Healthcare knowledge needs & behaviours: a bulletin for healthcare library staff
January 2018

Aim
This bulletin is designed to help healthcare library staff deliver Knowledge for Healthcare by keeping us up-to-date with the knowledge needs, preferences and behaviours of healthcare staff, students, patients and the public.

Sources scanned
Sources scanned include ALIA, BNI, CILIP weekly news and Update, CINAHL, Embase, Emerald Insight, ERIC, Google Scholar, HLG news, HMIC, Knowledge for Healthcare Blog, LISA, Medline, MLA news, NICE Information Services Bulletin and PubMed.

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If you have suggestions for improving the bulletin, please contact Lisa and Mary.

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Healthcare Workforce


Source: American Journal of Hospice & Palliative Medicine; Dec 2017; vol. 34 (no. 10); p. 966-976
Nurse–patient conversations about pain management are complex. Given recent increases in prescription pain pill abuse, such interactions merit scholarly attention. In-depth interviews with 21 nurses were conducted to explicitly explore nurses’ information seeking about pain. The participants in this study gathered pain information from patients through a variety of means and reported facing challenges and dilemmas when communicating with patients about pain management and medicinal preferences. These results have important implications for nurses, patient outcomes, and the broader health-care system and imply that continued educational and intervention efforts are essential in this complicated communicative context.

The common practice of "curbside consultation": A systematic review.
Purpose: Point-of-care information needs for nurse practitioners are tremendous. A phenomenon often referred to as curbside consultation (CC) with colleagues is an information source for point-of-care clinical decision making. This literature review was conducted to describe: (a) characteristics of CC, (b) consistency of CC definition, and (c) attitudes about CC among health professionals using this information source for point-of-care clinical decision making.

The role of librarians in teaching evidence-based medicine to pediatric residents: a survey of pediatric residency program directors
Objective: The research sought to identify the general use of medical librarians in pediatric residency training, to define the role of medical librarians in teaching evidence-based medicine (EBM) to pediatric residents, and to describe strategies and curricula for teaching EBM used in pediatric residency training programs.
Methods: We sent a 13-question web-based survey through the Association of Pediatric Program Directors to 200 pediatric residency program directors between August and December 2015.
Results: A total of 91 (46%) pediatric residency program directors responded. Most (76%) programs had formal EBM curricula, and more than 75% of curricula addressed question formation, searching, assessment of validity, generalizability, quantitative importance, statistical significance, and applicability. The venues for teaching EBM that program directors perceived to be most effective included journal clubs (84%), conferences (44%), and morning report (36%). While 80% of programs utilized medical librarians, most of these librarians assisted with scholarly
or research projects (74%), addressed clinical questions (62%), and taught on any topic not necessarily EBM (58%). Only 17% of program directors stated that librarians were involved in teaching EBM on a regular basis. The use of a librarian was not associated with having an EBM curriculum but was significantly associated with the size of the program. Smaller programs were more likely to utilize librarians (100%) than were medium (71%) or large programs (75%).

Conclusions: While most pediatric residency programs have an EBM curriculum and engage medical librarians in various ways, librarians’ expertise in teaching EBM is underutilized. Programs should work to better integrate librarians’ expertise, both in the didactic and clinical teaching of EBM.

Read the whole article [here](#)

### Teaching evidence-based practice principles to prepare health professions students for an interprofessional learning experience

**Source:** Journal of the Medical Library Association; Chicago Vol. 105, Iss. 4, (Oct 2017): 376-384.

**Objective:** The research assessed online learning modules designed to teach health professions students evidence-based practice (EBP) principles in an interprofessional context across two institutions.

**Methods:** Students from nine health professions at two institutions were recruited to participate in this pilot project consisting of two online learning modules designed to prepare students for an in-person case-based interprofessional activity. Librarians and an instructional designer created two EBP modules. Students’ competence in EBP was assessed before and after the modules as well as after the in-person activity. Students evaluated the online learning modules and their impact on the students’ learning after the in-person session.

**Results:** A total of 39 students from 8 health professions programs participated in the project. Average quiz scores for online EBP module 1 and module 2 were 83% and 76%, respectively. Following completion of the learning modules, adapted Fresno test of competence in EBP scores increased (p=0.001), indicating that the modules improved EBP skill competence. Student evaluations of the learning modules were positive. Students indicated that they acquired new information skills that contributed to their ability to develop a patient care plan and that they would use these information skills in their future clinical practice.

