.
 - You are allowed to feel abnormal for a while.
- ▶ **Support the normal processing trajectory of the shocking event.**
 - Explain that it takes time to process the shocking event.
 - Explain the importance of rest/sleep (helps to process what you experienced)
- ▶ **Stimulate your patient in a quick reintegration.**
 - Avoidance and isolation will only intensify stress and fear.
- ▶ **Motivate them to find support by family, friends and at regular places such as community centers or churches.**
 - Explain that it can be helpful to express oneself in different ways

When to refer to a psychologist:

- ▶ When the initial feelings of anxiety and stress don't decrease after 4 weeks or keep intensifying.
- ▶ When following develops: feelings of depression, panic attacks, substance abuse, anger, insomnia, dissociation and when the clients keep avoiding distressing memories/places.
- ▶ When the patient is not able to function properly at work or home.

moeten u Gerichte depressie van code

What can we offer?

- Information and prevention (slides/ brochures/presentations)
- Multidisciplinary meetings
- Trauma treatment: EMDR & CBT (interns, GP)
- Coaching behavioral problems
- Joining the health bus
- Friday's jam 5 of each meeting

Where to find us

- apap@psm.nl
- Facebookpage: APAP/Association for Psychologists in Allied Professions Sint Maarten

- White and Yellow Cross Care Foundation
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- RNF, Stephanie Kaarth
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- Psychologen praktijk Minda
+3721 3821114, info@psychologen.nl

- Interlicon, Alexandra van Lujk
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Je zou een infospreekuur kunnen inplannen waar mensen met vragen terecht kunnen, informeel dus, wanneer je inschat dat direct hulp opstarten noodzakelijk is, ondersteunen

Thank you for your attention
and
good luck!

Information sessions for specific risk groups consist of first aid professionals/first responders, organizations who were active during and just after the hurricane possibly experienced possible traumatic situations and immense pressure.



Psychological first aid

Social, Emotional and Behavioral consequences
And what to do!

Alexandra van Luijken, Sannie Gruijters, Caroline van Oost, Miranda Veltman, Stephanie Haseeth, Henriëtte Schreurs, Carmencita Chemont, Zuleima Violenus Salmon

Psychologists APAP



Introduction APAP SXM

- APAP is an association of psychologists and allied professionals.
- Presentation on:
 - Possible effects on psychological wellbeing.
 - How to cope with these effects.
 - When to go to a psychologist.

Everybody is different



- Situation
- Background
- Coping



Everybody reacts differently




Stress reactions could be...



- Physical
- Emotional



It is normal to feel abnormal after an abnormal event



- Processing of a traumatic experience

Red flags



- ▣ Intrusive symptoms
- ▣ Negative mood
- ▣ Dissociative Symptoms
- ▣ Avoidance symptoms
- ▣ Arousal symptoms



What can help?



- ▣ One step at a time
- ▣ **Ask for help and support**
- ▣ Express your emotions
- ▣ Get enough rest
- ▣ Do not isolate yourself
- ▣ Identify your triggers
- ▣ Set up short- and long term goals
- ▣ Rebuilding self confidence

When to go to a psychologist?



- ▣ Red flags
- ▣ Severe symptoms
- ▣ Not able to function

Contact info



Where to find us for more info:

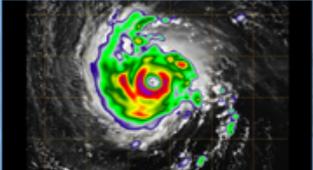
- ▣ APAP website: info@apapsxm.com
- ▣ Facebookpage: APAP

You are smart to have that talk!!!



Thank you for your attention!

Powerpoint presentation Hurricane Expo 2019

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|---|---|---|
| <p>PRESENT FUTURE PAST PAST PRESENT FUTURE FUTURE APAP PRESENT PAST FUTURE SXM PRESENT FUTURE PRESENT PAST PRESENT PAST FUTURE</p> | <p>Past</p> <ul style="list-style-type: none"> Flashbacks Emotions Stress | <p>Future</p> <ul style="list-style-type: none"> Negative thinking? Accept and acknowledge Share Prepare |
|  | <p>Keep breathing</p>  | <p>Self care isn't enough...</p> <p>We need community care to thrive!</p> <ul style="list-style-type: none"> Reach out Extended family Support groups  |
| <p>Present</p> <p>To get grip on your emotions you need to allow yourself to feel them first</p>  |  <p>www.apapsxm.com</p> <p>Facebook: APAP SXM</p> <p>Community mindfulness groups</p> | |