Lincolnshire Knowledge and Resource Service

This search summary contains the results of a literature search undertaken by the Lincolnshire Knowledge and Resource Service librarians in;

April 2011

All of the literature searches we complete are tailored to the specific needs of the individual requester.

If you would like this search re-run with a different focus, or updated to accommodate papers published since the search was completed, please let us know.

We hope that you find the information useful. If you would like the full text of any of the abstracts listed, please let us know.

Alison Price    alison.price@lpct.nhs.uk
Janet Badcock   janet.badcock@lpct.nhs.uk

Librarians, Lincolnshire Knowledge and Resource Service
NHS Lincolnshire
Beech House,  
Waterside South
Lincoln LN5 7JH
Please find below the results of your literature search request. If you would like the full text of any of the abstracts included, or would like a further search completed on this topic, please let us know. A feedback form is included with these search results. We would be very grateful if you had the time to complete it for us, so that we can monitor satisfaction with the service we provide.

Thank you!

Disclaimer
Every effort has been made to ensure that this information is accurate, up-to-date, and complete. However it is possible that it is not representative of the whole body of evidence available. No responsibility can be accepted for any action taken on the basis of this information. It is the responsibility of the requester to determine the accuracy, validity and interpretation of the search results.

All links from this resource are provided for information only. A link does not imply endorsement of that site and the Lincolnshire Knowledge and Resource Service does not accept responsibility for the information displayed there, or for the wording, content and accuracy of the information supplied which has been extracted in good faith from reputable sources.

Literature Search Results

Search completion date: 8th April 2010
Search completed by: Jan Badcock

Enquiry Details

I am looking at researching the input of 12 hour shift working pattern to our ward, looking at the evidence of benefits or indeed against.

Do you know whether there is much research out there and possibly where I would start to look?
Opening Internet Links
The links to internet sites in this document are ‘live’ and can be opened by holding down the
CTRL key on your keyboard while clicking on the web address with your mouse

Full Text Papers
Links are given to full text resources where available. For some of the papers, you will need a
free NHS Athens Account. If you do not have an account you can register by following the
steps at: https://register.athensams.net/nhs/nhseng/. You can then access the papers by simply
entering your username and password. If you do not have easy access to the internet to gain
access, please let us know and we can download the papers for you.

Guidance on Searching within Online Documents
Links are provided to the full text of each of these documents. Relevant extracts have been
copied and pasted into these Search Results. Rather than browse through often lengthy
documents, you can search for specific words and phrases as follows:

Portable Document Format / pdf. / Adobe
Click on the Search button (illustrated with binoculars). This will open up a search window. Type
in the term you need to find and links to all of the references to that term within the document will
be displayed in the window. You can jump to each reference by clicking it. You can search for
more terms by pressing ‘search again’.

Word documents
Select Edit from the menu, the Find and type in your term in the search box which is presented.
The search function will locate the first use of the term in the document. By pressing ‘next’ you
will jump to further references.
**Are 12 hour shifts legal?** Published: 31 Mar 2010

Yes, 12 hour shifts are legal. However, the Working Time Regulations (1998) require that there should be a break of 11 consecutive hours between each 12-hour shift. The RCN believes that no shift should ever be longer than 12 hours, and that a 12-hour shift may not be appropriate for all nurses. 12 hour shifts should be considered in the context of both patient safety and the physical and psychological demands of shift work.

**Should Students Be Working 12 HOUR SHIFTS?**

Jan Royal

Nursing is emotionally and physically draining work. Student nurses should be introduced to all elements of this work throughout their training in a progressive manner, and as such, during the first semester student nurses should not be working 12 hour shifts. For many this is the 1st time they have worked in a care environment and also worked a shift pattern. To add 12 hour shifts into this mix is asking too much too soon. We need to remember we are socialising these new students into our practice roles and exposing them to many new experiences during their learning. Time to reflect on this and to absorb the learning is vital, and working 12 hour shifts too soon in their training can exhaust them and make this too difficult.

Later on in their training students can be asked to work 12 hours shifts, and indeed some students may express a wish to. This should never be a requirement of a placement area, and can only be requested. If students wish to work 12 hour shifts it should be seen as a method of increasing this time with their mentor and making the most of learning opportunities rather than merely as an option to increase their off duty time. For students who are based in an area where 12 hour shift patterns are the norm and they do not wish to, or cannot work these shifts, then allocation of primary and associate mentors may help to ensure they get support during their shorter shifts. They should also work off duty that enables them to spend time with their primary mentors when they are on shift.
Guidelines for practice placements: Diploma / BSc (Hons) course.
The students are required to work 37.5 hours per week (exclusive of meal times), spread over 5 working days. In areas where it is normal practice to work 12 hour shifts, students may also undertake these if it is considered appropriate to meet their educational needs - for example to work with their mentor. However students should work no more than three 12 hour shifts in one week. Students are required to work planned shifts in keeping with normal shift patterns. This will entail working weekends and night duty. However, students would not normally be expected to work more than one weekend every four weeks. In semester one, they would not be expected to undertake night duty, but from semester two (in their own branch placement), and in branch, a maximum of three nights in any six week period could be undertaken. [http://www.nottingham.ac.uk/nursing/practice/mentors/downloads/section2_mentor_handbook_3rd.pdf](http://www.nottingham.ac.uk/nursing/practice/mentors/downloads/section2_mentor_handbook_3rd.pdf)
Evidence