**Conclusions:** Online EBP learning modules were effective in developing EBP knowledge and skills for health professions students. Using the same modules ensured that students from different health professions at different stages of their professional programs had consistent knowledge and enabled each student to fully engage in an interprofessional evidence-based activity. Student feedback indicated the modules were valued and beneficial.

Read the whole article [here](#)
Pattern of exposure to information and its impact on seasonal influenza vaccination uptake in nurses.

Source: Journal of Hospital Infection Dec 2017 97(4) 376-383

Background: Uptake of annual influenza vaccination of healthcare workers (HCWs) varies, and remains at a suboptimal level in many countries. As HCWs are often exposed to a variety of information about vaccination, the pattern of exposure may impact their decision; this deserves further investigation.

Methods: Practising nurses in Hong Kong were invited to participate in an anonymous online survey in February 2016, after the winter seasonal peak. The questionnaire covered demographics, work nature and experiences, vaccination uptake history and reasons for vaccination decisions. Two behavioural categories for access to information were defined - passive exposure to information and active information-seeking - differentiated by the source, type and nature of information accessed. Chi-squared test, Mann-Whitney U-test and logistic regression were performed to compare vaccinated and unvaccinated nurses.

Results: In total, 1177 valid returns were received from nurses. The median age of respondents was 32 years and 86% were female. The overall vaccination rate was 33%. Passive exposure to information from the workplace, professional body and social network was not predictive of vaccination decision, but passive exposure to information from mass media was predictive [odds ratio (OR) 1.78]. Active information-seeking, such as consulting a senior (OR 2.46), organizing promotional activities (OR 2.85) and undertaking an information search (OR 2.43), was significantly associated with increased vaccination uptake. A cumulative effect could be demonstrated for active information-seeking (OR 1.86), but not for passive exposure to information.

Conclusion: The current strategy of promotions and campaigns for seasonal influenza vaccination in HCWs may not be effective in increasing vaccination coverage. Measures targeting information-seeking behaviours may serve as an alternative approach.

Widening participation in nurse education: an integrative literature review

Source: Nurse Education Today Dec 2017 59 66-74

Background Widening participation into higher education is espoused within educational policy in the UK, and internationally, as a mechanism to promote equality and social mobility. As nurse education is located within higher education it has a responsibility to promote widening participation within pre-registration educational programmes. It could also be argued that the profession has a responsibility to promote equality to ensure its' workforce is as diverse as possible in order to best address the health needs of diverse populations.

Objectives To undertake an integrative review on published papers exploring Widening Participation in undergraduate, pre-registration nurse education in the UK. Design A six step integrative review methodology was utilised, reviewing papers published in English from 2013–2016. Data Sources Search of CINAHL, Education Source, MEDLINE, PsychINFO, SocINDEX, Science Direct, Business Source Complete, ERIC, British Library ETOS, Teacher Reference Centre, Informit Health Collection and Informit Humanities and Social Science Collection which highlighted 449 citations; from these 14 papers met the review inclusion criteria. Review Methods Both empirical s tudies and editorials focusing upon widening participation in pre-registration nurse education in the UK (2013–2016) were included. Papers excluded were non UK papers or papers not focussed upon widening
participation in pre-registration nursing education. Research papers included in the review were assessed for quality using appropriate critical appraisal tools. Results 14 papers were included in the review; these were analysed thematically identifying four themes; knowledge and identification of WP, pedagogy and WP, attrition and retention and career prospects. Conclusions Whilst widening participation is a key issue for both nurse education and the wider profession there is a lack of conceptualisation and focus regarding mechanisms to both encourage and support a wider diversity of entrant. Whilst there are some studies, these focus on particular individual widening participation groups rather than a wider strategic focus across the student lifecycle

Targeted interventions to advance a culture of inquiry at a large multicampus hospital among nurses


OBJECTIVES: The aim of this study is to assist nurse leaders in developing innovative structures to foster a culture of inquiry among professional nurses.

BACKGROUND: Critical to nurse’s engagement in evidence-based practice (EBP) is a culture of inquiry, in which nurses critically evaluate patient care activities and actively review existing evidence to address identified clinical issues. A bundle of structural interventions was implemented across a large, multisite hospital to advance a culture of inquiry. We measured the impact of these interventions on nurses’ library use and on nurses’ knowledge, attitudes, and practices towards EBP.

