Hospitals as food arenas

Can the hospital make a difference for staff?

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Can the hospital make a difference for staff?

Abstract

Purpose: To analyse the interaction between hospital employees' working conditions, and their health and dietary habits, including the role of canteen take-away schemes.

Design/Methodology/approach: An international literature review combined with case studies based on stakeholder research interviews of the social shaping of canteen take-away schemes at two Danish hospitals.

Findings: Hospital employees seem to be under pressure because of their working conditions, including insufficient possibilities for taking regular breaks, which reduce the possibilities for eating regular meals. Nurses seem in some cases to internalize the tensions between the work load and the possibilities to have regular breaks and regular meals during the work day, which causes risk of 'overeating' or 'undereating'. Canteen take away-schemes might improve the accessibility of regular meals for employees at evening and night shifts if the ordering and delivering structures are organized with respect to this and might reduce the workload outside the workday for planning, shopping for and cooking dinner meals at home for employees on day shift. Initiatives for reducing the work load during the work day were also identified.

Research limitations: The assessment of the dietary changes based on the canteen take-away food was only based on indirect assessments based on interviews with users and non-users and furthermore based on a questionnaire at one of the hospitals.

Value/originality: Canteen take-away schemes are a rather new initiative at worksites. The paper applies a social shaping approach to the case studies, which ensures that the concept is not given a positive impact beforehand.

Keywords:
Hospital, nurse, stress, health, food service, canteen take away

Paper

1. Background

This paper analyses the role of hospitals as setting and food arena for the hospital employees. It focuses on how the work and the availability of food at work seem to influence the health of the employees, either through the work load or indirectly through the interaction of the food service system at the hospital, the work load and the dietary habits of the hospital employees.

The hospital as a food arena for patients is not analysed in the paper, although a few relations with the food for patients are stressed when it also is linked to the food for the hospital employees.

The paper is based on theories concerning the role of influence and meaningfulness in the job on the well-being of employees and on theories concerning policy processes at worksites.

Empirically the paper is based on an international literature review about the interactions between work, health and dietary habits of hospital employees. Furthermore the paper is based on a dialogue study organized by Poulsen about the shaping of so-called canteen take-away projects at two Danish hospitals where employees are offered the possibility of buying dinner meals for eating at evening and night shifts or for bringing home for the evening dinner meal in order to reduce the work load of the hospital employees by reducing the work load *outside* the worksite from planning, shopping for and cooking meals at home. This dialogue study is carried out as part of a research project about the shaping and the impact of canteen take away systems at different types of worksites.

1.1 The role of influence and meaningfulness in the job

Meaningfulness and the ability to influence and control your own work day is important elements in an assessment of the working conditions and their impact on the health of employees at hospitals. Influence and meaningfulness in the work can contribute to reducing stress and burnout; even a monotonous and tedious work can be perceived as a good work, if it feels meaningful and involves good social relations (Karasek and Theorell 1990, Isaksen 2000). There are also indications that it is important, both to the work satisfaction of the employees and to the quality of the products, that the employees have a personal involvement in the work. Many wage earners find the quality of the work

they do as important as other aspects of the work. However, there is not necessarily a connection between satisfaction and quality in the work. Many high quality products, such as Persian rugs, are produced in miserable working conditions (Bilfeldt et al 2003).

The work's content and meaning to the employees, has not been a frequent topic in research on working life. Often, the question on whether the work is meaningful to the employees is not raised in research on working life. In some schools of management and organisational development, it becomes a management task to motivate and engage the employees, among other things by making the work meaningful to them. Unlike these schools, traditional research in occupational health and safety and working life research have often taken for granted that work in itself is meaningless or that the meaning of the work is irrelevant, since the employees have no influence on it anyway. A lot of work environmental research and effort has focused exclusively on the framework of the work itself: salary, working time, speed, work hazards, rules for influence, etc. This is important to the employees' life conditions but it is also important to be aware of the dilemmas and contradictions that arise for the employees, between, on the one hand the goals and values they attribute to the work, and on the other hand, the demands to accountability and involvement that the management imposes on them.

