Let's work together, let's learn together

G Thurgood

Summary: This report, the second of two articles, outlines the findings of a study relating to multidisciplinary education or shared learning for health care professionals. This study was done as part fulfilment of the assessment criteria for Aston University's Business School Health Service Degree.

The present changes in the health and education sectors are important factors in considering how and where health care professional students should learn and with whom, in the future.

An overview of selected aspects of the study's methods and findings only are presented here, which it is hoped will be of most interest.

The aims and definitions of the study are described and the postal questionnaire method and rationale discussed. The attitudes of professionals towards shared learning and their experiences of this are some of the issues which the study aims to identify. The sample is described which includes nurses, occupational therapists, physiotherapists and other health professionals. The results illustrate the views of 81 health care professionals on a variety of subjects and of some agreement in principle towards multidisciplinary education but some reservations about implementing courses. Brief discussion of the study is included in the conclusion and summary.

A study of attitudes towards multi disciplinary education for health care professions.
**Aims of study**

The aims of the study were to:

1) assess present education/training courses
2) identify extent of shared learning
3) identify attitudes towards multidisciplinary education
4) identify future developments in health care professionals' education

**Definitions**

Health care professionals can be defined as any group of staff in a health care occupation who are required to undertake a statutory education/training course to practise as a qualified professional. This is further defined as professionals with direct contact with patients.

Nurses and doctors were included within the definition as were physiotherapists (physios), occupational therapists (OTs), radiographers, chiropodists and speech therapists. Of the eight professions supplementary to medicine, referred to by the National Association of Health Authorities, only the four with direct patient contact were included (NAHA, 1987). The others were either in indirect contact with patients, or their numbers were too small to consider.

Within this study, the terms nurses and nursing include all areas of nursing, midwifery and health visiting, unless otherwise indicated.
The term multi disciplinary refers to a number of students from different professions attending part, or the whole, of a course together. A similar term is interprofessional. The course may be organised and co-ordinated by teachers from various disciplines. Shared learning refers to the opportunities for students to learn together. The study is concerned with both pre-registration/undergraduate and post-registration/postgraduate students. It is also concerned with hospital and community staff.

**Method of study**

The study was planned and structured on the survey method using self administered postal questionnaires. The questionnaires were sent with an explanatory letter and a stamped addressed envelope.

The aim of this method was to obtain respondents' attitudes towards, and experiences of, multi disciplinary education for health care professionals.

This method allowed a wide geographical area to be sampled, reached a wide number of people quickly, ensured respondents' anonymity and would not be too costly. Problems of this method considered included unwillingness to express attitudes on sensitive topics and low response rates which introduce bias (Seaman and Verhonick, 1982).

**Questionnaire design**

The questionnaire was designed to be easy to complete, clear and unambiguous. The questions were written as briefly as
possible and designed to stimulate the respondent by being interesting and relevant. Closed and open questions involving ticking of boxes or writing comments were included, as were Lickert attitude scale statements. The questionnaire was designed to measure both nominal and ordinal scale data and to be analysed using descriptive statistics.

There were 46 questions which contained 61 variables within them. Three questions referred to the respondents' professional status, 12 questions referred to a selection of aspects relating to multidisciplinary education and 31 questions related to attitudes towards shared learning. These attitude questions were related to four different areas of the study. Twelve questions related to attitudes to multidisciplinary education, 8 questions related to the use of multidisciplinary clinical teams, 6 questions related to interprofessional competition, status and power and 5 questions dealt with clinical practice and patient care.

The study was conducted during the period 16 May 1989 to 31 July 1989. The questionnaires were analysed by computer with the analysis being category counts for overall responses and for the four professional groups, physiotherapists, occupational therapists, nurses and other professionals.

**Sample**

The sample population was aimed at members of the professions listed below:

- Medicine
- Nursing
The educators of these professions were chosen as it was believed they would be responsible for any future policy changes towards multi disciplinary health care education.

The population numbers of these health care professional educators are difficult to estimate, however there appear to be 323 departments in the UK concerned with education of health care professionals in a number of different types of educational settings.

The Chartered Society of Physiotherapy suggests there were 4,000 physiotherapy students and 450 physiotherapy teachers in 1989.

In 1988 there were 3,790 nurse educators with 59,508 students in all undergraduate/pre-registration courses (ENB, 1987).