METHODS: Structural interventions included: 1) EBP and Research Committee meetings, in which nurses were educated on how to formulate a clinical question and critically appraise a research article; 2) Academic Partners Program, in which nurse academicians provided scholarly mentorship and guidance during monthly committee meetings; 3) hiring of clinical nurse scientists who provided 1-on-1 education and mentorship to clinical nurses in EBP and research; and 4) a Nurse Residency Program partnership, in which newly graduated nurses were required to complete an EBP project. We examined the impact of these structural interventions on nurses' use of library resources and nurses' knowledge, attitudes, and practices toward EBP.

RESULTS: The implementation of structural interventions to support nurses’ engagement in EBP was associated with a significant increase in the number of nurse-generated library consultative requests over time. Results showed high levels of nurse knowledge, attitudes, and practices in EBP.

CONCLUSIONS: Nurse leaders may advance a culture of inquiry by providing the infrastructure to support EBP activities and by empowering nurses to question and seek answer to identified practice questions. Infrastructures should include access to scientific articles and partnerships with schools of nursing. Additional research is needed to validate nurse library use as a measure of nurse engagement in EBP.
Patients and the Public

Improving hepatitis C treatment engagement: Getting at the what and how of patient information needs and preferences

Source: Hepatology
Date of publication: October 2017

Background:
There is a knowledge gap regarding the information needs and preferences of patients with Hepatitis C (HCV) in the Direct Acting Antiviral era. Although treatment for HCV has improved significantly, patient decision making related to treatment continues to be complex and challenging. We evaluated patient perceived information needs and preferences when making decisions related to HCV treatment with the objective of improving patient engagement in HCV care.

Methods:
In 2016, a cross-sectional survey was administered to 117 patients across two sites: a viral hepatitis hospital-based outpatient clinic and a community based program. All interested adult patients from both sites were included if able to complete the survey in English. Standard descriptive statistics were used to summarize the characteristics of the participants and their information needs and preferences and Mann-Whitney and chi-square tests were conducted to assess for differences between patient groups. Results: Participants had a mean age of 52.1 years (SD 11.5) and most were male (64%), White (81.5%), on disability leave (48.6%), and had a high school education or less (60.3%). Most reported satisfaction with the quality of information received but there was an expressed desire by at least half of participants to receive more HCV-related information. Treatment naive patients reported receiving less information, rated lower levels of satisfaction with information received, and poorer ability to follow treatment instructions as compared to treatment experienced. Physicians were identified as the most common source and preferred source of HCV information. A range of preferences were reported including receiving information from other providers and via newer technologies. The phone was rated as the preferred method of contact for reminders, with daily or weekly medication reminders reported as most helpful. A significant proportion also indicated that email and/or text message would be helpful and differences were found by socio-demographic variables. Specifically, White participants, and/or reporting a high school education or greater, higher than $30,000 income, and seeking HCV care from the hospital site were more likely to report a preference for reminders by text/email.

Conclusion:
A single preferred source or method of communicating with patients does not exist. A tailored multi-pronged approach is likely most effective for every step along the treatment cascade for
HCV care. Consideration of patient preference is paramount in providing quality care and improving patient outcomes by means of improved treatment adherence.

You can read this conference abstract [here](#).

**Delivery of information to orthodontic patients using social media**

**Source:** Evidence-based dentistry  
**Publication Date:** June 2017

**Design**  
Randomised controlled trial in a hospital setting.

**Intervention**  
Both groups were given standard verbal and written information for patients receiving orthodontic treatment. In addition, patients in the intervention group received e-mails asking them to view a specifically designed YouTube unlisted video accessible through a web link in the e-mail. All patients were administered with a baseline questionnaire at bond-up which was repeated at six weeks.

**Outcome measure**  
Change in question score from baseline.

**Results**  
Sixty-seven patients were randomised (control = 34; intervention = 34). Seven patients were lost to follow-up; four in the control and three in intervention group. In all the participants watched the video 90 times. Participants in the intervention group scored, on average, almost one point higher on the second questionnaire than did those in the control group (95% CI for the difference, 0.305-1.602; P = 0.005). Ethnicity had a statistically significant effect on improvement in knowledge, but sex did not.

**Conclusions**  
Presenting audiovisual information through the YouTube web site to orthodontic patients resulted in a significant improvement in patient knowledge. Supplementation of verbal and written patient information with audiovisual information via the internet is therefore worthy of consideration.

If you have access to this journal you can read the full text [here](#).