Heart risk 'linked to working hours'

Conclusion
This research has demonstrated that in a group of employed individuals who did not have heart disease, working long hours (over 11 per day) was associated with an increased risk of subsequent heart attack compared to people who worked normal 7- to 8-hour-days. This research is of importance and may help to improve models for predicting heart attack risk through the addition of a single, simple measure. However, the researchers rightly pointed out several limitations to their study:

• The researchers modelled the risk only in a single population comprising civil servants, and did not validate their results in a second population. However, they say they did perform statistical tests and simulations to test the validity of their model and that these suggest that the level of improvement of the Framingham risk score model that they calculated is not overly optimistic.
• The researchers only measured risk factors and medication usage once, at the start of the study. Therefore, their data did not account for any changes that may have occurred over the several years of follow-up.
• The cohort was comprised of low-risk persons, who were free from heart problems at baseline and did not include people with lower socioeconomic status. Therefore the findings may not be generalisable to higher risk groups in the general population.
• All participants were drawn from the civil service, therefore their work behaviours and environment may not be typical of those seen in other workplaces or professions.
• The research did not look at why long working hours may be associated with higher risk for heart attack and could not establish whether long work hours in itself caused the increased risk or whether it may be caused by unmeasured confounders. For example, long work hours may be associated with stress and disrupted eating, sleeping and exercise opportunities.
Further, the researchers only looked at outcomes of fatal or non-fatal heart attack, and did not look at changes in other disease markers or risk factors (e.g. changes in cholesterol, blood sugar etc), or look at people who had evidence of heart disease but did not develop a heart attack. These things may have helped to see how and why long hours may be contributing to the development of heart disease. More research is needed to assess why there is an association.
Overall, this was a well-conducted study that has highlighted another easily measured risk factor for heart attacks. Further research is now needed to understand why this may be the case, and to validate the model in more diverse populations.


This is the original research:
Using Additional Information on Working Hours to Predict Coronary Heart Disease
A Cohort Study
http://www.annals.org/content/154/7/457.abstract
Written by George Ricci for the QE Foundation, Inc. of Naples, Florida

This brief paper is written in response to requests about my expertise and experience with 12-hour and other variable hourly schedules other than the 8-hour shift model that is the main focus of the QE Foundation’s current initiative with the QE Staffing and Scheduling Methods. Other models have been developed as part of the QE Staffing and Scheduling Methods, but they have not been previously described in the QE Foundation website to date due to several concerns about their use.

As for the QE 12-hour shift model, there are three main concerns that must be addressed. First, its use should be limited in labor-intensive services due to the potential exhaustion and mistakes inherent in long workdays. Secondly, it does appeal to employees who would rather risk being tired on a long workday in exchange for more time off, but it may lower the quality and efficiency of services to be provided. Thirdly, the team concepts and dynamics, the major focus of the QE Staffing & Scheduling Methods, are a little more difficult to maintain with regard to switching and backing up team members.

The QE 12-hour shift model’s team concept has several variations. The first and basic variation is to have two team members paired together to work a particular shift (e.g. 8AM to 8PM) and a particular job slot seven days a week using a 6 week repeating schedule. Each team member would be scheduled to work seven 12-hour shifts every two weeks, and in such a manner that each week would have either 3 or 4 work shifts. Team members would be scheduled to work no more than 3 days in a row, and would have at least two consecutive days off between workdays (including the often requested every other weekend off).

The second variation is simply an expansion of the first to include two or more teams grouped together to handle two or more job slots (e.g. 2 job slots, 2 teams with 4 team members). More team members allow for more flexibility with regard to switching and backing up team members.

The third variation, and the most dynamic and unique concept of the 12-hour shift model, involves grouping 4 team members to be responsible for one 24/7-job slot (e.g. round the clock facility supervisor) whereby each team member is scheduled to work (rotate) an equal amount of day and night shifts. The uniqueness of this model is how 4 team members are bonded together with equally balanced schedules and responsibilities. In this variation, however, team members would have to use a 12-week repeating schedule to create an equally balanced schedule of days and nights worked by each team member.

A sample schedule model of the second and third variations with a total of four team members are outlined below. The first model shows team members A, B, C, & D...
working together two at a time on one defined 12-hour shift (either day or night). The second model shows team members A, B, C, & D working together to maintain a 24/7 round the clock job, and rotating between day and night 12-hour shifts.

These 12-hour shift models can also be applied to, and utilized with, other variable hourly shifts to include part-time employees, but that use should be very limited. Too many part-time employees can have a negative effect on quality and efficiency. In nursing homes, for example, a limited number of part time job slots could be utilized at meal times. Employees (e.g. students, retirees, etc.) could use the model framework to work any variety of hourly shifts (4, 6, 8 etc..) but its use should be limited and carefully utilized.

