



# **A Survey of Physical Activity in Medical Curricula:**

A report of the HEPA in Health Care  
Settings HEPA Europe Working Group

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By

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## Background

Following discussions in the HEPA in Health Care Settings working group session at the HEPA Europe conference in Cardiff in 2012, it seemed that there was an emerging evidence base that suggested that doctors were ill-equipped to provide important advice to patients on the role of physical activity and health due principally to a lack of formal education within the medical curriculum. At that time most of the evidence had been generated in the UK and USA ( Weiler W et al, 2013; Bleich S et. al, 2012.) However the group suggested that, anecdotally at least, this was likely to be an issue across the whole of Europe and beyond. It was determined therefore that a small scale survey should be conducted to try and ascertain whether this was the case.

## Method

A 17 item questionnaire was developed and circulated to working group and other HEPA members before being finalised and posted on the Survey Monkey website in July 2013. A random selection of 73 medical schools across 37 European countries, were sent an introductory letter and invitation to complete the on-line questionnaire. Initial analysis was conducted in December 2014 and reminders sent out to medical schools before a final analysis of responses was undertaken in the Spring of 2016.

## Results

There were a total of 52 responses from 23 countries although there was significant variability in the response rates to individual questions.

- Of **39** who responded to the question **“Do your entry level medical degrees courses contain dedicated lecture time related to physical activity?”** there was almost an even split with 48.7% indicating ‘Yes’ and 51.3% indicating ‘No’, which shows that approximately half of the respondents do not provide dedicated lecture time to physical activity in their entry level medical degrees.
- Of the **15** institutions who responded to the question **“Is the physical activity lecture time within the entry level course(s) mandatory or optional?”** 80% indicated it was “mandatory” and 20% “optional”.
- Of **15** respondents who answered the question **“Are there clear assessment and accreditation structures to reflect the learning outcomes from the physical activity lectures?”** 60% indicated “Yes” and 40% “No”.
- **12** medical schools responded to the question **“Approximately how many hours in total are dedicated to physical activity at standard entry level medical training in your institution”** Of these 2 indicated None; 2 indicated 1hour; 3 indicated 2 hours; 1 indicated 3 hours; 1 indicated 4 hours and 3 indicated 5 hours or more. So of those who answered 2/3 provide 3hours or less

- **14** respondents answered the question **“Which of the following topics are included in your standard entry level medical training curricula?”** Of these:
  - 86% provide Physical activity & Cardio-Vascular Disease
  - 71% provide Physical activity & musculo-skeletal disorders
  - 79% provide Physical activity and metabolic disorders
  - 57% provide Physical activity & pulmonary disorders
  - 43% provide Physical activity & neurological disorders
  - 57% provide Physical activity & mental health
  - 93% provide physical activity recommendations for health
  - 57% provide Behaviour change and physical activity counselling

Of those providing topic focused education related to physical activity, most include information on the physical activity recommendations with neurological disorders, mental health, behaviour change counselling and pulmonary disorders being the least popular options available.

- **33** medical schools answered the question **“Do your advanced medical degree courses contain dedicated lecture time related to physical activity?”** Of these 40% said “Yes” and 60% said “No”
- There were only **9** responses to the follow up question **“Is the physical activity lecture time within the advanced level course(s) mandatory or optional?”** with 7 indicating it was “Mandatory” and 2 that it was “Optional”.
- The **9** respondents to the question **“Are there clear assessment and accreditation structures to reflect the learning outcomes from the physical activity lectures”** showed that 5 said “Yes” and 4 said “No”.
- In response to the question **“Approximately how many hours in total are dedicated to physical activity at advanced level medical training in your institution?”**, of only **6** responses 3 indicated 3 hours,; 2 indicated 4 hours and 1 indicated 1 hour.
- And of the **9** respondents who answered the question **“Which of the following topics are included in your advanced level medical training curricula?”**:
  - All (100%) provide Physical activity & Cardio-Vascular Disease
  - 67% provide Physical activity and musculo-skeletal disorders
  - 67% provide Physical activity and metabolic disorders
  - 67% provide Physical activity & pulmonary disorders
  - 44% provide Physical activity & neurological disorders
  - 33% provide Physical activity & mental health
  - 67% provide physical activity recommendations for health
  - 56% provide Behaviour change and physical activity counselling

At advanced level of the 9 respondents fewest (33%) provide education on physical activity and mental health and all 100% provide ‘Physical activity and Cardio-vascular disease.

