The value, effectiveness and impact of health and academic librarians

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Aims

• To explore the evidence of the value, effectiveness and impact of health and academic librarians
• To examine how we can continue to provide evidence to demonstrate effectiveness and impact
Value

• The importance that stakeholders (funding institutions, politicians, the public, users, staff) attach to libraries and which is related to the perception of actual or potential benefit (3.75). The input is converted into output by means of processes. The output can have direct, pre-defined effects (outcomes). Output and outcomes can lead to impact and finally to value."

• Benefit or worth. Can include monetary value and impact. (Bawden et al, 2009)

• Can include utility or usefulness, is determined by the service user and is difficult to disentangle from quality. (Urquhart, 2015)
Impact

• The influence of libraries and their services on individuals and/or on society. The difference or change in an individual or group resulting from the contact with library services (3.25);

• Note: The change can be tangible or intangible and it may only be possible for the library to contribute to an impact rather than be solely responsible (e.g. length of stay, patient care)
Outcome

• Direct, pre-defined effect of the output related to goals and objectives of the library’s planning (e.g. number of users, user satisfaction levels) (3.44);

• Consequences of deploying services on the people who encounter them or the communities served (Markless and Streatfield, 2006, p7)
Or very simply.....

- Does it work (effectiveness)
- Does it make a difference (impact)
What evidence is there to support the employment of professionally trained library, information, and knowledge workers? A systematic scoping review of the evidence.

Rationale

• Library, Information and Knowledge professionals make a significant contribution to the overall aims of the organisations that they serve. And yet, their skill set is often over-looked and this contribution is under-valued.
Systematic scoping review

- Identify the evidence base to support the profession and members in making the case for their skills and expertise
- Create a range of evidence based propositions
- Identify gaps in research
5 stages (Arksey and O’Malley, 2005)

1. Identifying research question
2. Identifying relevant studies
3. Study selection
4. Charting the data
5. Collating, summarising, reporting results
1. Identifying the question

- What evidence is there to support the employment of professionally trained or registered library, information and knowledge staff?
2. Identifying relevant studies

- LISA, LISTA, Library Literature, Scopus, Medline and Cinahl
- Ethos
- [https://lis-systematic-reviews.wikispaces.com/search/view/systematic](https://lis-systematic-reviews.wikispaces.com/search/view/systematic)
- [http://www.cilip.org.uk/cilip/advocacy-campaigns](http://www.cilip.org.uk/cilip/advocacy-campaigns)
- Targeted internet search
3. Study selection

• Include:
  • Studies that assess the effects, value or impact of any library/information/knowledge management intervention or service. Library, information, knowledge or IT workers whose work relates to information or knowledge which needs to be organised or use of a system in which the information is located
  • Roles which include archives or study records
  • Evidence of measurable outcome (e.g. time saved, improved business, improved patient care, improved grades, impact on community)
  • All types of evidence (including experimental or observational evaluation studies with controlled or uncontrolled prospective design or controlled retrospective design, return on investment, cost analysis, correlational studies)
  • Studies in English
Exclude:

- Interventions which are provided by information workers that relates to information systems and how these work
- Descriptions of interventions/services with no evaluation component or measurable outcomes
- Studies which only include process type outcomes eg user satisfaction, numbers of users, books loaned
- Archivists
- Evaluation or impact theory testing
- “How to” articles on measuring performance, impact, evaluation, value
- Citation impact analysis and methods of citation impact
- Studies in languages other than English
Outcomes considered

• Measures of time saved
• Measures of money saved
• Measures of outcomes relevant per sector (e.g. impact on patient care – health, impact on assessment – academic)
Searching and sifting process

Potentially relevant citations identified through searching n=7188 citations

Studies excluded after abstract review n=6760

Studies included after title and abstract sifting n=428

Studies excluded after reading full text n=293

Total number of studies included in review 135

Public n= 15
Academic n=49
Health n=47
Schools n=14
4. Charting the data

- Author details and date
- Country
- Aims of study
- Library sector
- Evidence of professional or trained or registered staff
- Study design
- Outcomes measured
- Key findings
5: Collating, summarising and reporting the results - Health

- 47 studies: 8 SRs, 3 RCTs, surveys, mixed methods, CIT
- 19 US, 15 UK
- 6/8 systematic reviews by UK teams
- Mainly acute hospital settings
- 33 studies clearly professionally trained staff
Outcomes