Finally, it should be noted that although there are a myriad of variations in using both the 8-hour and 12-hour shift models with both full time and part time employees, none of those variations should ever be used without careful consideration to the team concepts and dynamics, and the bottom line effect they will have on the quality and efficiency of the services to be provided.
http://www.qefoundation.org/12hourshiftmodel.htm
Search Results

Table of Contents

Search History ........................................................................................................................................................... page 2

1. Physiological and behavioural response patterns at work among hospital nurses. ................................................. page 3
2. Compassion fatigue in nurses. ................................................................................................................................ page 3
3. Generational differences and the healthy work environment. ............................................................................. page 3
4. Are 12-hour shifts safe? ................................................................................................................................... page 4
5. Spotlight on: is it time to pull the plug on 12-hour shifts? Part 3. Harm reduction strategies if keeping 12-hour shifts. page 4
6. Time to do away with 12-hour shifts? ................................................................................................................ page 4
7. Is it time to pull the plug on 12-hour shifts? Part 2. Barriers to change and executive leadership strategies. .......... page 4
8. Is it time to pull the plug on 12-hour shifts? Part 1. The evidence ...................................................................... page 4
9. 12-hour shifts better for nurses, better for patients. .......................................................................................... page 4
10. Quick reads. Eight- or twelve-hour shifts: what nursing students prefer. .......................................................... page 4
11. Nursing "misadventures" ................................................................................................................................... page 5
12. 12-hour shifts: an ethical dilemma for the nurse executive ............................................................................. page 5
13. The effect of consistent nursing shifts on teamwork and continuity of care. .................................................... page 5
14. Survey responses: working 12-hour shifts. ........................................................................................................ page 5
15. 12-hour shifts: An ethical dilemma for the nurse executive ............................................................................. page 6
16. STAFFING WATCH. .......................................................................................................................................... page 6
17. Midwest ice storms didn't chill the spirit and unity of hospital workers. ............................................................ page 6
18. A study examining the impact of 12-hour shifts on critical care staff. ............................................................... page 6
19. Comparison of nurse, system and quality patient care outcomes in 8-hour and 12-hour shifts. .................... page 7
20. Comparison of nurse, system and quality patient care outcomes in 8-hour and 12-hour shifts .................... page 7
21. Is there a relationship between 12-hour shifts and job satisfaction in nurses? ................................................ page 8
22. The effects of extended workdays on fatigue, health, performance and satisfaction in nursing. .................... page 8
23. Positive about working the 12-hour shift system. ............................................................................................ page 8
24. The effects of extended workdays on fatigue, health, performance and satisfaction in nursing ..................... page 9
25. Who wants to work 12-hour shifts? ................................................................................................................ page 9
28. Challenging the myth of the 12-hour shift: a pilot evaluation ........................................................................ page 10
29. Professional issues. Implementing 12-hour shifts on a cardiology nursing development unit. ....................... page 10
30. Nurse staffing decisions: an integrative review of the literature. .................................................................... page 11
31. Evaluation of 12-hour shifts on a cardiology nursing development unit ....................................................... page 11
32. Implementing 12 hour shifts on a cardiology nursing development unit ........................................................ page 11
Search History

1. HMIC; "12 hour shifts".ti,ab; 20 results.
2. HEALTH BUSINESS ELITE; "12 hour shifts".ti,ab; 17 results.
3. CINAHL; "12 hour shifts".ti,ab; 87 results.
1. Physiological and behavioural response patterns at work among hospital nurses.

Citation: Journal of Nursing Management, 01 January 2011, vol./is. 19/1(57-68), 09660429
Author(s): CHEN J; SUE DAVIS L; DAVIS KG; PAN W; DARAISEH NM
Abstract: The aim was to determine whether hospital nurses are experiencing physiological strain at work by examining their physiological and behavioural response patterns over 12-hour shifts. Excessive workload for nurses may lead to poor quality of care and high nursing turnover rates. Energy expenditure (EE), heart rate (HR) and work pace (WP) can be used to examine the physiological impact from the workload. A total of 145 nurses wore monitors for one 12-hour day shift to record HR and WP, which were used to calculate EE. Individual and work-related factors were assessed through questionnaires and work logs. Energy expenditure accumulated over the 12 hours reached the EE level of 8-hour shifts in which individuals work at a moderate physical intensity level. The HR data indicated a moderate cardiac stress level throughout the shifts, despite which WP decreased after 15.00 hours. Inadequate work break and sleep, family care-giving responsibility and aging may challenge work recovery. Nursing workload of 12-hour shifts has a negative physiological impact on hospital nurses. Nurse managers need to be aware of the physiological strain experienced by staff nurses, and focus on ensuring sufficient breaks and proper work accommodations for older nurses.

Source: CINAHL

2. Compassion fatigue in nurses.

Citation: Applied Nursing Research, 01 November 2010, vol./is. 23/4(191-197), 08971897
Author(s): Yoder EA
Abstract: Compassion fatigue, trigger situations, and coping strategies were investigated in hospital and home care nurses. The Professional Quality of Life Scale measured compassion fatigue, compassion satisfaction, and burnout. Narrative questions elicited trigger situations and coping strategies. Compassion fatigue scores were significantly different between nurses who worked 8- or 12-hour shifts. Fifteen percent of the participants had scores indicating risk of the compassion fatigue. There were significant differences in compassion satisfaction, depending on the unit worked and time as a nurse. The most common category of trigger situations was caring for the patient. Work-related and personal coping strategies were identified.