In order to sample the population as widely as possible a stratified random sampling method was chosen. The stratum were chosen to obtain this wide sample. The stratum were profession, type of institution and UK regions. Seven professions, six types of institutions and six regional zones were targeted.
Table 1. Number and type of educational institution, number and percentage sampled, by professional grouping

<table>
<thead>
<tr>
<th>Health care professional category</th>
<th>Med</th>
<th>OT</th>
<th>Nurse</th>
<th>Physio</th>
<th>Chiropody</th>
<th>Speech Therapy</th>
<th>Radiography</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total no. of institutions</td>
<td>27</td>
<td>15</td>
<td>161</td>
<td>31</td>
<td>15</td>
<td>17</td>
<td>57</td>
<td>323</td>
</tr>
<tr>
<td>Samples sent</td>
<td>13</td>
<td>6</td>
<td>16</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>54</td>
</tr>
<tr>
<td>% of total</td>
<td>48.15</td>
<td>40.00</td>
<td>9.90</td>
<td>29.08</td>
<td>20.00</td>
<td>17.64</td>
<td>7.00</td>
<td>16.70</td>
</tr>
</tbody>
</table>

Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Med</th>
<th>OT</th>
<th>Nurse</th>
<th>Physio</th>
<th>Chiropody</th>
<th>Speech Therapy</th>
<th>Radiography</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Tech College</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>College of HE</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Institute of HE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Polytechnic</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>15</td>
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<tr>
<td>University</td>
<td>13</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Totals</td>
<td>13</td>
<td>6</td>
<td>16</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>54</td>
</tr>
</tbody>
</table>
The number of institutions in the sample was 54 which was 16.7% of the total. Although not a large sample it meant 248 questionnaires were sent to 54 institutions (Table 1). It was hoped that by sending 3-5 questionnaires to each institution a wider sample of respondents' views would be gained than by sending one questionnaire to 248 institutions. The lack of control over who completed the questionnaires may have introduced some bias into the study.

Results

The overall response rate was 32.66%. There were varying response rates from the 7 professions (Table 2). Responses were received from 10 different professional groups with the largest responses from nurses, physiotherapists and occupational therapists (Table 3). Because of the small numbers involved in the other professional groups it was decided to add all these results together. This must be considered when analysing the results.

Table 2. Response rates of professions

<table>
<thead>
<tr>
<th>Profession</th>
<th>No. sent</th>
<th>No. returned</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>59</td>
<td>4</td>
<td>6.77</td>
</tr>
<tr>
<td>Nursing</td>
<td>75</td>
<td>33</td>
<td>44.00</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>25</td>
<td>15</td>
<td>60.00</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>40</td>
<td>16</td>
<td>40.00</td>
</tr>
<tr>
<td>Speech therapy</td>
<td>15</td>
<td>4</td>
<td>26.66</td>
</tr>
<tr>
<td>Radiography</td>
<td>19</td>
<td>4</td>
<td>21.05</td>
</tr>
<tr>
<td>Chiropody</td>
<td>15</td>
<td>3</td>
<td>20.00</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>81</td>
<td>32.66</td>
</tr>
</tbody>
</table>
Table 3. Response rate by profession

<table>
<thead>
<tr>
<th>Profession</th>
<th>%</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>40.74</td>
<td>33</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>18.52</td>
<td>15</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>19.75</td>
<td>16</td>
</tr>
<tr>
<td>Speech therapy</td>
<td>4.94</td>
<td>4</td>
</tr>
<tr>
<td>Radiography</td>
<td>4.94</td>
<td>4</td>
</tr>
<tr>
<td>Chiroprapy</td>
<td>3.70</td>
<td>3</td>
</tr>
<tr>
<td>Psychology</td>
<td>1.23</td>
<td>1</td>
</tr>
<tr>
<td>General practice</td>
<td>3.70</td>
<td>3</td>
</tr>
<tr>
<td>Personnel management</td>
<td>1.23</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00</strong></td>
<td><strong>81</strong></td>
</tr>
</tbody>
</table>

Some of the professions are over/under represented compared with their population within the health care system (Table 3). The first four categories of respondents by job title/grade relate specifically to the education of health care professionals and so the survey sample is important as 64.20% of respondents were in this category (Table 4). Respondents in managerial jobs accounted for 17.28% of the sample and are important as they add a clinical view of the professions' opinions. There were 37 different responses to the job title, so when coding the results for computer analysis these were grouped into 10 categories (Table 4).

