

## EDITORIAL

# Interprofessional education: a review

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Recent changes in medical education as well as in the organization and delivery of health care in the UK have emphasized the need for doctors, nurses and other health care professionals to learn to work together as teams in order to provide the best possible care for patients.<sup>1</sup> The importance of interprofessional education (IPE) and teamwork is, therefore, being increasingly recognized and given priority in medical education.<sup>2–4</sup>

The NHS Plan underlined the value of professional collaboration in the health service and recommended that the providers of education and training should support the concept of shared learning.<sup>5</sup> Both the Department of Health (DOH) and the General Medical Council (GMC) in the UK have placed great emphasis on multiprofessional education, which they believe will help break down the professional boundaries and promote a team approach to health care.<sup>6–7</sup>

Geriatric medicine is ideally suited to the concept of interprofessional education, where medical students are taught in an interdisciplinary environment that helps them to integrate more successfully into multidisciplinary teams. The clinical practice of the specialty, which involves interprofessional and interagency working across the range of health and social care, provides settings conducive for shared learning.

Although IPE has been around for several decades, it is only recently that we started to understand the complexity of this educational paradigm.<sup>8</sup> This paper aims to review the literature in order to develop a better understanding of the concept of IPE.

### Interprofessional education: what does it mean?

It is important to have a better understanding of the meaning of IPE, as various terms are used

interchangeably leading to what Leathard calls a ‘semantic quagmire’.<sup>9</sup> Whilst academics tend to use the terms ‘interprofessional’ and ‘multiprofessional’ interchangeably, the policy makers and practitioners prefer to use terms such as ‘shared learning’ or ‘joint training’.<sup>8</sup>

Educationists in the UK advocate using IPE to describe learning designed to improve collaborative practice.<sup>10</sup> On the other hand, the term multiprofessional education (MPE) is preferred by the World Health Organization (WHO) which defines MPE as ‘the process by which a group of students (or workers) from the health-related occupations with different educational backgrounds learn together during certain periods of their education, with interaction as an important goal, to collaborate in providing promotive, preventive, curative, rehabilitative and other health-related services.’<sup>3</sup> Some consider this to be unduly restrictive, by maintaining that it does not reflect the different facets or approaches to MPE that can be adopted.<sup>11</sup>

The UK Centre for the Advancement of Interprofessional Learning (CAIPE), a leading authority on interprofessional and collaborative learning, defines IPE as ‘occasions when two or more professions learn from and about each other to improve collaboration and the quality of care.’<sup>12</sup> This is contrasted with multiprofessional education, which is defined as ‘occasions when two or more professions learn side-by-side for whatever reason.’<sup>12</sup> IPE can, therefore, be regarded as a subset of MPE, only differing in its purpose and the methods that it employs to achieve this.<sup>12</sup> Harden suggested an alternative way of characterizing IPE, in which a continuum of activities exist from isolated to integrated learning between professions, with discipline or subject-based teaching at one end of the spectrum and integrated or multidisciplinary teaching at the other.<sup>13</sup>

The Cochrane Review described IPE as follows: ‘an IPE intervention occurs when members of more than one health and/or social care profession learn

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interactively together, for the explicit purpose of improving interprofessional collaboration and/or the health/well-being of patients/clients. Interactive learning requires active learner participation, and active exchange between learners from different professions.<sup>14</sup>

It is clear from the above that it is vital to have a clear definition of IPE in order to determine the relative merits of different models of IPE, as well as the usefulness of IPE interventions, compared with education in which the same professions were learning separately from one another.<sup>14</sup> Clarity of definition is also important to help education providers develop the models of education required to underpin the IPE.<sup>15</sup>

### Interprofessional education: the rationale

The education providers, including medical schools, have been criticized for not providing an environment conducive for shared learning and teaching and, despite the recommendations of GMC, formal teaching programmes and courses based on the concept of interprofessional learning are a rarity.<sup>16–17</sup> The lack of understanding of the work of nurses and other health care professionals has been said to be made worse by the early socialization of medical students.<sup>18</sup> However, changing environments in health care delivery systems and in medical education have made it imperative that teaching institutions give adequate consideration to interprofessional education and to the concept of teamwork.

It is considered neither possible nor desirable for doctors to provide patient care in isolation.<sup>19</sup> The GMC maintains in its document, *Good Medical Practice*, 'Health care is increasingly provided by multidisciplinary teams. You are expected to work constructively within such teams and to respect the skills and contributions of colleagues.'<sup>20</sup> The concept of interprofessional teaching and learning has been shown to encourage the breaking down of interprofessional barriers and to facilitate a team approach to health care.<sup>2</sup> It also promotes integration between various disciplines.<sup>21</sup>

Interprofessional teaching and learning at the undergraduate level has been found to encourage the elimination of professional boundaries at an early stage, promoting a team approach to health care, which ultimately results in a better quality health service.<sup>2</sup> In addition, this method has been

found to facilitate integration between different clinical disciplines, and to achieve standardization, which avoids variation of experience and is essential for avoiding compartmentalization.<sup>21</sup> Although the concept is currently in its infancy, it is likely that both 'learning with' as well as 'learning from' a range of health professionals will, in the foreseeable future, become commonplace.<sup>18</sup> There are a variety of educational, professional and economic factors that will drive this forward, including the need to share training facilities and resources.<sup>18</sup>

