

Physical and mental health problems in pre-professional musicians

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OBJECTIVE:

- Musicians make long hours, play in awkward asymmetrical postures and are exposed to constant pressure and face numerous mental challenges. Consequently, musicians are at risk for health problems during their careers.
- The extent and nature of health problems in conservatoire students have received less attention.
- To develop the best preventive strategies for pre-professional musicians to prevent both physical and mental health problems, it is necessary to first establish the extent of the problems in this population.
- Therefore, our objective was to gain insight into the prevalence of physical and mental health problems in first, second and third year conservatoire students.
- Furthermore, the association between playing-related musculoskeletal disorders (PRMD), mental health and general health was investigated.

METHODS:

- 89 classical music students of university of the arts Codarts Rotterdam were invited to participate in this retrospective cohort study.
- Questionnaires were filled in using a web-based system, Performing artists and Athletes Health Monitor (PAHAM).
- Outcome measures were: PRMD in previous 12 months, mental health (Mental Health Inventory-5) and self-rated general health (Short Form health survey SF-12). In case of PRMD, pain intensity and interference (Musculoskeletal Pain Intensity and Interference Questionnaire for Musicians) were measured.

RESULTS:

- 46 (52%) classical music students (60.9% women; mean age 21.3 (SD 3.09) years) filled in the questionnaire, including mostly violin players (21.7%, n=10), singers (15.2%, n=7) and pianists (10.9%, n=5).
- Most participants were first-year students (56.5%, n=26), followed by third (28.3%, n=13) and second year students (15.2%, n=7). The students had on average more than 10 years (10.67 years; SD = 3.43) of playing experience.

Table 1. Means (SD) or numbers (%) on PRMD, pain intensity and interference, mental health & general health.

	All students	PRMD	No PRMD	PRMD vs. no PRMD
Students (N)	46	8 (17.8%)	38 (82.2%)	
Pain intensity (0-10)		3.78 (SD 2.02)		
Pain interference (0-10)		5.60 (SD 2.62)		
Mental health (0-100)	65.74 (SD 15.84)	62.00 (SD 11.90)	66.53 (SD 16.57)	t = 0.731
Poor mental health (score ≤ 60)	21 (45.7%)			
General health (0-100)	63.04 (SD 3.18)	43.75 (SD 22.16)	67.11 (SD 19.37)	t = 3.026**

** significant difference between students with PRMD students without PRMD, p < 0.01.

CONCLUSIONS:

- The burden of PRMD complaints in conservatoire students seems relatively low.
- The amount of students facing mental problems is cause for concern.
- Students with PRMD reported worse self-rated general health than students without PRMD.
- No association, but a trend between PRMD and mental health could be observed.

PRACTICAL IMPLICATIONS:

- Conservatoires should focus on the subject of mental health in their curricula to increase more awareness and prevent mental problems.
- Prospective studies should focus on general health as possible risk factor for PRMD.
- To investigate whether the concept 'no pain, no gain' played a role in the population studied, qualitative studies are needed.