Source: CINAHL

3. Generational differences and the healthy work environment.

Citation: Med-Surg Matters, 01 November 2010, vol./is. 19/6(20-21),
Author(s): Thomas E
Abstract: Charlene was so excited! She was to begin her first day as a medical-surgical nurse at an urban Philadelphia hospital. After years of raising her family and working as a legal secretary in a local firm, she had summoned up the courage to pursue her dream and had obtained her BSN. Finally! She could be what she knew she was always meant to be S a registered nurse. Charlene was a little worried; she had just celebrated her 50th birthday. Was she too old for floor nursing? Charlene presented on her unit as she had been instructed, and was greeted by the unit clinical nurse specialist. She was then introduced to Dee, who would be her preceptor. Dee is a twenty-something woman who had been working three 12-hour shifts in a row weekly, which allowed her time to travel to another state to be with her boyfriend on her days off. Dee and her phone appear to be as one S whether she is talking, texting, or looking up medications. Dee has an endless energy reserve that is fueled by coffee and power bars. She has no time for lunch breaks! Charlene and Dee are both registered nurses on the same medical-surgical unit, but their views and experiences as nurses are very unique and are influenced in no small degree by their generational differences. Charlene's orientation hangs in the balance. Will Dee
provide her with the attention and knowledge that she requires to be an independent and safe practitioner?

Source: CINAHL
Full Text: Available in fulltext at EBSCO Host

4. Are 12-hour shifts safe?
Citation: American Nurse Today, 01 October 2010, vol./is. 5/10(0-0), 19305583
Author(s): Cardillo D
Source: CINAHL

5. Spotlight on: is it time to pull the plug on 12-hour shifts?. Part 3. Harm reduction strategies if keeping 12-hour shifts.
Citation: Journal of Nursing Administration, 01 September 2010, vol./is. 40/9(357-359), 00020443
Author(s): Geiger-Brown J; Trinkoff AM
Source: CINAHL

6. Time to do away with 12-hour shifts?
Citation: OR Manager, 01 September 2010, vol./is. 26/9(15-16), 87568047
Source: CINAHL
Full Text: Available in fulltext at EBSCO Host

7. Is it time to pull the plug on 12-hour shifts? Part 2. Barriers to change and executive leadership strategies.
Citation: Journal of Nursing Administration, 01 April 2010, vol./is. 40/4(147-149), 00020443
Author(s): Montgomery KL; Geiger-Brown J
Abstract: This article is part 2 of the series "Pulling the Plug on 12-Hour Shifts." In part 1 (March 2010), the authors provided an update on recent evidence that challenges the current scheduling paradigm that supports the lack of safety of long work hours. Part 2 describes the barriers to change and challenges for the nurse executive in moving away from the practice of 12-hour shifts. This is an executive-level analysis of barriers and recommends strategies for change. Translation of evidence into administrative practice requires examination of external environmental factors, internal system consequences, organizational culture, and measures of executive performance.
Source: CINAHL

Citation: Journal of Nursing Administration, 01 March 2010, vol./is. 40/3(100-102), 00020443
Author(s): Geiger-Brown J; Trinkoff AM
Source: CINAHL

9. 12-hour shifts better for nurses, better for patients.
Citation: Lamp, 01 August 2009, vol./is. 66/7(6-6), 00473936
Author(s): Pridham A
Source: CINAHL
Full Text: Available in fulltext at EBSCO Host

Citation: Nursing Education Perspectives, 01 January 2009, vol./is. 30/1(40-43), 15365026
Author(s): Rossen BE; Fegan MA
Abstract: Securing and organizing clinical placements for nursing students has become increasingly difficult for schools of nursing and for hospitals, especially with today's dramatic increases in student enrollments. Many nursing programs now include 12-hour shifts as part of students' clinical education. But questions remain regarding the impact of 12-hour shifts on student learning and lifestyle, relationships among students, their clinical instructors, and nursing staff, and patient and family care.

Source: CINAHL

Full Text: Available in fulltext at EBSCO Host

11. Nursing "misadventures".

Citation: CMAJ: Canadian Medical Association Journal, 17 June 2008, vol./is. 178/13(1648-), 08203946

Author(s): Kondro, Wayne

Abstract: The article reflects on a recent statistical survey that covered all nurses working in Canada, as of June 2008. According to the Statistics Canada survey of the nation's nurses, there is a one in five chance that a hospital patient will be administered the wrong dose of a drug. Findings were based on data gathered from the 2005 National Survey of the Work and Health of Nurses, which conducted telephone interviews with nurses on condition of confidentiality. It found that nurses working 12-hour shifts are less likely to make medication errors compared to nurse working for 8-hours.

Source: HEALTH BUSINESS ELITE

Full Text: Available in fulltext at Ovid
Available in fulltext at EBSCO Host
Available in fulltext at EBSCO Host
Available in fulltext at National Library of Medicine

12. 12-hour shifts: an ethical dilemma for the nurse executive.