Karasek's and Theorell's Demand/Control Model (Karasek and Theorell 1990) emphasizes that workload, defined as high job demands, combined with a low job influence, may be experienced as job strain for a person. In the Demand/Control Model, four different kinds of psychological work experiences are generated by high or low job demands combined with high or low job control (decision latitude), and divided into four job categories: high strain jobs, low strain jobs, active jobs, and passive jobs.

According to the model people having high job demands and low job control may have a risk of mental job strain, eventually leading to fatigue, depression, sleeping problems, burn-out, medicine abuse, or other physical illness. Active jobs with both high demands and high control are seen as stimulating jobs without negative psychological affects or health risks. A passive job, on the other

hand, does not give individuals the possibility of using their skills, and may lead to psychological strain and diseases. High psychological workload may induce overeating and lead to cardiovascular diseases (Greeno & Wing 1994).

Most often, the employees take considerable pride in their work and their professional competence. This pride is, however, often contested by demands of the work that make it impossible for the employees to live up to their own standards for a well-performed work. This individual dilemma is often connected to major conflicts and contradictions between on the one hand, the users and society's standards and ethical norms and on the other, the economic considerations of the companies. The employees are thus expected to make considerations over the content of the work even though the framework does not allow room for it. The employees' handling of these dilemmas may result in various survival strategies. What happens if the employees cannot meet the goals that have been set for the work or there is a conflict between the employees' perceptions regarding the work's objectives and the demands that are made? Three employee strategies have been identified: internalisation, detachment and politicizing (Bilfeldt et al 2003). These strategies should not be seen as strategies the employees freely can choose between, but rather as strategies shaped by the work place's traditions and the way that new demands and efforts are introduced. Likewise, there may be differences from workplace to workplace within the same area, or from employee to employee in the same workplace.

Internalisation means that the employees 'turn' the demands and the responsibility towards themselves, and personally take on the responsibility of meeting the demands - whether it is their own demands or demands that come from other stakeholders. This internalisation may result in a greater mental work strain. In particular with respect to nursing and care, it can be difficult to draw the line for what is good enough. Detachment means that the employees do not accept responsibility for demands that are perceived as enforced from the outside, or for demands that they cannot meet within the framework of the work and the norms for work effort that they find reasonable. Politicising involves that the issue of the relationship between demands and resources is made an object of

negotiations and discussions between management and employees or representatives for the employed.

1.2 Policy processes at worksites

The analyses were inspired by the approach of the worksite's social constitution. This approach was developed by Hildebrandt and Seltz (1989) and is an analytical understanding where social processes at worksites are evaluated through analysis of the worksite's social practice (Olsén and Clausen, 1994).

Social constitution utilises a dialectical relation between local worksite policy and structural power. The basis is the picture of a worksite as subject to the capitalistic mechanisms and thereby an asymmetrical balance of power between the different actor groups at the worksite. Actors are structured in social groups through their position at the worksite (top management, project management, supervisor level, catering staff, employees, etc.) and are thereby also linked in a macro-power structure. The social constitution of a worksite is characterised by a number of variables; among these are the formal power structure of the workplace, the regulation and negotiation system at worksite level, and the conflict and consensus history of the worksite.

2. Methods

The results presented in this paper are based on a literature review and on a dialogue based research methodology. We have made a literature review based on a literature search where keywords such as worksite, workplace, lunch break, hospital, nurses, food, and nutrition were used in various combinations.

The dialogue based research includes focus group interviews and personal qualitative interviews as well as follow up meetings with the interviewees in order for them to get feedback on the results from the interviews. For the interviews semi structured interview guides were developed and the interviews were recorded and subsequently transcribed.

3. Results

3.1 Literature review about hospital employees and work, health and diet

Several studies have examined different aspects of the interaction between work, diet and health among hospital employees. This includes the influence of work load, the influence of irregular work patterns on dietary habits, including the frequency and timing of meals, and nutrient content.