**Prospective assessment of patients' knowledge and informational needs and of surgeon-to-patient information transfer before and after knee or hip arthroplasty**

**Source:** Orthopaedics and Traumatology: Surgery and Research;
Publication Date: 2017

Background: Patients are playing an increasingly large role in their own management and must therefore receive clear, complete, and comprehensible information. In the field of hip and knee arthroplasty, little is known about the level of patient knowledge and effectiveness of surgeon-to-patient information transfer. We therefore designed a prospective observational study with the objective of assessing four factors: patient knowledge during management, quality of information transfer, informational needs, and factors associated with the level of knowledge. Hypothesis: The level of patient knowledge changes during the management process. Patients and methods: A prospective single-centre study was conducted between January 2014 and March 2015 during the outpatient visits and inpatient stays of 63 patients who underwent arthroplasty of the hip (n = 36) or knee (n = 27). A single observer attended all patient visits and recorded the information provided by the surgeon. Each patient completed a self-questionnaire after the outpatient visit (T1), at admission (T2), and at discharge after surgery (T3). Semi-quantitative scores were used to assess knowledge and informational needs. The effectiveness of information transfer was evaluated by comparing the information provided by the surgeon to the replies made by the patients. Results: The mean overall knowledge score (on a 0-42 scale) increased from 17.22. +/- 6.33 at T1 to 19.44. +/- 6.89 at T3 (P = 0.0028). In contrast, knowledge about complications was better at T1 than at T3 (2.67. +/- 1.98 vs. 2.19. +/- 1.91; P <. 0.05). Agreement between information given by the surgeon and replies made by patients varied across items from 23% to 100%. The mean informational needs score (on a scale from 0 to 21) ranged from 3.67 to 4.83 and was higher at T3 than at T2 (4.83. +/- 3.77 vs. 3.67. +/- 4.86; P = 0.03). The proportion of patients who wanted written information was higher at T3. Most patients sought information before the outpatient visit. At each step of the management process, the main areas about which the patients wanted information were the surgical procedure, the rehabilitation programme, and the prosthesis. Several socio-demographic or management-related factors influenced the level of knowledge. Thus, older age and lower educational attainment were associated with lower knowledge scores, whereas previous lower-limb orthopaedic surgery and amount of information provided by the surgeon were associated with higher knowledge scores. Knowledge scores were not associated with being employed vs. retired, gender, replacement of a hip vs. a knee, the surgeon, or being accompanied by another person. Discussion: Our study is original in that we assessed changes in patient knowledge during the management process for hip or knee arthroplasty. The level of patient knowledge was fairly low and varied considerably across individuals and time points in the management process. These data highlight the importance of providing patients with information throughout their management and particularly at discharge, when the desire for information seems greatest. Level of evidence: IV, prospective observational study with no control group.

If you have access to this journal you can read the full text here
Health information needs of pregnant women: information sources, motives and barriers

*Source:* Health Information and Libraries Journal
*Published:* November 2017

**Background**
Pregnant women should be provided with relevant and useful information to manage this specific period of their lives. Assessing information needs of this group is a prerequisite for providing this information.

**Objective**
The aim of this study was to assess the information needs of pregnant women during their pregnancy and childbirth.

**Methods**
This descriptive study was conducted on the pregnant women who attended antenatal clinics and obstetricians/gynaecologists’ offices in Kerman, Iran, in 2015. Data were collected using a self-administered, valid and reliable questionnaire. A total of 400 women participated in the study.

**Findings**
Most pregnant women needed information about care of the foetus (*n* = 344, 86%), physical and psychological complications after delivery (*n* = 333, 83%), development and growth of the foetus (*n* = 330, 82.5%), pregnancy nutrition (*n* = 327, 82%) and special tests during pregnancy (*n* = 326, 81.5%). They mostly (*n* = 195, 49%) looked for information when they were suffering from a disease or pregnancy complications.

**Conclusions**
As pregnant women need extensive information to be able to take care of themselves and their babies, their information needs should be identified and taken into consideration when planning educational programmes for this group of women.

If you have access to this journal you can read the full text [here](#).

Implementing patient information for gynae-oncology patients at a tertiary referral health service.

*Source:* International Journal of Evidence-Based Healthcare
*Publication Date:* Sep 2017

**Aim:** To ensure that gynae-oncology surgical patients receive relevant written information, in their preferred format, and at a time that suits them, according to the best available evidence.