Citation: Journal of Nursing Administration, 01 June 2008, vol./is. 38/6(297-301), 00020443

Author(s): Lorenz SG

Abstract: Flexible work hours, including 12-hour shifts, have become a common scheduling option for nurses. The author explores whether 12-hour shifts are an ethical scheduling option for nurses because recent research suggests that 12-hour shifts are a potential hazard to patients. A multistep model for ethical decision making, reflecting the concept of procedural justice, is used to examine this issue.

Source: CINAHL

13. The effect of consistent nursing shifts on teamwork and continuity of care.

Citation: Journal of Nursing Administration, 01 March 2008, vol./is. 38/3(132-137), 00020443

Author(s): Kalisch BJ; Begeny S; Anderson C

Abstract: To attract nurses to the workforce, scheduling of nurses on patient care units has evolved into a mixture of 4-, 6-, 8-, and 12-hour shifts. The result is chaotic as staff members come and go at varying times, creating the need for multiple handoffs and reassignment of patients. Effective teamwork and continuity of care are difficult, if not impossible, to achieve under these circumstances. The authors describe the effect of using just 1 shift length for all nursing staff.

Source: CINAHL


Citation: Nursing, 01 February 2008, vol./is. 38/2(34-34), 03604039

Source: CINAHL
15. 12-hour shifts: An ethical dilemma for the nurse executive

Citation: Journal of Nursing Administration, 2008, vol./is. 38/6, 0002-0443

Author(s): Lorenzo, Susan G

Abstract: Flexible work hours, including 12-hour shifts, have become a common scheduling option for nurses. The author explores whether 12-hour shifts are an ethical scheduling option for nurses because recent research suggests that 12-hour shifts are a potential hazard to patients. A multistep model for ethical decision making, reflecting the concept of procedural justice, is used to examine this issue. Cites numerous references. [Journal abstract]

Source: HMIC

16. STAFFING WATCH.

Citation: H&HN: Hospitals & Health Networks, 01 December 2007, vol./is. 81/12(26-), 10688838

Author(s): Hudson, Teresa

Abstract: The article focuses on a report released by Press Ganey Associates in October 2007 which revealed that registered nurses have a lower overall employee satisfaction rate than all other hospital workers. In contrast, management and administrative personnel have the highest level of overall satisfaction. Nurses working 12-hour shifts, a working arrangement many nurses prefer, ranked their satisfaction lower than other nurses.

Source: HEALTH BUSINESS ELITE

Full Text: Available in fulltext at EBSCO Host

17. Midwest ice storms didn't chill the spirit and unity of hospital workers.

Citation: AHA News, 22 January 2007, vol./is. 43/2(2-), 08916608

Author(s): Ament, Lucy

Abstract: The article reports on how hospitals coped following the late-December snow storms in Colorado. Staff at Spanish Peaks Regional Health Center in Walsenburg began arriving early for work, some working 12-hour shifts over the next four days. Southeast Colorado Hospital District in Springfield had been training for a pandemic and was well-supplied. Staff pitched in to help with the cooking and emergency room doctors covered for nearly 52 hours at the height of the storm.

Source: HEALTH BUSINESS ELITE

Full Text: Available in fulltext at EBSCO Host

18. A study examining the impact of 12-hour shifts on critical care staff.

Citation: Journal of Nursing Management, 2007, vol./is. 15/8(838-846), 0966-0429

Author(s): Richardson, Annette

Abstract: BACKGROUND: Twelve-hour shifts contribute to flexible patterns of work, but the effects on delivery of direct care and staff fatigue are important topics for deeper examination. AIMS: To examine the impact and implications of twelve-hour shifts on critical care staff. METHODS: A staged dual approach using two focus groups (n=16) and questionnaires (n=147) with critical care staff from three critical care units. RESULTS: Positive effects were found with planning and prioritising care, improved relationships with patients and relatives, good quality time off work and ease of travelling to work. Less favourable effects were with caring for patients in isolation cubicles and the impact on staff motivation and tiredness. Acceptable patterns of work were suggested for 'numbers of consecutive shifts' and 'rest periods between shifts'. CONCLUSIONS: Most participants believed twelve-hour shifts should continue. The challenge is to ensure
existing systems and practices develop to improve on the less positive effects of working twelve-hour shifts. IMPLICATIONS FOR NURSING MANAGEMENT: This study provides nurse managers with important and relevant staff views on the impact of working twelve-hour shifts, in particular to those working within a critical care environment. It is suggested that the challenge is to ensure existing systems and practices develop to improve on the less encouraging effects of working twelve-hour shifts. It adds an understanding of the senior nurse's view on the positive and negative effects of managing and organising staff off duty to safely run a department with twelve-hour shifts.