The respondents' experience in their profession varied a lot but, as would be expected in managers and educationalists, most were well experienced. Those with 16 or more years experience accounted for 65.43% of the total sample.

This is important when considering attitudes and socialisation of professions, as the respondents may have
deep rooted, strong opinions relating to the education of professions.

<table>
<thead>
<tr>
<th>Table 4. Categories of respondents by job title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Teacher/Tutor/Lecturer I</td>
</tr>
<tr>
<td>Senior Tutor/Senior Lecturer II</td>
</tr>
<tr>
<td>Principal/Vice Principal Lecturer</td>
</tr>
<tr>
<td>Head of Dept/Dean/Professor</td>
</tr>
<tr>
<td>General Practitioner/Doctor</td>
</tr>
<tr>
<td>Personnel Manager</td>
</tr>
<tr>
<td>District Officer (Speech</td>
</tr>
<tr>
<td>Therapy/Occupational Therapy</td>
</tr>
<tr>
<td>Therapy/Physiotherapy</td>
</tr>
<tr>
<td>Senior Nurse Manager</td>
</tr>
<tr>
<td>Superintendent Physiotherapist/Senior</td>
</tr>
<tr>
<td>Therapist II/IIII/III/Speech Therapist B</td>
</tr>
<tr>
<td>No response</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The attitude questions relating to the four areas of the study, multi disciplinary education, multi disciplinary clinical teams, interprofessional competition, status and power and clinical practice and patient care, provide many interesting results which can only be provided in summary form in this report and main points of interest highlighted.

**Attitudes towards multidisciplinary education**

The results of the 12 attitude questions relating to various aspects of multidisciplinary education indicate an overall favourable view of the concept of multidisciplinary education but that its actual development and implementation may
need careful planning and a variety of different approaches must be considered.

There was some agreement that multidisciplinary education is necessary for effective health care delivery in the 1990s and that students and teachers/lecturers would benefit from this. Most, 85%, felt that health care professionals do benefit from multidisciplinary courses and 66% felt health care professionals would value multidisciplinary education.

Multidisciplinary education was seen as a way of reducing wasteful overlap of expertise by 71.6% of respondents and that shared learning would increase multidisciplinary research by 77% of respondents.

Respondents agreed, 64%, there are many opportunities for multidisciplinary education although physiotherapists wanted or needed more.

The idea of a health care professional degree was agreeable to 54% of the respondents although these were mostly nurses. The idea of a college of health care professionals was agreed to by 58%, although physiotherapists were noticeably not keen. Nor were they in agreement with a common core approach even though there was an overall agreement of 65.43%.

58% of the respondents felt multidisciplinary education would be more cost effective. However, 73% of the occupational therapists disagreed.
Attitudes towards multidisciplinary clinical teams

These results relate to the 8 questions about attitudes towards multidisciplinary clinical teams. Respondents agreed that multidisciplinary teams' effectiveness is inhibited by interprofessional competition, however, 66% felt multidisciplinary teams work well in practice.

Shared learning would promote an environment of 'togetherness' between health care professionals was agreed by 79% and multidisciplinary courses would improve communication was supported by 86.42%.

Knowledge of each other's roles and skills would be improved by multidisciplinary courses was agreed by 88% of the sample.

Role overlap was seen as inevitable by 85%, yet 66.67% felt health care professionals tended to be isolated from each other.

Only 13.58% agreed that present courses adequately prepare health care professional students to understand each other's roles and skills.

Attitudes towards interprofessional competition, status and power

These results are from the 6 questions about attitudes to some of the problems of multidisciplinary teams.

Although 81.8% of nurses felt the nurse is responsible for the co-ordination of much of the care given by other professionals, all the other professions disagreed.
Multidisciplinary education would not be a threat to the status of professionals according to 72.84% of respondents, although only 46.67% of the occupational therapists agreed. Professional power was seen as a major inhibitor in the development of multi disciplinary courses by 58% of the respondents. However, there was a lot of difference between the professional groups with 81.82% of nurses agreeing, compared to 37.50% physiotherapists and 33.33% occupational therapists.

Professional attitudes prevent collaboration between disciplines according to 65% of respondents although occupational therapists disagreed by 60%. The difficulty of finding ways of crossing traditional and carefully defined professional barriers was felt by 60.49% to be important. Again occupational therapists disagreed by 60%. 53% felt professions are resistant to change related to methods of education, but both physiotherapists and occupational therapists disagreed.