- Clinical decision-making (Diagnosis, choice of assessment/test, choice of intervention)
- Patient centred care (eg advice to patient/carer, reduced length of stay, improved quality of life for patients/carers, increased patient involvement/ shared decision making, improved patient experience, improved patient access to information)
- Risk management & safety (Improve patient/staff safety, avoidance of referral/readmission/ clinical test/hospitalisation/medication errors, legal/ethical issues, improve accountability/ transparency of services)
- Quality of care (Meet quality standards, improved quality care, interventions based on best practice or current evidence, evaluation or audit, innovative practice)
- Continuing professional development & research
- Efficiency/cost-effectiveness (Saved time, support organisation financial strategies, business development)
Health librarians contribute to:

- Improving quality of patient care
- Improved clinical decision making
- Improving patient centred care
- Aiding risk management & safety
- Helping to demonstrate efficiency/cost-effectiveness
- Assist healthcare professionals in pursuit of CPD
- Health service development or delivery
“The research examining librarians providing literature searching as a service, showed a positive effect on decreasing the time to providing relevant information for clinical decision-making and decreased the length of hospital stay..” (Perrier et al., 2014, p1122)

“A number of key outcomes related to patient safety such as misdiagnosis (13%), adverse drug reaction or interaction (13%), medication error (12%), and hospital acquired infection (3%) were all listed by respondents as outcomes that were avoided as a result of the information.” (Marshall et al., 2013, p.41)

“A quarter reported direct impact in improving patient and staff safety (n=85, 25%) as well as in risk management (n=79, 23%)...“I would say so because if a child gets their head trapped in a bedrail, that’s going to have a huge impact on the financial situation of the Trust through litigation”. (Nurse, Acute)”. (Brettle et al., 2015, p.26)
Future research: health

- Impact evaluation in the non-acute setting (community, primary care, outreach library services), knowledge management activities and longer term impact.
- Cost-effectiveness of health library services
- Mixed methods studies
- Qualitative interviews to illustrate the complexity of the impact incidents
- Standards for reporting impact evaluation studies need to be improved
5: Collating, summarising and reporting the results - Academic

49 studies, mainly US small number of UK

- 2 main foci – evaluation of IL; impact on student achievement and retention
- Range of designs, 3 IL SRs, 1 RCT, cohort studies, correlational studies, 1 ROI
- 11 were clearly about professionally trained staff, 37 assumed
Academic librarians contribute to:

- Better research, researchers and research achievement
- Improved skills for coursework, assessments or research
- A good return on investment for the University
- Improved retention
Every $1 spent on the library returns $4.49 in return for Syracuse University (Kingma and McClure, 2015)

“The only variable which made a significant impact on retention and graduation was the number of professional library staff. This equated to a 10% increase in the ratio of professional library staff predicts a 0.72% increase in retention.” (Emmons and Wilkinson, 2011, p.144)

The project has successfully demonstrated that there is a statistically significant relationship between student attainment and two of the indicators: e-resources use and book borrowing. This relationship has been shown to be true across all eight UK partners in the project.” (Stone et al., 2012, p.26)

“Traditional and web based teaching strongly increases IL skills when assessed pre and post teaching. For controlled studies, traditional teaching increases IL skills but the effect size is smaller than the pre and post studies.” (Weightman et al., 2015)
Future research: academic

- Individual libraries need to capture impacts that relate to their own institution.
- Develop easier means of collecting data routinely that can be used to correlate with items such as student grades or retention and combine with qualitative approaches.
- A UK version of the ROI study (Kingma and McClure, 2015)
- High quality information literacy studies that measure and demonstrate impact over the longer term.
Discussion

• Premise that on the whole librarian interventions are complex and impacts are not direct
• Information literacy is an area where more “rigorous approaches” could be used
• Methods favoured by one sector could be transferred to others
• Mixed methods studies are useful to provide the data and the “how”
• Included studies haven’t been critically appraised
Conclusion

- Clear evidence of the contributions made by both health and academic librarians
- These sectors have the strongest evidence base
How can you demonstrate your effectiveness and impact?
Knowledge for Healthcare: Value and impact toolkit

Knowledge for Healthcare: Value and impact toolkit

- HEE Knowledge for Healthcare Programme following work by the Impact and Value Task and Finish Group
- Access to KfH Impact Tools
- Resource on measuring value and impact
- Guide on what to use when
- Allow you to collect routine data and/or conduct mixed methods studies
Being evidence based is about...

- Questioning our practice
- Is about gathering or creating the evidence
- Is about using the information or evidence wisely
- Is about using our professional skills to help others
Thank You

Questions?

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References


References