A large cohort study of Danish nurses showed that psychological job characteristics were associated with 6 year weight gain for nurses 45–65 years of age (Overgaard et al 2004). High busyness combined with low influence in job as well as low busyness with low influence in job was found to increase in body-weight gain, after 6 year. Both job busyness and job influence were independent risk factors for weight gain. Psychological, hormonal, and or other mechanisms may explain the relationships between job attributes and excess weight gain.

Based on several articles Overgaard et al (2004) emphasize that perceived stress could be associated with unhealthy eating habits. Working conditions that do not allow regular eating breaks could influence nurses' eating habits. This could result in the busiest nurses losing weight due to lack of eating time. Alternately, nurses might eat more unhealthy food too quickly due to stress. These explanations have been supported by a number of studies indicating that certain professionals, including nurses and schoolteachers, react to stress by changing their food intake: either by 'overeating' or 'undereating'. High psychological workload due to high job demands and low influence in job seems to predict weight gain in general and, in particular, among those nurses with a familial predisposition to obesity (Overgaard et al 2006).

In a qualitative British study among health care workers work-related stress was found to be the greatest health concern on the workplace (Jinks & Daniels 1999). As minor concern is mentioned nutrition. The study does not investigate potential links between the different health concerns.

Friis et al (2005) found that Danish nurses have a healthier lifestyle than other Danish women. They smoke less, have healthier eating habits, are physical more active during their leisure time; however,

they consume more alcohol than other women. In spite of this healthier lifestyle no major health differences in terms of self-reported health, diseases and use of healthcare facilities were found between nurses and women belonging to the same socio-economic group.

A study of British doctors and their perceived barriers for healthy eating (Winston et al 2008) find that the lack of breaks, insufficient selection of canteen food and limited opening hours in the canteen all is perceived as significant barriers to healthy eating. In a study of British nurses the lack of breaks is also found to be preventing the nurses from eating healthy (Faugier et al 2001a). Furthermore is shift pattern also perceived as a factor preventing healthy eating in the working hours. These findings support the findings of Overgaard et al (2004) among nurses. Faugier et al (2001b) found that the eating practices at the hospitals were shaped by poor availability and variety of food, long distance from catering facilities and the poor possibilities to have regular breaks with the actual staffing level and workload. The availability of food at the evening and night shifts were poor. The nurses on these shifts had to bring to bring their own food or order food from near-by take away kitchens outside the hospitals.

Kirk (2009) found in a study of a group of Canadian female hospital workers that approximately 25% of the participants had the metabolic syndrome, with elevated waist circumference being the most common cardiovascular disease risk factor. A multivariate analysis found a few key significant associations between irregular work patterns, specifically extended shifts and elevated systolic and diastolic blood pressure. The analyses revealed that after 6 or more years of shift work, female workers were more likely to develop the metabolic syndrome and abdominally obesity.

3.2 The social shaping of canteen take-away projects

In 2008 the first hospitals in Denmark began offering their employees the possibility of buying meals to bring home for dinner, so-called canteen take-away (CTA) schemes. It was at the time a very new idea, not only for public worksites but for workplaces in general in Denmark. The first hospitals that started wanted to be recognized by potential staff as innovative, and it was a clear scope for them to be able to attract new staff and at the same time be able to retain their present staff.

Through a case study two different hospitals were followed during the planning and implementation of a CTA scheme. Hospital A is located in the Copenhagen area and employs about 4500 persons, which makes it one of the biggest hospitals in Denmark. The other hospital, Hospital B, is located in the eastern part of Jutland and has about 1600 employees. The two hospitals began their considerations about CTA in the spring of 2008, inspired by a Danish research and development project *Canteen Takeaway*, coordinated by the Danish Cancer Society (www.kantinetakeaway.dk). In November 2008 Hospital A sold their first portion CTA, while Hospital B was ready with their system in the spring of 2009.