**Attitudes towards clinical practice and patient care**

These results are from the 5 questions related to clinical practice and patient care.

Over 85% felt there should be an emphasis on the multidisciplinary approach to individuals' rehabilitation due to the increasingly ageing population.

To meet present day health care needs 81.48% felt a multidisciplinary approach to learning is desirable. Occupational therapists agreed by only 53.33%.
Respondents disagreed that patients/clients would receive better co-ordinated care and more comprehensive care if all health care professionals were educated together. However, 66.60% of nurses agreed but only 6.67% of occupational therapists.

68 respondents (83.95%) felt there was a need to rethink the roles of health care professionals for the 1990s. All groups agreed by 73% or more.

Asked if multi disciplinary education would provide a flexible, co-ordinated service which would respond to patients' needs, 58% agreed overall but occupational therapists disagreed.

Benefits of creating a multidisciplinary course

Over 75% felt there were benefits in multidisciplinary courses and provided the following examples:

- Improved teamwork
- Better communication
- Better use of resources
- More understanding/awareness of others' roles
- Cost effectiveness
- Better use of teaching resources
- More opportunities for multidisciplinary research
- Less professional competition
Table 5 lists the topics respondents felt suitable for shared learning.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Nurses</th>
<th>OTs</th>
<th>Physios</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td>78.78</td>
<td>26</td>
<td>53.27</td>
<td>8</td>
<td>18.75</td>
</tr>
<tr>
<td>Physiology</td>
<td>78.78</td>
<td>26</td>
<td>53.27</td>
<td>8</td>
<td>18.75</td>
</tr>
<tr>
<td>Development</td>
<td>90.91</td>
<td>30</td>
<td>73.34</td>
<td>11</td>
<td>68.75</td>
</tr>
<tr>
<td>Psychology</td>
<td>90.91</td>
<td>30</td>
<td>59.93</td>
<td>9</td>
<td>81.25</td>
</tr>
<tr>
<td>Sociology</td>
<td>93.94</td>
<td>31</td>
<td>66.67</td>
<td>10</td>
<td>87.50</td>
</tr>
<tr>
<td>Communications</td>
<td>93.94</td>
<td>31</td>
<td>93.33</td>
<td>14</td>
<td>100.00</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>93.94</td>
<td>31</td>
<td>93.33</td>
<td>14</td>
<td>100.00</td>
</tr>
<tr>
<td>Management</td>
<td>90.91</td>
<td>30</td>
<td>86.66</td>
<td>13</td>
<td>87.50</td>
</tr>
<tr>
<td>Philosophy</td>
<td>84.85</td>
<td>28</td>
<td>66.67</td>
<td>10</td>
<td>75.00</td>
</tr>
<tr>
<td>Health Education</td>
<td>87.87</td>
<td>29</td>
<td>86.67</td>
<td>13</td>
<td>81.00</td>
</tr>
<tr>
<td>NHS</td>
<td>90.91</td>
<td>30</td>
<td>86.67</td>
<td>13</td>
<td>100.00</td>
</tr>
<tr>
<td>Research</td>
<td>90.91</td>
<td>30</td>
<td>93.34</td>
<td>14</td>
<td>75.00</td>
</tr>
<tr>
<td>Caring</td>
<td>78.78</td>
<td>25</td>
<td>80.00</td>
<td>12</td>
<td>68.75</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>66.66</td>
<td>22</td>
<td>26.67</td>
<td>4</td>
<td>56.25</td>
</tr>
<tr>
<td>Prof Legal</td>
<td>81.81</td>
<td>27</td>
<td>73.33</td>
<td>11</td>
<td>62.50</td>
</tr>
<tr>
<td>Social Policy</td>
<td>93.94</td>
<td>31</td>
<td>86.67</td>
<td>13</td>
<td>93.75</td>
</tr>
<tr>
<td>Diseases</td>
<td>66.66</td>
<td>22</td>
<td>60.00</td>
<td>9</td>
<td>25.00</td>
</tr>
<tr>
<td>Economics</td>
<td>87.88</td>
<td>29</td>
<td>80.00</td>
<td>12</td>
<td>81.25</td>
</tr>
<tr>
<td>Politics</td>
<td>90.91</td>
<td>30</td>
<td>80.00</td>
<td>12</td>
<td>100.00</td>
</tr>
<tr>
<td>Treatment care</td>
<td>48.48</td>
<td>16</td>
<td>13.33</td>
<td>2</td>
<td>18.75</td>
</tr>
<tr>
<td>Prof Roles</td>
<td>90.91</td>
<td>30</td>
<td>80.00</td>
<td>12</td>
<td>93.75</td>
</tr>
</tbody>
</table>
Of the 21 topics, 16 received more than 75% agreement that they were suitable. The ones which were not suitable were anatomy, physiology, pharmacology, diseases and treatment and care. Nurses agreed with all but 1 area, that of treatment and care. Occupational therapists agreed with all but 2 topics, pharmacology and treatment and care. Physiotherapists disagreed with 4 topics' suitability, anatomy, physiology, diseases and treatment and care. The 'others' group felt anatomy and treatment and care were unsuitable.

