Background
It is recognised that adopting a positive approach to continence promotion, education and training creates a very real possibility of cure. However, from a review of the literature we determined that there was no recent reviews on the content of continence within undergraduate education. The study aims to determine the continence content of medical, nursing (adult, learning disabilities, mental health, child), midwifery, physiotherapy and occupational therapy undergraduate educational programs within Higher Education Institutions (HEIs) in the UK.

The Literature
Laycock’s Survey 1995 (Nursing, medicine, GP’s, Physiotherapy)
Overall mean - 4.6 hours
Pre-registration nursing - 9.4 hours (n=42)
Physiotherapy - 4.2 hours (n=28)
Medicine - 3.3 hours (n=29)
GP’s - unable to supply this information (n=28)

Walker 1998 (physiotherapy only)
UK 70% > one hour (38.5% response)
America 51% > one hour (27% response)
Canada 33% > one hour 92% response
Morishita (1994) reported an average of 2.14 hours of lecture time within schools of nursing in the USA, clinical time dependent on student encountering a patient with UI
Norton (1986) who stated that UI is rarely treated as a separate subject in schools of nursing in the UK

Study design, materials and methods
A short web-based questionnaire, designed following a review of the literature and consultation with HEI staff, was piloted at two universities across relevant courses, and minor alterations were made. Relevant HEIs in the UK were identified via the University and Colleges Admissions Services (n=86) and the Deans or Head of Schools were contacted to obtain permission for dissemination of the survey web-link to the staff members responsible for course content. After the initial e-mail if there was no response to the survey two reminder emails were sent, followed by a telephone call during which the questionnaire could be completed if the responder agreed.

The Questionnaire
The survey questions focused on how continence education was incorporated into the curriculum (as a separate module and/or within other course content); the quantity of continence education provided (total number of hours dedicated to continence); the areas of curriculum that contained continence-specific education; and the areas of continence covered (e.g. aetiology, assessment). Questions also related to the specialism of the tutors (e.g. invited lecturers), methods of delivery (lectures, clinically-based case studies) and the emphasis placed on continence within the educational program. Responders were asked to indicate any changes in the continence content during the past five years, and to document the reasons for change.

Response
From January 2010 to October 2010, 86 HEI’s were approached, 85 agreed to participate in the survey. An overall response rate of 81% (n=294/362) was obtained from undergraduate professional programmes, of these questionnaires 92% (n=271/294) were completed. The highest response was from adult nursing and the lowest from medicine (Table 1). Most courses were of 3 years’ duration; medical courses were on average 5 years.

<table>
<thead>
<tr>
<th>HEI</th>
<th>Total amount of time</th>
<th>Undergraduate</th>
<th>Other Professional</th>
<th>Undergraduate</th>
<th>Other Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=42</td>
<td>4.6 hours</td>
<td>n=29</td>
<td>4.9 SD 4.3</td>
<td>n=42</td>
<td>4.6 SD 4.3</td>
</tr>
<tr>
<td>n=28</td>
<td>3.8 hours</td>
<td>n=21</td>
<td>3.9 SD 3.9</td>
<td>n=28</td>
<td>3.8 SD 3.9</td>
</tr>
<tr>
<td>n=27</td>
<td>3.5 hours</td>
<td>n=23</td>
<td>3.6 SD 3.6</td>
<td>n=27</td>
<td>3.5 SD 3.6</td>
</tr>
<tr>
<td>n=26</td>
<td>3.1 hours</td>
<td>n=22</td>
<td>3.2 SD 3.2</td>
<td>n=26</td>
<td>3.1 SD 3.2</td>
</tr>
<tr>
<td>n=25</td>
<td>2.8 hours</td>
<td>n=21</td>
<td>2.9 SD 2.9</td>
<td>n=25</td>
<td>2.8 SD 2.8</td>
</tr>
<tr>
<td>n=24</td>
<td>2.5 hours</td>
<td>n=20</td>
<td>2.6 SD 2.6</td>
<td>n=24</td>
<td>2.5 SD 2.5</td>
</tr>
<tr>
<td>n=23</td>
<td>2.2 hours</td>
<td>n=19</td>
<td>2.3 SD 2.3</td>
<td>n=23</td>
<td>2.2 SD 2.2</td>
</tr>
<tr>
<td>n=22</td>
<td>1.9 hours</td>
<td>n=18</td>
<td>2.0 SD 2.0</td>
<td>n=22</td>
<td>1.9 SD 1.9</td>
</tr>
<tr>
<td>n=21</td>
<td>1.6 hours</td>
<td>n=17</td>
<td>1.7 SD 1.7</td>
<td>n=21</td>
<td>1.6 SD 1.6</td>
</tr>
<tr>
<td>n=20</td>
<td>1.3 hours</td>
<td>n=16</td>
<td>1.4 SD 1.4</td>
<td>n=20</td>
<td>1.3 SD 1.3</td>
</tr>
<tr>
<td>n=19</td>
<td>&lt;1 hour</td>
<td>n=15</td>
<td>&lt;1 hour</td>
<td>n=19</td>
<td>&lt;1 hour</td>
</tr>
</tbody>
</table>

Question: From the modules you selected in the previous question, can you estimate the total amount of time spent on continence education in the whole programme?

<table>
<thead>
<tr>
<th>How is continence education provided?</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded within other modules</td>
<td>68%</td>
</tr>
<tr>
<td>Provided as an individual module</td>
<td>32%</td>
</tr>
<tr>
<td>Both</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total amount of time

Further information
Postgraduate Online Survey: what professions qualified within the last 18 months – was your undergraduate continence education fit for purpose?
Qualitative interviews with purposely selected sample
New research relating to translation of education into clinical practice – known that education increases knowledge, perhaps attitude but rarely behaviour.

Further information: NMAHP RU is funded by the Scottish Government’s Health Directorates, Chief Scientist Office. It has academic bases within Glasgow Caledonian University and the University of Stirling. The overall aim of the Unit is to improve the care and treatment of patients through scientific study of direct patient care.
Contact details: NMAHP RU, Glasgow Caledonian University, Buchanan House, Glasgow G4 0BA.
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Acknowledgements

References
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