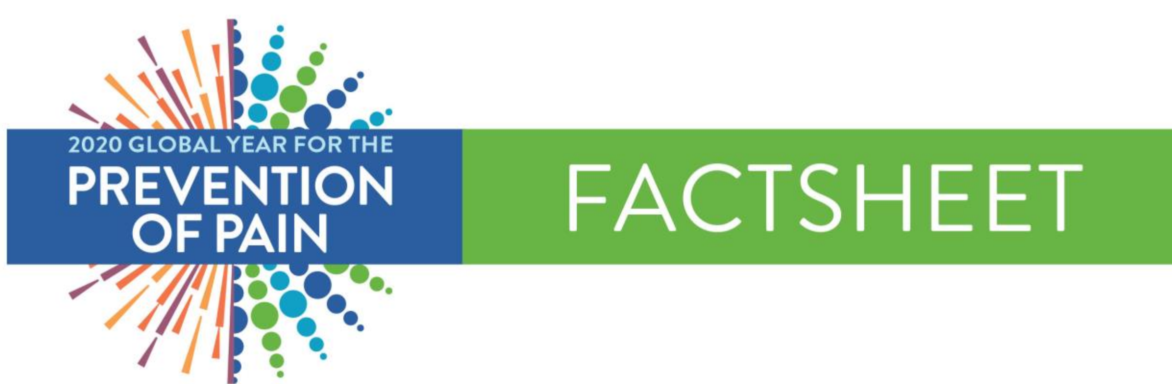

Prevention of Pain in Vulnerable Populations

The prevention of pain is a global public health concern, and a priority [1] because of the sheer numbers affected. The major cause of pain in all populations is trauma and the persistence of pain following both injury and surgical intervention represents a potentially enormous problem for society.

Vulnerable populations are known to experience significant health disparities [2]. The World Health Organization [3] identifies vulnerable populations as including children, pregnant women, older adults, malnourished people, and people who are ill or immunocompromised. These minority and underserved groups may also be affected by poverty with limited access to healthcare or public health interventions. Consequently, the prevention of pain in vulnerable populations should be viewed as a safeguarding issue.

Additionally, those who are in pain may become vulnerable because of the debilitating effects of pain and suffering. Amongst potentially vulnerable groups, older adults are more likely to experience pain than other segments of the adult population [4]. However, vulnerability is not confined to the oldest in society, and the non-verbal are especially at risk of having their pain poorly assessed or managed [5].

Musculoskeletal conditions including low back and neck pain are major causes of disability in all adult populations [6]. Ageing and disability increases the potential for chronic pain [7]. However, 63% of older adults with dementia had bothersome chronic pain compared to 54% of adults without dementia in a sample of 7,609 community-dwelling older adults [8]. The common pain sites are knees, hips and low back often associated with osteoarthritis and osteoporosis. Painful musculoskeletal problems can increase the risk of cardiovascular disease and for older adults; increase the risk of falls and mortality [7]. Prevention of pain and associated disability can be supported with adopting a healthy lifestyle including regular physical activity [9].

Chronic pain prevention is more challenging. The triggers and pathology of chronic pain are complex; in particular there may be no identifiable causal event [9]. However, there may be particular risk factors associated with the development of chronic pain which could be avoided in particular populations. Psychological factors, such as anxiety, depression, resilience and pain beliefs, are known to be a considerable influence on the experience of chronic pain [10]. Furthermore, older adults have a lower pain threshold which may progressively decrease over time in older adults with dementia, while their pain tolerance increases because they are unable to cognitively recognize and quickly interpret pain, thus increasing vulnerability to consequences of pain [5].

Recommendations for Prevention of Acute Pain in Vulnerable Populations

- Eat well and maintain a healthy weight to keep bones and muscles working efficiently.
- Keep moving and use exercise to build and maintain core strength and flexibility.

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- Move well; avoid bad posture and over exertion such as heavy lifting wherever possible.
- Reduce stress and anxiety; learn relaxation techniques and coping strategies such as yoga, tai-chi or mindful meditation to stay in control.

Recommendations for Prevention of Chronic Pain in Vulnerable Populations

All of the recommendations for acute pain prevention plus:

- Effective management of acute pain
- Recognition of chronic pain development as a public health problem

Assessment and Management

There are times when pain cannot be prevented, and this is when we need to employ effective assessment and management strategies. There are many guidelines that have been developed around the world which can be used to guide the assessment and the management process for all vulnerable populations. At least ten guidelines, for example, focus on older adults and cover issues such as pain assessment and management, acute and chronic pain, or pain associated with osteoarthritis [14, 15, 17, 18, 19, 20, 21].

From a paediatric perspective, guidelines focus on acute, chronic or cancer pain from specific countries and from the World Health Organization [22, 23, 24, 25]. In terms of torture survivors, there are a few guidelines but often focus upon the management of psychological disorders [26] rather than pain. Nevertheless, there have been a number of publications recommendations for managing pain in this population [5].

Organisational and professional barriers often inhibit implementation of these guidelines, so education and improved awareness are the key. Early intervention will prevent development of chronic pain and subsequently reduce the burden upon the patient, their family and society. However, staff need to be aware of how to elicit pain history and responses. For example, in the UK, the 7-minute GP consultation prevents older adults from describing their pain narrative, but it is an organisational limitation that has to be worked around. Similarly, Tai-Seale et al [13] found discussions around pain lasted only 2-3 minutes which is often confounded by communication, gender or cultural factors.

Nevertheless, we are where we are and the organisational, educational barriers are a reality and all we can do is work within the limits of what we have, relying upon the humanity of care to do the best for patients with the tools and guidelines available. At least in 2019/20 we have the skills to recognise the populations who may be considered vulnerable and their specific needs are being highlighted. For example, we have at least 12 pain assessment tools which have been specifically developed for older adults with dementia and some are widely used in clinical practice. For example: PAINAd, PACSLAC, Doloplus, Abbey [14].

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