3 tables 11 refs. [Abstract]

Source: HMIC
Full Text: Available in fulltext at EBSCO Host

19. Comparison of nurse, system and quality patient care outcomes in 8-hour and 12-hour shifts.

Citation: Medical Care, 01 December 2006, vol./is. 44/12(1099-1106), 00257079
Author(s): Stone PW; Du Y; Cowell R; Amsterdam N; Helfrich TA; Linn RW; Gladstein A; Walsh M; Mojica LA
Abstract: BACKGROUND: Many nurses desire 12-hour shifts. However, there are concerns about implementation. OBJECTIVE: We sought to compare the effects of 8- and 12-hour shifts on nurse, system, and quality patient care outcomes. METHODS: We used a cross-sectional design with data collected from multiple sources in 2003-2004, including a nurse survey and administrative and patient records. We studied hospital nurses and patients in general adult wards, with outcomes including burnout, job satisfaction, scheduling satisfaction, preferences, intention to stay, and employee safety. System outcomes included recruitment and turnover, staffing, absenteeism, and related costs. A variety of quality patient care outcomes were measured from the 3 different types of data. RESULTS: Thirteen New York City hospitals participated; 805 surveys were examined from 99 nursing units (response rate 42%). Compared with nurses working 8-hour shifts, those working 12-hour shifts were on average more satisfied with their jobs, experienced less emotional exhaustion, 10 times more likely to be satisfied with schedules, 2 times as likely to perceive 12-hour schedules as important, and 58% less likely to report missing shifts; units with 12-hour shifts had lower vacancy rates and weeks to fill the position (all P values ≤ 0.05). There were no differences in patient outcomes. CONCLUSIONS: Nurses working 12-hour shifts were more satisfied. There were no differences in quality outcomes. Flexibility and choice in shift length are important elements in a positive nurse work environment. This study represents an innovative attempt by a labor-management bargaining group to make an evidence-based decision. We encourage others to conduct similar studies.

Source: CINAHL

20. Comparison of nurse, system and quality patient care outcomes in 8-hour and 12-hour shifts

Citation: Medical Care, 2006, vol./is. 44/12, 0025-7079
Author(s): Stone, Patricia W; Du, Yunling; Cowell, Rhabia; Amsterdam, Norma; Helfrich, Thomas A
Abstract: Many nurses desire 12-hour shifts. However, there are concerns about implementation. The authors sought to compare the effects of eight- and 12-hour shifts on nurse, system, and quality patient care outcomes. The authors used a cross-sectional design with data collected from multiple sources in 2003-2004, including a nurse survey and administrative and patient records. They studied hospital nurses and patients in general adult wards, with outcomes including burnout, job satisfaction, scheduling satisfaction, preferences, intention to stay, and employee safety. System outcomes included recruitment and turnover, staffing, absenteeism, and related costs. A variety of quality patient care outcomes were measured from the three different types of data. Thirteen New York City hospitals participated; 805 surveys were examined from 99 nursing units (response rate 42%). Compared with nurses working eight-hour shifts, those working 12-hour shifts were on average more satisfied with their jobs, experienced less emotional exhaustion, 10 times more likely to be satisfied with schedules, two times as likely to
perceive 12-hour schedules as important, and 58% less likely to report missing shifts; units with 12-hour shifts had lower vacancy rates and weeks to fill the position (all P values less than or equal to 0.05). There were no differences in patient outcomes. Nurses working 12-hour shifts were more satisfied. There were no differences in quality outcomes. Flexibility and choice in shift length are important elements in a positive nurse work environment. This study represents an innovative attempt by a labour-management bargaining group to make an evidence-based decision. The authors encourage others to conduct similar studies. Cites 45 references. [Journal abstract]

Source: HMIC

21. Is there a relationship between 12-hour shifts and job satisfaction in nurses?
Citation: Alabama Nurse, 01 June 2004, vol./is. 31/2(11-12), 00024317
Author(s): Day GR
Source: CINAHL
Full Text: Available in fulltext at EBSCO Host

Citation: Journal of Advanced Nursing, 15 December 2003, vol./is. 44/6(643-652), 03092402
Author(s): Josten EJC; Ng-A-Tham JEE; Thierry H
Abstract: BACKGROUND: Several authors have claimed that 12-hour shifts in nursing are better for both employees and patient care. However, although the research has found positive effects on satisfaction with working hours and free time, the effects on employee fatigue, health and performance have mostly been neutral or negative. AIM: Work schedules should preferably be beneficial for satisfaction, fatigue, health and performance. This study therefore investigated whether shifts that are extended only slightly can combine the positive effects of the 12-hour shift with the positive effects of the 8-hour shift. The study investigated the effects of 9-hour shifts. METHOD: A total of 134 nurses from three nursing homes in the Netherlands completed a questionnaire on fatigue, health, performance and satisfaction. One group worked 8-hour shifts, and the other worked 9-hour shifts. RESULTS: Nurses who worked 9-hour shifts were on average more fatigued, had more health complaints, and were less satisfied with their working hours and free time than those who worked 8-hour shifts. Their performance was slightly poorer. About 70% to 80% of the 8- and 9-hour nurses preferred to work a maximum of 8 hours during morning/early and afternoon/late shifts. CONCLUSIONS: The 9-hour shift seemed to combine the negative aspects of the 12-hour shift with the negative aspects of the 8-hour shift. It is suggested that the 9-hour shift had more negative effects than the 12-hour shift because: (1) nurses could not choose what shift length they worked; (2) many worked part-time; and (3) they already had many days off. It is also suggested that increases in workload since the 1980s make current extended shifts in nursing more fatiguing.
Source: CINAHL
Full Text: Available in fulltext at Ovid
Available in fulltext at EBSCO Host

23. Positive about working the 12-hour shift system.
Citation: Singapore Nursing Journal, 01 January 2003, vol./is. 30/1(30-37), 02180995
Author(s): Yuh AS
Abstract: The 12-hour shift system has been implemented recently as a potential recruitment and retention strategy. Studies investigating the impact of shift duration have produced conflicting findings with limited generalizability. This paper presents a study where cross-sectional survey design was used to explore and compare the views of nurses working the 12-hour shift system in the intensive care setting of a Singapore hospital and a United Kingdom Healthcare Trust. Results showed that respondents were generally
positive about the 12-hour shift system. Future research should explore socio-demographic factors affecting nurses' views about 12-hour shifts.