There is also a call for a more flexible workforce and the removal of professional boundaries resulting largely from care and education being increasingly provided in the community, together with the ever-increasing demands on resources.<sup>22</sup> There are a number of other forces which are driving interprofessional education and working, including the shortages of doctors in the UK, the reduction in the junior doctors' hours, escalating health care costs, increasing knowledge, skills and role overlap between doctors and nurses, and a growing academic emphasis within nursing.<sup>22</sup>

It has been argued that the present model of health care education, where doctors and nurses train separately, keep separate patient records and report to different hierarchies, is not conducive to collaboration and teamworking.<sup>23</sup> It has also been suggested that as the number of different professions and sites of care involved in the course a patient's illness increases, and as patients' subjective experience grows in importance as an indicator of quality, the need for health care delivery which is well co-ordinated, error-free and sensitive to patient and client demands increases.<sup>14</sup> It is also important to ensure that different professions are helped to develop a better understanding of each other's roles in order to break down traditional, mostly negative, stereotypes.<sup>24</sup>

The supporters of the concept of IPE point to the many benefits which IPE can bring to the educational system. A successful IPE can lead to significantly improved respect for and understanding of the roles of colleagues; job satisfaction amongst interprofessional team members; focus on the needs of users and carers, and cost-effectiveness.<sup>25</sup> It is also increasingly being regarded as a means of cultivating collaborative practice and teamwork between professions in the health and social care sectors and ultimately enhancing patient or client care.<sup>25</sup>

### Interprofessional education: is it effective?

The IPE is regarded as potentially a more effective method of education for supporting collaborative practice than a programme of uniprofessional education, as it enables different professionals to meet, exchange and interact together.<sup>14</sup> However, it is being increasingly recognized that it may not be evidence based.<sup>26</sup>

There is little evidence in the literature to demonstrate that when health and social care professionals learn together, this enables them to work better together.<sup>26</sup> Although there has been some evidence showing a change in attitudes and stereotyping,<sup>24</sup> as yet there is no evidence of improved patient care.<sup>22</sup> The new initiatives to promote and develop IPE in the UK are largely based on the perception that they will bring positive outcomes.<sup>27</sup> There is clearly a need for developing a robust evidence base for IPE in view of the criticisms that it is based on anecdotes rather than on hard evidence.

Efforts have been made by CAIPE in association with the Joint Evaluation Team for Inter-professional Education (JET) to rectify this, by undertaking a number of reviews of IPE interventions and studies in the last few years.<sup>26</sup> The first of these was the Cochrane review of evaluations of IPE in health and social care that met the rigorous standards set by the Cochrane Effective Practice and Organisation of Care Group (EPOC).<sup>14</sup> However, none of studies met the inclusion criteria.

The results of the Cochrane review led the JET to initiate a second, also called Parallel, review which widened the criteria used in the Cochrane review to gain a better insight into the IPE evaluations.<sup>26</sup> This included a wider range of outcomes and evaluation methodologies. The outcomes model was developed from a continuum of outcomes based on the work of Kirkpatrick.<sup>28</sup> These included learners' reactions, modification of attitudes and perceptions, acquisition of knowledge and skills, changes in individual behaviour, changes in organizational behaviour and benefits to patients.<sup>28</sup>

The evaluations of IPE, based in higher education, reported positive outcomes with regard to reactions to the learning experience, changes in attitude or perception and the acquisition of knowledge and/or skills.<sup>8</sup> The work-based IPE also showed positive outcomes in relation to changes in the organization of practice and effects on patients

or clients.<sup>8</sup> Another review, commissioned by the British Educational Research Association (BERA) in co-operation with CAIPE, conducted by JET, involved a critical analysis of the widest available range of methodologies to evaluate 19 IPE programmes in the UK.<sup>29</sup> The outcomes reported by this review were similar to the Parallel review.

Although the Cochrane review revealed no evidence for the effectiveness of IPE, it is important to bear in mind that not having sufficient evidence is not evidence that IPE does not work.<sup>14</sup> Hammick maintains that 'it highlights the need for evidence: evidence for whether it is effective or not and, importantly, evidence about the context(s) in which it is effective. In other words, indicators are needed about what type of IPE works, for what group of learners, in what situations.'<sup>26</sup>

The emerging evidence from the Parallel review suggests that IPE can contribute to improving collaboration in practice and has the potential to initiate changes in practice of benefit to the patient and the organization.<sup>26,29</sup> This has also been supported by the findings from the UK review. Moreover, there is some evidence that the work-based IPE may be superior to those based in higher education in achieving the positive outcomes.<sup>26</sup> However, it is important to be aware of the limitations of the studies conducted so far, as the number of well-designed and methodologically sound evaluations included in such studies/reviews has been small.

### Conclusions

The health professional's understanding of the need to work together within and between health care teams is now believed to be a key factor facilitating the provision of effective patient care.<sup>1</sup> It is considered vital that doctors and nurses are taught in an interdisciplinary environment early in their training, in order to help them appreciate the importance of each other's roles in the multidisciplinary team and to gain insight into the attitudes and working practices of other professions.<sup>22,27</sup>

The interprofessional approach to learning is generally regarded as an important factor, which facilitates a successful integration of health professionals into multidisciplinary teams.<sup>3,19</sup> Although previous studies have demonstrated a change in attitudes and stereotyping,<sup>24</sup> it is not yet established whether 'learning together' will result in better

'working together' in practice, and improvement in patient care.<sup>1</sup> Further studies are required to show whether this educational approach has any impact on future working practice and quality of patient care.

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