

TAILORING STRATEGIES FOR SUSTAINABILITY AND REINTEGRATION.mp4

[00:00:01] Good evening. Assalamualaikum and mingalaba. Thank you for having me. So today I will talk about traumatic brain injury rehabilitation after disasters, tailoring the strategies for sustainability of rehab approaches and reintegration of TBI patients into the community. When we talk about TBI in disaster settings, we must begin with the emergency response and initial rehabilitation phase. So this stage often determines the long term prognosis. Rehab must start early, not just focusing on survival, but also setting the foundation for recovery. So in many disaster situations, acute medical emergencies and medical management will take precedence. But evidence have shown that if you initiate even the basic rehabilitation interventions early, such as positioning early, mobilisation of the patients and also family education within the first few days, this can drastically reduce long term disability. Importantly, rehabilitation isn't just about physical or functional recovery. It is about helping people return to their roles in their life, whether it is parenting or working or simply engaging in their communities again. Therefore, if we look at this slide towards the last right hand side, it is about long term rehabilitation and social integration. After disasters, TBI incidents can actually rise by 30 to 50%, as reported by the common causes for this increase in the incidence because of falling debris, structural collapse, or road traffic accidents during evacuation. So I believe in Myanmar, there are regions affected by the natural disasters or conflict may lack access to rehab facilities. Vulnerable populations, including children, the elderly and those with pre-existing disabilities, are especially at risk.

[00:01:56] Polytrauma is also common, so let's not forget about psychological trauma. Grief, PTSD and stress can often coexist, making recovery more complex loss of family members or displacement can further disrupt the healing environment. We typically classify brain injuries into diffuse and focal injuries. But in disaster, we may see a mixture of these injuries. So understanding the type of injury can also help us to tailor rehab strategies and anticipate long term need of these patients. During disaster or in resource limited settings, we need to have sustainable approaches. These are some of the strategies that can assist to sustain our long term rehabilitation efforts. Apart from the obvious physical limitations that the patients have, we must address the hidden symptoms. For example, the personality changes, cognitive dysfunction and also

fatigue. We have to be flexible in designing rehab approaches. Keep the patient documentation simple enough to track the progress, and also the interventions or medications that have been given to the patients. We can start training the local staff, family members and also volunteers so that we can continue the rehabilitation, progress and rehabilitation interventions at home. We also need to use community resources, such as probably using local centres or even religious gatherings, as platforms for continuation of rehabilitation. Many of our patients do not look disabled. The physical issues are most likely from limb fractures and other polytrauma. So these fractures will eventually heal if managed early.

[00:03:50] But the TBI patients continue to struggle daily with what we call the hidden symptoms. 76% of the survivors actually face issues. For example, easily fatigue. So this is a combination of both physical fatigue and also cognitive fatigue, where the patients may feel unusually tired or drained even with a simple activity. Apart from fatigue, they also have behavioural changes and personality changes. For example, they became the different person than they were before the traumatic brain injury. They can become short tempered, easily agitated, childish like, disinterested in things that they have interest before. They may also have lack of insight of these personality changes, or they do not understand about the injury that happened to them. They may have disinhibition, and this will all lead to problems with social interaction and causing social challenges because of the difficulty in communication. They also may present with emotional and mood disorders. They can be very labile. Some of the patients will show depression and other patients may show anxiety. They can present with sleep disorders. And don't forget about the PTSD post-traumatic stress disorder. The patients may have problems even listening or looking at certain items that can remind them of the disaster that has happened. The milder traumatic brain injury patients, the mild to moderate TBI patients, survivors from the disaster may present with symptoms of concussion. They can complain of headaches, dizziness and feeling light-headedness. Some of them can report that they have tinnitus or sensitivity to bright light and loud noise.

[00:05:46] They can also present with poor balance and this is most likely an origin central origin. So as a rehab professionals, you need to also find out and address these symptoms and uh, you know, intervene accordingly. Last but not least, and this is also quite important, the hidden symptoms of the cognitive impairments they can present

with cognitive rigidity, which means that it's difficult for them to be flexible when you provide or when you try to engage them in the rehabilitation therapy. They have poor attention, poor inside, which I've mentioned earlier, a difficulty in multitasking because of the attention problem. And uh, they can also, um, you know, present with this cognitive communication problems. So the communication problems are not really because of language issues, but because of the cognitive, um, changes and impairments causing this cognitive problem. And this can create, um, difficulties for the rehab team to engage them in the regular continuous long term rehabilitation intervention when designing the rehab program for the TBI survivors. Just remember to be flexible. Not every region in Myanmar has the same resources of access, so you have to use whatever that is available to you. Uh, for example, using a tele rehabilitation via any app available. Do not underestimate the power of a simple phone call, voice, note, or probably video checking with the caregivers as part of this tele rehab intervention, you can also decide to have to use this probably the satellite model where you choose one satellite location with the TB patients and family members can come and receive the initial treatment, and also as a follow up treatment in this satellite area, you can plan to achieve one functional goal at a time.

[00:07:45] For example, in this number three, you see where the patients may receive the treatment or regular follow up in one place, and then they go home and continue with the rehabilitation at home with the family members, come back to the centre or to the satellite area where you can address another functional goal at a different time. And you can do this multiple times because this is as part of the long term rehabilitation plan. Avoid sensory overload for patients with possible PTSD because it's noisy and chaotic, settings can actually trigger panic. Um, another, uh, you know, flexible approach is that to use group therapy, uh, especially because if you have, uh, limited resources in the rehab team members, but we can be very creative to design this group therapy. Consider the patients with similar functional levels and those with mutual goals, and look at the group dynamics of the patients. When you want to put them in one specific group in the selection process, you can also use the local strength. Identify one strength at a time. Maybe a village market or a mosque can serve as a social rehab hub and you try to start small, but scale up the intervention and the, you know, the local strength or local resources that you want to use in moderate to severe TBI.

[00:09:09] Family centred rehab can improve outcome by 70%. So we can train family members, not just as supporters, but as one of the rehab team assistants. The family members are the bridge between hospital and home. What they can do is that they can help with exercise and daily routines. They can provide emotional support. They can also prevent isolation, which can happen, you know, most likely because of the personality changes. And family members can also monitor changes and give feedback to the rehab team. Here are some of the strategies that you can teach the family members to use. For example, set a daily routine. This reduces confusion and improve engagement. Use visual cues, for example sticky notes, coloured signs or memory boards. Integrate rehab into daily life. For example, washing vegetables can be for hand therapy. Counting mangoes can be cognitive training. Use whatever that is available at home. For example, in this slide we use mop, handle and also stickers to put on the wall. Finally, reintegration should be realistic and culturally appropriate. The goals could be for household, community or economic roles. So in summary, sustainable rehab after TBI in disaster settings is possible, but it requires us to be flexible, resourceful and deeply connected to the community. Thank you.