Source: CINAHL

24. The effects of extended workdays on fatigue, health, performance and satisfaction in nursing

Citation: Journal of Advanced Nursing, 2003, vol./is. 44/6, 0309-2402
Author(s): Josten, Edith J C; Ng A Tham, Julie E E; Thierry, Henk
Abstract: Several authors have claimed that 12-hour shifts in nursing are better for both employees and patient care. However, although the research has found positive effects on satisfaction with working hours and free time, the effects on employee fatigue, health and performance have mostly been neutral or negative. Work schedules should preferably be beneficial for satisfaction, fatigue, health and performance. This study therefore investigated whether shifts that are extended only slightly can combine the positive effects of the 12-hour shift with the positive effects of the eight-hour shift. The study investigated the effects of nine-hour shifts. A total of 134 nurses from three nursing homes in the Netherlands completed a questionnaire on fatigue, health, performance and satisfaction. One group worked eight-hour shifts, and the other worked nine-hour shifts. Nurses who worked nine-hour shifts were on average more fatigued, had more health complaints, and were less satisfied with their working hours and free time than those who worked eight-hour shifts. Their performance was slightly poorer. About 70% to 80% of the eight- and nine-hour nurses preferred to work a maximum of eight hours during morning/early and afternoon/late shifts. The nine-hour shift seemed to combine the negative aspects of the 12-hour shift with the negative aspects of the eight-hour shift. It is suggested that the nine-hour shift had more negative effects than the 12-hour shift because: (1) nurses could not choose what shift length they worked; (2) many worked part-time; and (3) they already had many days off. It is also suggested that increases in workload since the 1980s make current extended shifts in nursing more fatiguing. Cites numerous references. [Journal abstract]

Source: HMIC
Full Text: Available in fulltext at Ovid
Available in fulltext at EBSCO Host

25. Who wants to work 12-hour shifts?

Citation: Nursing Standard, 04 April 2001, vol./is. 15/29(3-3), 00296570
Source: CINAHL
Full Text: Available in fulltext at Ovid


Citation: Nursing Standard, 04 April 2001, vol./is. 15/29(33-36), 00296570
Author(s): Bloodworth C; Lea A; Lane S; Ginn R
Abstract: Aim: The aim of this pilot evaluation was to assess whether changing a nursing shift pattern to incorporate 12-hour shifts would have positive effects for patients and staff in a ward environment. Method: All nurses, night sisters and therapists in contact with the ward during the trial were asked to complete a questionnaire. Data on sickness, agency use, 'untoward incidents' and spread of unsocial hours were also analysed to see what effects a change in shift pattern had. Results: The new shift pattern offered benefits for patients through improved communication, increased continuity of care and more content staff. In addition, staff complied to the Working Time Regulations (DTI 1998) with no change to their unsocial hour pay. There was also a reduced need for agency nurses. Conclusion: This study illustrated the potential a new nurusing shift pattern involving 12-hour shifts has for patient care, as well as for staff job satisfaction and efficient management of the ward. Twelve-hour shifts are infamous in nursing and many studies cite exhausted and dissatisfied staff as a reason for the negative press (Fitzpatrick et al 1999, Todd et al 1993). In particular, Todd et al (1989) claimed that the quality of patient
care was negatively affected on wards that used a 12-hour shift pattern. The study reported here challenges Todd et al's work (1989, 1993) by demonstrating the benefits a change in shift pattern to 12-hour shifts can have for patients and staff in a ward environment.

### Source
CINAHL

### Full Text
Available in fulltext at Ovid


#### Citation:
Communicating Nursing Research, 01 March 2001, vol./is. 34/(296-296), 01601652

#### Author(s):
Hodge MB

#### Source:
CINAHL

28. Challenging the myth of the 12-hour shift: a pilot evaluation

#### Citation:
Nursing Standard, 2001, vol./is. 15/29, 0029-6570

#### Author(s):
Bloodworth, Charlotte; Lane, Sharon; Ginn, Rachel

#### Abstract:
The aim of this pilot evaluation was to assess whether changing a nursing shift pattern to incorporate 12-hour shifts would have positive effects for patients and staff in a ward environment. All nurses, night sisters and therapists in contact with the ward during the trial were asked to complete a questionnaire. Data on sickness, agency use, 'untoward incidents' and spread of unsocial hours were also analysed to see what effects a change in shift pattern had. The new shift pattern offered benefits for patients through improved communication, increased continuity of care and more content staff. In addition, staff complied to the Working Time Regulations (DTI 1998) with no change to their unsocial hour pay. There was also a reduced need for agency nurses. This study illustrated the potential a new nursing shift pattern involving 12-hour shifts has for patient care, as well as for staff job satisfaction and efficient management of the ward. Twelve-hour shifts are infamous in nursing and many studies cite exhausted and dissatisfied staff as a reason for the negative press (Fitzpatrick et al 1999, Todd et al 1993). In particular, Todd et al (1989) claimed that the quality of patient care was negatively affected on wards that used a 12-hour shift pattern. The study reported here challenges Todd et al's work (1989, 1993) by demonstrating the benefits a change in shift pattern to 12-hour shifts can have for patients and staff in a ward environment. [Journal abstract]