Physiotherapists agreed by 100% that communication, interpersonal skills, the NHS and politics would be suitable for shared learning.

Overall the topics indicated do seem to be suitable for varying degrees of shared learning experiences. It would be important to review this and identify which topics each profession felt it could share and with which professions. Other topics the respondents felt suitable for shared learning included the following:

**Nurses**
- Cultural / transcultural health care, race, ethnology, health,
- Problem orientated approaches to shared care
- Teaching skills/education theories
- Alternative therapies

**Occupational therapists**
- None

**Physiotherapists**
- Finance
- Legislation
- Information technology
'Others' counselling skills

Best venue for course

Table 6 illustrates the most popular venues respondents felt most suitable for shared learning.

<table>
<thead>
<tr>
<th></th>
<th>Nurses</th>
<th>OTs</th>
<th>Physios</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>24.24</td>
<td>8</td>
<td>0.00</td>
<td>43.75</td>
<td>7</td>
</tr>
<tr>
<td>Polytechnic</td>
<td>27.27</td>
<td>9</td>
<td>53.33</td>
<td>37.50</td>
<td>6</td>
</tr>
<tr>
<td>CHE</td>
<td>15.15</td>
<td>5</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>CFE</td>
<td>3.03</td>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Hospital</td>
<td>12.12</td>
<td>4</td>
<td>0.00</td>
<td>0.00</td>
<td>6.25</td>
</tr>
<tr>
<td>Community</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>3.03</td>
<td>1</td>
<td>6.67</td>
<td>0</td>
<td>6.25</td>
</tr>
<tr>
<td>No response</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Combined</td>
<td>9.09</td>
<td>3</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Any</td>
<td>3.03</td>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Difficult to specify</td>
<td>3.03</td>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
</tbody>
</table>

1 Table shows the respondents opinions of the best venue for multidisciplinary courses and shows a 61% preference for university or polytechnic venues. CHE = College of Higher Education, CFE = College of Further Education, Community = Community based.
Let's work together, let's learn together

Nurses
- cost, finance, funding, manpower
- venue, accommodation
- length and level of courses
- entry criteria, number of students
- status, ownership of course
- overcoming the present system
- motivation, commitment from employing agencies
- credibility for all students
- timetabling
- curriculum
- professional jealousy
- professional power
- staff attitudes
- resistance to change

Occupational therapists
- different levels of knowledge needed
- loss of expertise
- funding, finance, large numbers of students interprofessional rivalry, professional defensiveness convincing employer the end product is needed identifying essential differences between professions and ensuring they are not lost resources - staff and facilities
- breadth and depth of topics
- changing attitudes
- ensuring levels of competency are maintained

Physiotherapists
- different levels of knowledge needed
- professional bodies
- professional standards
ensuring input from all disciplines
topics relevant to all students cost
location
expertise
resources
agreeing curriculum
educational bias in favour of certain academic professions

Other professionals
threats, scepticism, jealousy, suspicion, professional barriers
politics, cash, skill mix, venue
topic level to meet all student needs
student numbers to manageable size with balance between
large and small professional groups
professional bodies' acceptance of common courses
curriculum development requires ideological commitment
from all professionals involved
ensure professions do not lose identity

The identification of similar problems by the four professional
groups is important as it indicates awareness of the difficulties.
As several of these problems can be overcome, these results are
encouraging and indicate providing multi disciplinary courses
may not be as difficult as some believe.