- **28** institutions answered the question **“Does your Institution provide postgraduate General Practice training?”** Of these 57% said “Yes” and 43% said “No”

- In the follow-up question **“Do your postgraduate General Practice courses contain dedicated lecture time related to physical activity?”** 15 respondents indicated that 60% said “Yes” and 40% said “No”.
- **10** medical schools responded to the question **“Approximately how many hours in total are dedicated to physical activity in your General Practice training at your institution?”** Of these 4 indicated 0 (None); 2 indicated 1 hour; 2 indicated 2 hours; 1 indicated 3 hours and 1 indicated 5 hours or more.
- Of the **10** who then answered the question **“Which of the following are included in your postgraduate General Practice training curricula?”**
  - 90% provide Physical activity & Cardio-Vascular Disease
  - 40% provide Physical activity and musculo-skeletal disorders
  - 70% provide Physical activity and metabolic disorders
  - 30% provide Physical activity & pulmonary disorders
  - 40% provide Physical activity & neurological disorders
  - 10% provide Physical activity & mental health
  - 70% provide physical activity recommendations for health
  - 30% provide Behaviour change and physical activity counselling

With a similar proportional breakdown to the Entry level and Advanced level training Cardio-Vascular Disease and Physical Activity recommendations appear to be the most popular topics with mental health, behaviour change counselling and pulmonary disease being the least popular.

## Summary

- There was a good spread of responses (52) covering all regions and 23 countries in Europe.
- Other than for the ‘identifying’ questions there were variable responses to particular questions ranging from 39 for the high level questions to only 6 for some of the ‘follow-up’ questions.
- Less than half of respondent medical schools include physical activity as a dedicated subject at Entry level; a third at Advanced level and over two thirds for GP training.
- Approximately half of respondents (10) identified clear assessment & accreditation structures to reflect the learning outcomes.
- Of those who do provide physical activity input most (6) provide between 1 -4 hrs at ‘Entry level’, the remainder (3) between 5 – 6 hrs; Of those providing GP training 40% (4) provide no dedicated training on physical activity and most (5) offer less than 3 hrs.
- Findings on amount of curriculum time given to physical activity appear even less than those in Weiler et al.’s\* survey of UK medical schools with only 60% of medical schools who responded providing dedicated time to physical activity in the curriculum with an average of approximately 2.5hrs at entry level and 3 hrs at ‘advanced’ level although there appears to

be a higher proportion providing information on recommended guidelines (approx.93% v's 55%) but significantly fewer providing formal input (approx. 16% v's 48%) at entry level.

- Of those who do include physical activity in the medical curriculum most clinical conditions include physical activity information with CVD and 'recommendations for health' receiving the most input and mental health, neurological conditions and pulmonary disorders the least.

## Limitations

Whilst there was a good overall response rate to the survey , the responses to individual questions was much lower and in some cases very low, and on their own cannot be considered to be representative or generalisable.

Though tested with colleagues from several countries prior to dissemination it is acknowledged that cultural and language interpretation of some questions may be problematic (For example 'Entry Level' or 'Advanced Level' may be interpreted differently in some countries), leading to potential misunderstanding of the questions and thus the responses.

There was no way of knowing the knowledge or professional role of the respondents who may or may not have been the most well informed person to answer the questions.

## Conclusions

Doctors are widely regarded as credible sources of expert advice on physical activity and health but continue to have little formal education to support this assertion, leaving them exposed to unrealistic public expectation and ill equipped to address the holistic needs of their patients.

## Recommendations

- There needs to be significantly greater emphasis on the role of physical activity on health within all medical curricula including a comprehensive understanding of the general recommendations and specific effects of physical activity in relation to all medical conditions.
- Continuing Professional Development resources should be made available to all medical staff in general and General Practitioners in particular to keep them abreast of knowledge pertaining to physical activity and its effects on health.

## References

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