#### Source:
HMIC

#### Full Text:
Available in fulltext at Ovid

29. Professional issues. Implementing 12-hour shifts on a cardiology nursing development unit.

#### Citation:
British Journal of Nursing (BJN), 26 October 2000, vol./is. 9/19(2095-2099), 09660461

#### Author(s):
Wootten N

#### Abstract:
This article, the first of two parts, discusses the implementation of 12-hour shifts using a locally devised nursing development unit (NDU) framework. A literature review and force-field analysis were undertaken to plan, implement and evaluate the introduction of the 12-hour system. The literature review identified five broad categories: effect on care delivery; nurse education; cost-effectiveness; impact on staff; and implementation strategies. It also ascertained that the most successful methods of implementation were those that gained the cooperation of staff. The force-field analysis identified the restraining forces (e.g. tiredness, the European Working Time Directive and staff views) and therefore allowed the change agent to concentrate his limited time on combating these restraining forces. The second part of this series will examine the evaluation and audit of the 12-hour shift system.

#### Source:
CINAHL

#### Full Text:
Available in fulltext at EBSCO Host

Citation: Nursing Economic$, 01 May 2000, vol./is. 18/3(124-135), 07461739

Author(s): Shullanberger G

Abstract: The author exhaustively explores the current literature and attempts to summarize the current thinking on how to best decide on the most cost-effective nurse staffing requirements. Between 1984 and 1994 FIFE nursing employees decreased by 7.3%, causing some researchers to seek ways to explore the relationship between staffing levels, staff and patient satisfaction and outcomes of care. Satisfaction among staff nurses working in a self-scheduling environment was determined largely by the individual's ability to negotiate for the desired days and shifts and by the nurse manager's ability to stand back from the process and let the staff collaboratively work it out. Work structure related studies seemed to find that 12-hour shifts were reported to be "less fatiguing" than traditional 8-hour shifts. Staffing studies found that rural hospitals still used 0.27 more RNs per occupied bed than urban hospitals and that the presence of a unit secretary was associated with a decreased use of RNs.

Source: CINAHL

Full Text: Available in fulltext at EBSCO Host

31. Evaluation of 12-hour shifts on a cardiology nursing development unit

Citation: British Journal of Nursing, 2000, vol./is. 9/20, 0966-0461

Author(s): Wootten, Nick

Abstract: The first part of this two-part article discussed the implementation of 12-hour shifts using a locally devised nursing development unit (NDU) framework (Vol 9(19): 2095-9). This article, the second part, discusses the results of a survey to evaluate the 12-hour shifts, the problems encountered during the implementation of 12-hour shifts, the solutions and the NDU framework as described in the first part of the article. A qualitative design to the postal survey was chosen with the resulting data being subjected to a content analysis. Data triangulation compared survey results with incident reports and sickness records. The limitations of the survey included having the change agent analysing the data, the sampling method and being unable to pilot the questionnaire. The results indicated an improvement in the quality of patient care, although this is difficult to measure, a pacing of workload throughout the day, and tiredness during, after and at the end of a stretch of shifts. Other results centred on staff morale, social life, student nurses' experience and night shifts. The solutions to identified problems included the employment of two twilight nurses to help the night staff during the busy early evening period. As a requirement of the NDU framework, standards were produced from the survey results, as this would allow subsequent audit of the 12-hour shift system. The recommendations from this survey included the dissemination of results both locally and nationally to expand the body of nursing knowledge and to promote practice based on the best available evidence. Cites numerous references. [Journal abstract]

Source: HMIC

Full Text: Available in fulltext at EBSCO Host

32. Implementing 12 hour shifts on a cardiology nursing development unit

Citation: British Journal of Nursing, 2000, vol./is. 9/19, 0966-0461

Author(s): Wootten, Nick

Abstract: This article, the first of two parts, discusses the implementation of 12-hour shifts using a locally devised nursing development unit (NDU) framework. A literature review and force-field analysis were undertaken to plan, implement and evaluate the introduction of the 12-hour system. The literature review identified five broad categories: effect on care delivery; nurse education; cost-effectiveness; impact on staff; and implementation strategies. It also ascertained that the most successful methods of implementation were
those that gained the co-operation of staff. The force-field analysis identified the
restraining forces (e.g., tiredness, the European Working Time Directive and staff views)
and therefore allowed the change agent to concentrate his limited time on combating these
restraining forces. The second part of this series will examine the evaluation and audit of
the 12-hour shift system. Cites numerous references. [Journal abstract]

Source: HMIC

Full Text: Available in full text at EBSCO Host