Benefits for patients/clients
The following results illustrate the professional groups' responses to the benefits patients/clients would gain from the provision of multidisciplinary education. Some common
benefits include better co-ordinated care and better referral methods. The most common responses included:

Nurses
- better all round care
- better standards of care
- more holistic care
- pooling of resources
- better continuity of care
- better co-ordinated care
- mutual respect of team members

These are important as they indicate nurses believe multidisciplinary courses would improve the care patients receive and team work.

Physiotherapists
- improved co-ordination of care
- more effective teamwork
- holistic care
- quicker referral

These are important as they suggest professionals believe quality of care can be improved by shared learning.

Occupational therapists
- better referrals increased
- quality of care

'Other' professionals
- improved co-ordination of care
- quicker referral
- more effective teamwork
- holistic care
It can be seen that there is some agreement between the groups that benefits for patients/clients can result from shared learning opportunities.

Provision of multidisciplinary courses

Just over half the respondents provided multidisciplinary courses as illustrated in Table 7.

Table 7. Provision of multidisciplinary courses

<table>
<thead>
<tr>
<th></th>
<th>Nurses</th>
<th>OTs</th>
<th>Physios</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>45.45</td>
<td>15</td>
<td>73.33</td>
<td>11</td>
<td>37.50</td>
</tr>
<tr>
<td>No</td>
<td>54.55</td>
<td>18</td>
<td>26.67</td>
<td>4</td>
<td>62.10</td>
</tr>
</tbody>
</table>

Examples of courses provided by each group of respondents:

*Nurses*
- communication skills
- primary health care
- management
- health and safety
- race and health
- health promotion/education moving
- and handling patients
- Professional Development degree BSc in Nursing/Health Studies
- Research methods/statistics
- Diploma in Professional Nursing Studies
- MSc in Nursing and Health Care Management

This illustrates a wide range of courses offered by nurses.
Let’s work together, let's learn together

**Occupational therapists**
- research methods
- counselling
- Remedial Health Science degree
- BSc(Hons) Health Studies Degree in Occupational Therapy

**Physiotherapists**
- neurology
- Diploma/BSc in Professional Development
- BSc in Remedial Health Sciences Management
- of patients with Cerebral Palsy

**Other professions**
- primary health care team for medical students
- BEd in Health Care Studies
- counselling
- patients with AIDS
- management
- lifting techniques
- professional development
- resuscitation
- fire and safety

All these courses illustrate that there are many different shared learning opportunities available. Similar results were obtained with a question about the respondents' knowledge of other courses on offer.

**Multidisciplinary courses attended**

Almost 75% of respondents had attended a multidisciplinary course as shown in Table 8.
Table 8. Professionals who had attended a multidisciplinary course

<table>
<thead>
<tr>
<th></th>
<th>Nurses</th>
<th>OTs</th>
<th>Physios</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
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<td>80.00</td>
<td>12</td>
<td>75.00</td>
</tr>
<tr>
<td>No</td>
<td>24.24</td>
<td>8</td>
<td>20.00</td>
<td>3</td>
<td>25.00</td>
</tr>
</tbody>
</table>

A selection of the courses included:
- family planning
- management
- head injury course
- counselling
- neurology
- education
- ethnology
- MEd, BSc
- medical ethics
- sports medicine
- mental handicap
- pain
- further education teacher's certificate
- MA Sociology Research Methods in Health and Health Care
- Diploma in Health Education MSc
- in Communication Studies Diploma
- in Social Administration
Benefits for health professionals

When asked who the respondents would benefit from sharing learning with, a large number (43.21%) felt they would benefit from sharing with all the professions listed.

It was indicated that 20.99% felt they would most benefit from sharing with medical staff. There were many comments regretting the absence of doctors from a lot of multidisciplinary courses.

Conclusion

This study has highlighted many areas of interest relating to the education and training of health care professionals and the provision of patient/client care in a developing and evolving health service.

It is obvious that as the organisation of health care provision changes so must the education of the health care professionals who provide the care.

Professionals need help to cope with change, particularly if it is seen as a threat to the professional's status. Only by bringing professionals together more, can more effective health care be provided. Multidisciplinary education which offers opportunities for shared learning may be one method of achieving this.

This study included the responses of 81 health care professionals with a wide range of experiences in both the health service and education system. Although the opinions of 4 GPs were obtained the results are sadly lacking more
views from the medical profession. The respondents felt multidisciplinary education is necessary for effective delivery of health care in the 1990's and that teachers, students and patients would benefit. There was some agreement with the ideas of a health care professional degree, a college of health care studies and a common core approach.