**Methods:** This project utilized an audit and feedback design and was conducted over a 9-month period from August 2015 to May 2016. Twenty-nine patients were audited prior to two strategies
being implemented. The first strategy was a standardized email letter to all patients (containing links to surgical information, cancer support websites and a short video introducing hospital staff, and the second was a discharge information sheet detailing wound care, signs of complications, actions to take and follow-up instructions. Thirty patients were audited post-implementation to evaluate the success of these strategies. Results: There were significant increases in the number of patients who said they received written information on their diagnosis, surgery and potential complications at initial consultation and a significant increase in the number of patients who said they were provided with written follow-up information on discharge. Pre-audit, 83% of patients stated they would like to receive a list of reliable websites to access and post-audit, 89% of patients stated they found the websites provided were useful. Discussion: Although gynae-oncology surgical patients did previously receive relevant verbal information, little or no written information was provided. The pre-implementation audit provided insight into the information these patients required. The e-mail was generally well received by patients; however; there was a minority who did not have internet access and therefore a paper version was provided. Conclusion: This project identified deficits in the provision of written information for surgical gynae-oncology patients. Two strategies were implemented to address this deficit with positive results in the number of patients receiving written information; however, further investigation is needed to establish patient satisfaction with this information.

If you have access to this journal you can read the full text here

**Consumer health information seeking in social media: a literature review**

*Source:* Health Information and Libraries Journal  
*Publication Date:* October 2017  

**Objective:** The objective of this literature review was to summarise current research regarding how consumers seek health-related information from social media. Primarily, we hope to reveal characteristics of existing studies investigating the health topics that consumers have discussed in social media, ascertaining the roles social media have played in consumers’ information-seeking processes and discussing the potential benefits and concerns of accessing consumer health information in social media.  

**Methods:** The Web of Science Core Collection database was searched for existing literature on consumer health information seeking in social media. The search returned 214 articles, of which 21 met the eligibility criteria following review of full-text documents.  

**Conclusion:** Between 2011 and 2016, twenty-one studies published explored various topics related to consumer information seeking in social media. These ranged from online discussions on specific diseases (e.g. diabetes) to public health concerns (e.g. pesticide residues).
Consumers’ information needs vary depending on the health issues of interest. Benefits of health seeking on social media, in addition to filling a need for health information, include the social and emotional support health consumers gain from peer-to-peer interactions. These benefits, however, are tempered by concerns of information quality and authority and lead to decreased consumer engagement.

If you have access to this journal you can read the full text here

(How) do People Negotiate Online Information into their Decision Making with Healthcare Professionals?
Source: ACM Digital Library
Date published: July 2017

Description of how people negotiate and communicate with healthcare professionals (HCPs) about information they have found online for the purposes of making health decisions. Using 55 interviews with people using the Internet as part of their health decision-making it shows how online information can be successfully integrated into decision-making leading to decision satisfaction and perceived positive outcomes. Description of what successful integration looks like as well as detail the ways in which integration of information can be disguised during negotiations with HCPs. Details of what happens when integration fails, potentially valuable information resources are lost or the patient decides to bypass the HCP altogether. By exploring successful and unsuccessful integration examples suggestions are made about how integration of online health information into HCP discussions around decision-making could be improved via (1) improved digital curation tools (2) providing communication scaffolding for the doctor-patient consultation and (3) harnessing the power of collective resources.

If you have access to this journal you can read the full text here

How to talk to your doctor about information you find online
Source: The Conversation
Date published: December 2017

Why it can be difficult to talk to your doctor about information you find online and how to make it work.

Read the full article here
Santa’s little helpers: a novel approach to developing patient information leaflets

Source: BMJ
Date published: December 2017

The average reading age is in the UK is 9 years old. A Hip Arthroplasty patient leaflet was analysed and after an education session primary school children were asked to re-write it highlighting how we should be creating honest and to the point information.

If you have access to this journal you can read the full article here

Improving patient information prior to urgent trauma surgery

Source: International Journal of Surgery
Publication Date: Nov 2017

Background: Patients with acute traumatic injuries that are not deemed life-threatening are often sent home and placed on a TCI (To-Come-In) list for their trauma operation. At a busy London district general hospital with a large trauma and orthopaedic department we carried out a quality improvement project to enhance the standard of information being given to patients awaiting a trauma operation.

Method: We conducted a questionnaire which was given to patients who had arrived for their trauma surgery. They were asked questions on the quality of information provided prior to surgery. Following on from the questionnaire, as part of a multidisciplinary team including patients, physiotherapists, trauma facilitators and doctors a leaflet was developed.

Result: Overall, patients felt that the amount of information provided was not enough. 50% of patients would prefer written/paper instructions. 35% of patients did not feel suitably prepared for their admission. Due to these results we submitted a draft of our questionnaire and obtained permission to distribute this to patients prior to admission. Conclusion: Patient information prior to surgery is vital to relieve anxiety, by improving the method of information delivery we can help patients feel better prepared for their operations.

You can read the conference abstract here