At Hospital A the idea about CTA emerged when the personnel in the canteen for employees wanted to make an offer for the staff working at evening and night shifts. At that time the evening and night staff did not have any possibilities of buying food in the staff canteen, because it closes after the lunch break. These considerations developed into several ideas, which they presented to the canteen board. At this presentation someone had heard about CTA and launched the idea that this could be an option for the night shift. As a side effect it would furthermore be an offer for the rest of the staff. The hospital became involved in the Canteen Takeaway project. The manager of the staff canteen wanted to use an external supplier of meals but the management for the hospital decided that it should be the hospital kitchen that provided this service. A couple of months after they started selling CTA the staff canteen were assigned to the hospital kitchen. The staff canteen had earlier on been a subdivision of the hospital kitchen but when the hospital tried to outsource the area related to food they split up the area into minor sections in order to make it easier for external companies to make an offer.

The workload and its impact on stress and absenteeism have been addressed in different ways at the hospital. An example is a project at one of the departments aiming at improving the psychological aspects of the working environment and reducing the absenteeism among nurses, assistants and secretaries. This included changes in the organisation of the daily work, including the possibility for taking a ‘power nap’ during the night shift (Evaluation 2004). Managers at the hospital are trained in managing and reducing stress.

At Hospital B the idea about CTA emerged at a workshop for nurses. They were invited to a workshop to develop ideas about how the workplace could help them in their everyday life. At the workshop the idea occurred and as coordinators of the workshop the Human Resource department carried on with the idea. The workshop was part of the development of a strategy on 'welfare in the job' aiming at improving the employee satisfaction and reduce absenteeism and retain the employees. Among the proposals were also ideas for reducing the workload during the work day, like better possibilities for regular lunch breaks and transfer of some tasks to new employees with more relevant skills (Strategy on welfare in the job 2008).

The two hospitals have some differences in their schemes. Hospital A decided to offer CTA on all weekdays (every day except Saturdays and Sundays) in order to make sure that the majority of the employees had the possibility to buy the food every week, while Hospital B decided to make CTA twice a week. The considerations about frequency reflected the hospitals' different decisions about the CTA menu. At Hospital A they made a modified menu of the menu for the patients, which means that they make the same dishes as the patients are served, but in a fat reduced version. Employees in the hospital kitchen describe the food as healthy. A CTA meal at Hospital A consists of meat, potatoes or pasta or rice and some kind of pickled vegetables or des like. In order to make CTA accessible for the evening and night shift the hospital leased a vending machine where the personnel could buy CTA when the canteen was closed. This solution turned out not work because the trays got stuck inside the machine. The CTA scheme is about to be changed and the changes should make CTA more accessible for the evening and night shift because they do not have to order in advance and it will be prepared and sold in the canteen open for relatives to patients, which is open in the afternoon as well. This increases the period during the day where the CTA meals can be bought.

Hospital B decided to make a separate menu which did not have any links to the menu for the patients, but as a consequence of this choice they could only allocate working hours to offer CTA twice a week. The meals vary from traditional Danish meals to somewhat more exotic meals. The meals are by the kitchen staff described as complete proper meals, the users do not have to prepare extra food when they buy CTA they get a meal that contains meat, potato or rice or pasta, sauce,

vegetables or a salad and bread and the division is based on recommendations from the Y-plate model, which means 2/5 is bread, rice, potatoes and pasta, 2/5 is vegetables and fruit, and only 1/5 is meat, poultry, fish, egg, cheese or sauce (Ministry for Food, Agriculture and Fishery 2008). The kitchen made nutrient calculations on the meals and they had a fat percentage below 30 %.
The choices about the menu influenced the deadline for ordering CTA and the price. At Hospital A the deadline was decided to be at 8 o'clock in the morning, while at Hospital B the employees have to order the day before at 1 p.m. At Hospital A the price for one meal was decided to be 31 DKK and 18 DKK for a salad. As a special offer they made portions of three for the price of 88 DKK. At Hospital B the price for one portion was at the beginning 40 DKK and after an introduction period the price was raised to 45 DKK.