A majority believed multidisciplinary teams work well in practice but they also felt team effectiveness is inhibited by interprofessional competition. It was agreed shared learning would promote an environment of 'togetherness' between professionals and improve communication.

Two-thirds of respondents agreed professionals tended to be isolated from each other and only 13.58% agreed that present courses adequately prepare health students to understand each others roles and skills. This needs further investigation.

Responses related to interprofessional competition, power and status confirm that these are some of the most important barriers to successful development of shared learning courses. Within nursing there can be professional barriers between general, psychiatric nurses, hospital and community, day and night staff which can inhibit shared learning opportunities. Common foundation courses in Project 2000 curriculum attempt to amend this.

Respondents felt professional power was a problem, as was the professionals' attitudes and traditional boundaries which must cause resistance to change in long established methods of education and training.

The majority of respondents felt multidisciplinary education was desirable to meet our present health care needs and that
to deal with the increasingly ageing population, rehabilitation should involve a multidisciplinary approach. The professions disagreed that patients' care would be improved but the different groups did differ. However, 83.95% believed there is a need to rethink the roles of health professionals in the future.

There was some agreement that multidisciplinary education could provide a flexible, co-ordinated service to meet patients' needs. This is an important aspect relating to the government's White Paper which emphasises working for patients.

There was a large agreement that creating multidisciplinary education courses would be beneficial. The benefits the respondents stated emphasised a lot of the benefits found in the literature such as communication improvements, better use of resources and improved teamwork.

More than three-quarters of the respondents felt 16 of the 21 topics listed would be suitable for shared learning. This was encouraging but needs further investigation.

The venues felt most appropriate for multidisciplinary education were universities or polytechnics.

The problems of creating and implementing multidisciplinary courses were consistent between the professions and reflected most of the problems highlighted in the literature.

The respondents also had similar views on the patients/clients benefits from multidisciplinary education. Improved teamwork and better co-ordinated care were two of the main points expressed.
Only half of the respondents provided multidisciplinary courses and 40.74% did not know of any.

However, three-quarters of respondents had attended a multidisciplinary course. The comments in these three areas reflect a wide range of type of course and subject matter but the majority are in postgraduate study.

Respondents generally felt they would benefit from shared learning with the majority of other professions, particularly the medical profession.

The results of the investigation provide many interesting findings which need further study and discussion. The respondents’ views may not be repeated in a larger study and not all areas of nursing were included in the sample. However, the results provide a comprehensive view of the attitudes of professionals in positions of power, who could have influences on developments in the future.

If their views are strongly believed, there may be important changes in the education of health care professionals in the next few years.

This study has reviewed the developments in shared learning and a gradual change towards shared learning can be seen in varying degrees and ways.

The study has highlighted the reasons why shared learning is considered important. These include improving quality of patient/client care, increasing professionals' job satisfaction and using expensive resources economically.
The results reflect an awareness of the benefits of shared learning. There is, however, some doubt about the creation and implementation of these courses. These doubts are due to professional barriers, financial costs and power which may inhibit professionals.

It would seem there is a need to encourage professionals concerned with education to communicate more with each other and to begin discussing and planning policies which will allow shared learning to occur.

This need is further created by multidisciplinary approaches in practice to a wide variety of patients/clients including those who have diabetes, stomas, strokes, heart disease and terminal illness.

Also multidisciplinary groups are forming to look at specific areas of health care such as pain control, infection control and wound care. The results show that professionals have strong positive attitudes towards shared learning and this reflects present postgraduate courses being commenced.

Also a Health Care Promotion Educational Forum has recently formed between ten professions, creating a multidisciplinary approach to education and training (ENB, 1990).

There is, therefore, the need for further study into the areas that have been investigated and to promote a spirit of co-operation between health care professionals in order to meet the needs of the patients/clients in our rapidly changing health service and society. By learning together and working together professionals can continue to provide high quality care to their patients/clients into the next century.
References

Biographical note: Graham Thurgood RGN, MSc, Cert Ed (FE), Dip N (Lond), NDN Cert is a nurse tutor at West Yorkshire College of Health Studies, based at Huddersfield, mainly concerned with RGN students. His interests include mentor preparation, student centred learning and management studies.

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