

Injuries and Health Benefits Experienced by Performing Artists - Experience of a Small Island Community

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Abstract

Objective: To review the health benefits and injury profile of performing artists in a small island population.

Method: A questionnaire was distributed to a number of performing arts companies in the Maltese islands and the responses given over a two-week period were analysed. The questionnaire included basic demographics, the form of performing art in which they are involved and the forms of injuries experienced over a five-year period.

Results: Seventy-four individuals from the five main branches of performing arts responded to the questionnaire. Injury rates varied between the subgroups with the largest number of respondents in the 18-25 years age group and with 71% of all respondents claiming one or more separate injuries related to their art. Overall injury rates were higher in the arts requiring more frequent and powerful body contact. Repetitive strain injuries, back pain and knee injuries were the three most common ailments reported.

Conclusions: Physical activity has a direct effect on the experience of injuries but also improves mental and physical health of participants. The complications of minor injuries in performing artists are more grievous than when occurring in those who are not involved in the performing arts. It is recommended that performing arts specific preventive measures should be employed to decrease the number of injurious contacts between performers, including improved training modalities and ongoing medical care without reducing, or imposing upon, artistic expression.

Key words: Physical activity, injuries, art, health.

Introduction:

The performing arts are those forms of art which differ from the plastic and static arts in so far as the former uses the artist's own body, face, voice and own physical presence (or absence in some circumstances) as a medium¹. It is not all that different from sports in many areas. Dancers, singers and actors undergo hours of physical and mental preparation for any performance. The mental and physical strain can often result in injuries and other biomechanical abnormalities. This however

does not mean that participating regularly in a performing art is not of benefit to the individual. The scientific evidence based on many epidemiological, clinical, and physiological studies justifies claims that individual participation in adequate amounts of regular physical activity can improve health and prevent disease.

Materials and Methods:

A total of seventy-four performing artists participated in a questionnaire survey carried out over a two-week period with the aim to review the types and severity of injuries sustained in their field of artistic expression. Two hundred questionnaires were sent to a random selection of performing artists attending the main theatre and dance groups in the Maltese islands. The questionnaire comprised a set of questions including the form of performing art within which the respondent was involved; the types of injuries sustained over a five-year period; and whether they considered a need for a specialised form of medical care for performing artists. The respondents hailed from the following major artistic groups; performing artist/stage actor, dance-related, singer/vocal-related, musician and allied professional.

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Fig 1 demonstrates this division and demonstrates that the greatest number of respondents was from an acting and stage background, with similar numbers of respondents from the musical and dance scene. Only four respondents were from the allied professional field – involving the stage work including lights systems; sound control and set-up.

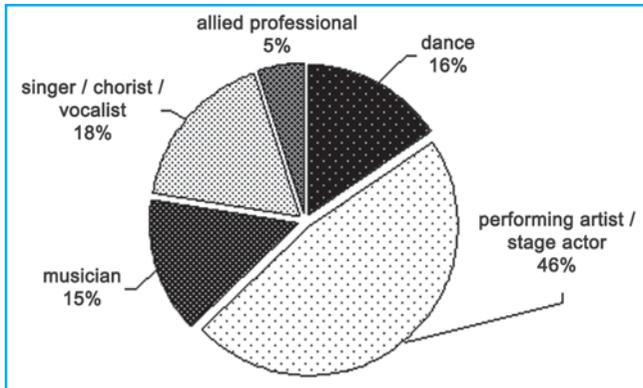


Fig 1- No of the Individuals in Their Relevant Performing Art Subgroups

Results:

This survey had a 37% response rate (n=74). Injury rates were varied between the sub-groups with fifty individuals (67.6%) of respondents claiming one or more separate injuries related to their art. Fifty respondents were from the 18-25 years age group, two aged <18, eighteen in the 26-40 age group and four individuals over the age of 40. Overall injury rates were higher in the arts requiring more frequent and powerful body contact such as dancing and stage acting with repetitive strain injuries, back pain and knee injuries being the three most common complaints.

Of the respondents; fifty individuals (67.6%) documented one or more injuries in their related art – a total of 158 separate injuries which were divided as shown in Table 1. There were twenty-one individuals (28.4%) who were treated for one or more episodes of anxiety, twelve individuals (16.2%) had attended clinics or specialist for weight abnormalities (overweight or underweight including anorexia), and three (4.1%) were treated for one or more episodes of depression. Three individuals (4.1%), all from the dance subgroup, noted severe menstrual abnormalities which were being followed up by a medical/gynaecological specialist. Sixty-four respondents (86.5%) commented on the need for more specialised care of performing art related injuries in Malta.

Table 1: Number of Individual Injuries Reported

Type of complaint	No. of individuals
Repetitive strain injury	21
Back pain	20
Knee pain	20
Voice loss / injury	16
Tendon pain	11
Neck pain	11
Shoulder pain	10
Ankle pain	9
Wrist / finger injury	8
Foot pain	8
Elbow pain	5
Hip pain	5
Dermatological problems	5
Auditory related	3
Dental related	2
Other	4

Discussion:

The potential health benefits of participating in the arts to individual people and to the community have received widespread attention internationally over the past few years. The arts have been used as mediums in areas such as health promotion and also as therapeutic interventions. In Malta there have been some rare occasions where arts projects have been used specifically to tackle health problems including bullying and drug abuse². Countries such as Israel and the UK have set up a course in “Medical Clowning”, inspired by the film *Patch Adams*³, and based on the theory that humour can mask pain, where students learn techniques in which the patient is the “star” and clowns are integrated into the medical team⁴. The “Alexander Technique” for example, is a performing art method which focuses on relaxation and the relationship of the head and neck to the back. While originally developed for speech and singing, this technique has expanded into a general theory of enhanced respiratory function, tension prophylaxis and care of patients with mobility problems such as Parkinson’s disease⁵⁻⁸.

