Proposing a framework for prioritising topics for Personal Health Education in Schools, to improve public and community health, to teach acute medical conditions experienced in later childhood?

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Abbreviations

PSHE: Personal Social Health and Economic Education

Introduction

Interest in Public Health related to school children has undergone revitalisation in the UK in recent years as stronger associations have been made between behavioural patterns initiated or that develop during childhood and the resulting health outcomes in later life [1]. This together with the rising cost of healthcare [2] has led to a further concentration on preventative approaches including education in schools, promotion of a healthy lifestyle via widespread media intervention, and increased emphasis on health screening and health checks within General Practice [3].

Until fairly recently Health Education in United Kingdom (UK) schools had been relatively limited to sex education, healthy eating and diet within home economics classes [4]. However in 2000, Personal, Social, Health and Economic education (PSHE) was introduced to address the perceived deficiencies for 11 year olds and older. The aim of PSHE was to give children the ability to assess risk, and to create informed conclusions within four major domains i.e. Personal education, Social education, Health education, and Economic education. These together constitute the PSHE acronym [5].

Although it seems logical that health education in schools will lead to a health improvement, not all interventions necessarily lead to improvements [6] so it is important to find evidence for this before creating a wider syllabus on health promotion. For brevity we will draw on two examples that have addressed a range of health behaviours in children. A study from Queen’s University of Belfast in children aged from 5 – 18 years old investigated ‘Behavioural incentive interventions for health behaviour change in young people’ [7]. The authors
concluded that there was strong evidence that behavioural incentives could encourage more healthy eating habits, and were also effective in incentivising increased physical activity. Although this study looked at the use of behavioural incentives to change the behaviour of the children it establishes that it is possible to change behaviour using education.

The second example is a study, similar to a meta-analysis that focused on changing the attitudes of young people in relation to six specific health behaviours. The study was titled ‘The effectiveness of interventions to change six health behaviours: a review of reviews’ [8]. The conclusions were a) that interventions were effective over a range of health behaviours, b) that they were effective in bringing about behavioural change of the subjects, and c) that behavioural change could be achieved in a complex area such as health behaviour. This survey is particularly relevant here because it included subjects of secondary school pupil age range. Thus, with evidence supporting the notion that educating secondary school pupils on health issues can result in behavioural changes leading to desired outcomes; we can now consider developing a proposed framework to assess which subjects could be prioritised for teaching.

Currently, most of the teaching focus in PSHE tends to be on social and health aspects [9], such as addressing the detrimental effects of taking illicit substances and smoking. Yet PSHE has the potential to be utilised as a very powerful tool for wider health promotion in additional spheres. It is deployed in most of the secondary schools across the UK, thereby reaching millions of individual children. With an estimated 7.7 million secondary school children aged between 10—19 years old in the UK [10], this equates to approximately 11% of the population. It is hoped that when these young people become adults they will, in turn, shape the direction society takes in terms of personal and community health.

This underpins the importance and potential influence of the actual topics that are covered in these lessons. Due to this potential, and the limitation of time and resources, it is important to give very careful objective consideration to which topics to cover, and also which not to include, within the PSHE curriculum. The choice of topics should be based on a strong rationale and the best possible evidence relating to likely positive outcomes [11]. It is important to determine how best to achieve this, and also whether any unintended consequences might result and how to prevent or address them should they occur.

At present acute conditions and emergencies experienced in childhood are under-represented in the PSHE Association’s library of lesson plans [11], as in the past factors resulting in longer term health care problems have been foremost e.g. smoking and obesity. However, the above criteria does not preclude emergency medical conditions that may be an ideal category to broaden the scope of PSHE, and the resulting knowledge transfer in these subjects may benefit a young person more immediately than lessons relating to long-term conditions such as heart disease and cancer that are often cited for teaching healthy lifestyle choices. Also teaching on emergencies may actually be perceived by pupils, their parents and their teachers as more immediately useful. Furthermore, emergency medical conditions may be more interesting as directly relevant, more memorable and having a higher likelihood of eliciting the desired behaviour; actual experience of a medical emergency is not merely a theoretical risk, many years in the future, but a very real, acute problem that is often painful or debilitating and demands a prompt and efficient resolution.

As there are only so many hours of teaching assigned to PHSE within an academic programme annually, it is essential to carefully select the most important topics to teach in these lessons. Currently there are no accepted national criteria for adoption of a health topic or medical condition into the UK’s PSHE syllabus [12] although there is a process to follow for accreditation by the PSHE Association. This body then publishes peer reviewed lesson plans and teaching aids that can be used by teachers in their classes [11]. Therefore it is important to consider what might be the criteria to use to choose subjects for Public Health promotion via the PSHE programme. This list of criteria is not intended to be exhaustive and an individual topic may not have to satisfy all criteria, but it does allow one topic to be compared with another in order to prioritise the most important, given the time constraints.

### Potential criteria to select an acute health subject for pshe

1. **Is it a relatively common problem?**
2. **If not a common problem, has the problem potential serious or devastating consequences?**
3. **Is it a problem affecting children of secondary school age (11–18 years)?**
4. **Can the outcomes of the condition be improved by education? i.e. is early diagnosis, treatment or prevention affected currently by lack of knowledge and can education lead to a change in behaviour that improves outcomes?**
5. **Is it easy to educate children about the problem, with clear messages and easily understandable actions?**
6. **Can it affect anyone of that age group, sex or ethnic group – i.e. not discriminatory?**
7. **Will there be any potentially detrimental unintended consequences from teaching the course to secondary school children in relation to stress anxiety and misdiagnosis?**

Whether common, rare or very rare, a balanced judgment has to be made alongside the potential consequences of the condition (criterion 3); i.e. if the conditions are very rare, but with devastating consequences, like meningitis or severe sepsis, it might still warrant inclusion into the curriculum. As to severe or devastating consequences, the untoward severe adverse outcomes of a condition such as testicular torsion can lead to permanent damage or loss of the testicle; infection; requirement of surgical intervention; infertility and psychological problems in later life.
Additionally it is important to have ‘balancing’ factors in place to ensure that the subject cannot be construed as discriminatory and there are no unintended consequences of the lessons. An example of this would be a program of cancer education targeting an inappropriate age group, raising anxiety and stress levels in significant numbers of children and parents about a specific cancer type when the actual risk of the malignancy in the age group being taught is exceedingly rare.

This occurred in the UK where a large cancer charity chose to teach teenage girls about breast cancer when it would have been better to teach teenage boys about testicular cancer.

Healthcare education should impart knowledge and lead to behavioural changes that in turn lead to better healthcare outcomes. Protecting against a negative behaviour or outcome is enhanced by making a subject more transparent to lay people, young or old, alongside explaining the hazards and risks associated with it and what mitigating actions may be taken. This approach gives children aged from 11–18 a form of preventive education as they learn how to live healthy lives, and what to do to try to avoid hazards, and also what action may be taken, if ever faced with particular scenarios. Some emergency medical situations seem ideal for this as they often are time sensitive and therefore have to be addressed soon after the initial incident.

The aim of the health component of PSHE is to promote the health of the children by both promoting healthy behaviour, and reducing unhealthy behaviour, and mitigating risks. Hopefully this will result in children leading an increasingly safe, productive [13] and healthy lifestyle and being more content. A framework to choose subjects for these PSHE lessons would be beneficial to support this.

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