The regular exercise and social interaction derived from regular participation in a physical activity such as the performing arts has been shown to have positive benefit in reducing cardiovascular disease, depression, diabetes and cancer. Improvements have been observed in patients with mild depression and anxiety, where the physiological changes with regular exercise extend the

range of activities that can be undertaken with confidence and ease⁹. A change in lifestyle such as an increase in physical activity, such as dance, dramatically reduces the individual risk of coronary heart disease and stroke. Habitual physical activity also helps reduce the risk of developing non-insulin dependent diabetes mellitus¹⁰. Laboratory studies have shown that exercise can increase insulin sensitivity and improve glucose tolerance, which offers an explanation for the favourable effect of physical activity on conditions such as polycystic ovarian disease (PCOD) and insulin resistance. Good metabolic control can still be achieved by young diabetic patients who participate in sport because exercise leads to a predictable reduction of the exogenous insulin requirement¹¹. Several recent epidemiological studies¹²⁻¹³ have also observed that physically active people are less likely than those who have a sedentary lifestyle to develop breast and colon cancer and studies have also shown an increased quality of life in those who have been treated for breast cancer.

There are, however, also numerous published studies regarding the effects of intense physical activity on menstruation. Long term effects have been shown to be greatest in young girls who start intense exercise before menarche showing an increased chance of delayed menarche, impairment of growth and pubertal progression, subsequent menstrual dysfunction, and suboptimal bone health¹⁴. Management of exercise related menstrual dysfunction aims primarily to restore normal menstrual cycles. Advice on altering the volume and intensity of training programmes and reducing the stressors of competition may be effective¹⁵.

One of the many obstacles encountered by the Performing Arts is funding for projects and this also translates into a lack of funding for health promotion. Healthcare budgets in many countries include money for the arts. This funding ranges from money for arts-inspired healthcare education (through “theatre-in-education” projects or arts information projects) to formal strategies of occupational and artistic therapy, university teaching modules that strive to educate doctors and nurses into more empathetic human beings through the use of art and literature, artistic attempts to brighten hospital environments and reduce the clinical atmosphere, and the longstanding culture of “hospital radio”. All these activities are potentially classifiable as arts, and all are an integral and generally accepted part of national healthcare in a wide variety of countries.

In an editorial, Richard Smith suggested that the British Government should spend more on the arts and less on

health care in the understanding that the improvement of our own social surroundings would give rise to a healthier population¹⁶. The WHO states in its declaration that “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”¹⁷.

Arts medicine has many challenges. Due to the demands in musical and physical performance, physical condition requirements vary considerably to normal requirements or demands. Small irritations or minor pains which may appear ‘normal’ to a non-artist, can be career threatening to the performing artist. An upper respiratory tract infection, for example, may cause the cancellation of an important concert. For wind players, recovery from such common problems as Bell’s palsy can result in everyman’s asymptomatic presentation which will be deemed from a visual diagnosis as fully cured only to discover that you still cannot play properly because you cannot yet form an ‘embouchure’. Even trivial matters as herpes simplex (cold sores) can be totally debilitating for a brass player. Additionally; sprains, strains and minor tendon tears completely ground any physical actor or dancer. The medical community needs to fully recognise the significance of both the ailment as well as the psychological significance that the performer attaches to the problem.

Repetitive strain injuries (the commonest complaint in the survey) cannot be simply eliminated by altering simple motions. Meinke (1994)¹⁸ commented that the “only hope of making meaningful interventions in this particular work situation, especially where there has been injury, is by changing the ‘worker’”. Many of the difficulties in making any such changes that may seem logical or necessary from the mechanical perspective are never so transparent to the artist because so much of movement, both good and bad, is tied to a perception of artistic necessity and instrumental technique from which a particular tone or expression is derived. The extent to which the communication between artist and physician can be improved is in no small way tied to the development and promotion of specialty clinics which have personnel who are both adequately trained medically and who are also empathetic personally to the patient as artist as well as the artist as patient.

It is impossible to get an accurate reflection of the size of the problem which encompasses performing arts medicine but at least one Canadian study¹⁹ at a large music school showed a population of 300 students of whom 15% experienced playing-related health problems.

That percentage extrapolated over the entire Canadian university music school population represented an enormous number of students with serious need for competent and caring health professionals. It becomes patently obvious that all of the stake-holders in the performance field must unite to support and contribute to the on-going dialogue in arts medicine²⁰.

Efforts to set up appropriate clinics in developed countries are complicated by the fact that the majority of patients are uninsured. The uninsured status of most performers currently presents a major obstacle to the ability of performers to obtain care and the ability of clinics to provide it without courting financial instability²¹. This is further exacerbated by the fact that some of the insurers of health care are unwilling to cover some of the treatment prescribed.

Conclusions:

The large percentage of injuries shown in the study indicates the need for a future comparison between the performing arts and other physical activities such as sports. The long term aim of any future performing arts physician is to ensure that as many people as possible can participate safely in the arts and that these people have the appropriate availability of medical services as and when required. At the same time it is important to note that the arts will continue to conserve artistic expression of a particular art without compromising it to reduce injury risk. Needless to say; the potential health gain both from a physical and mental health aspect from getting involved in the arts is enormous and not to be taken lightly.

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