Both hospitals chose to make a web shop where the employees could order the food. Hereby it was also possible for the employees to order from home. Hospital A found out early in the process that this was important because most personnel at the hospital have irregular working hours and therefore needed to be able to order from home.

In both cases the hospitals have great success selling special menus related to Danish traditions. For instance both hospitals tried to make a special Morten's Evening menu with roasted duck and have great success with such initiatives.

At Hospital A they made a survey to investigate the satisfaction of the users just after they started offering CTA. 180 employees answered the questionnaire; this was a 77 % response rate. The survey did not include questions about why the users were using the offer, but it included questions about what they would have eaten if they were not eating CTA and what they used the extra time for. From the answers it is clear that the majority would have prepared a meal themselves if they did not buy CTA, this would for the most parts be a hot meal but for some it could also be a cold simple dish, such as sandwiches. The extra time is used with family and friends or for leisure activities including sports.

At Hospital B we have made focus group interviews with six non users and seven users of their CTA scheme. From these interviews it was clear that the non users did not use CTA because they did not

think that their children would like the food, the deadline for ordering was perceived as too early, they like cooking themselves or they liked what their wives prepared for them, or the days they could order it did not fit with leisure time activities. The users chose to buy CTA because it saves them time, they find the meals to be healthy, they get more variation in their meals compared to what they would make themselves, and they describe the meals as "food made from the heart". They all found the price to be very reasonable. Amongst the nurses using the scheme they hoped that more of their colleagues would discover CTA because they found the meals to be significantly better than pizza, which many nurses on the evening and night shift bought.

4. Discussion

4.1 Interaction between work, diet and health

The literature review showed that hospital employees seem to be under pressure because of their working conditions, including insufficient possibilities for taking regular breaks which reduce the possibilities for eating regular meals. The possibilities for buying healthy food seem especially limited at evening and night shifts. Most of the identified research focuses on nurses. High psychological workload seems to imply risk for weight gain in general and in particular among nurses with a familial predisposition to obesity. Nurses seem in some cases to internalize the tensions between the work load and the possibilities to have regular breaks and regular meals during the work day. This means that working conditions that do not allow regular eating breaks could influence nurses' eating habits. Nurses react to stress by changing their food intake: either by 'overeating' or 'undereating'.

4.2 Canteen take-away as worksite strategies

Through the two case studies a number of topics, which may be part of the planning and implementation of canteen take-away schemes at hospitals, were identified:

- Why are canteen take-away schemes developed?
- Who is producing the canteen take-away food?
- What food is produced as canteen take-away food?
- Who are the users and the non-users of the schemes and why?

- How and when should the food be ordered?
- Is the canteen take-away food healthier than the food the users normally would have eaten?

Why are canteen take-away schemes developed?

The two studies of canteen take-away systems at hospitals show how dialogues at a hospital about possibilities for reduction of the stress of the employees are organised. At one of the two studied hospital the canteen addressed the bad availability of regular food to the night shift employees and offered to start making and selling food for the employees at these shifts. The scheme was, however, organized as an offer to employees on all shifts. The problems making the CTA meals actually available to the evening and night shifts show that a canteen take-away needs to be seen as a system comprises activities like ordering the meal, planning the production in the kitchen and buying the CTA meal.

At the other hospital nurses themselves addressed how the hospital as organisation could help them in their everyday life. The two initiatives show a difference in aim, since one canteen-take away initiative was initiated in order to improve the eating possibilities at the worksite (but at the same time also targeting employees at day shifts that want to buy and bring home dinner), while the other initiative was targeting the workload outside the working hours by offering to take over some of the private tasks (planning, shopping for and cooking meals at home). The initiative is one among several proposals from employees as part of a job welfare strategy, which also includes a chill out room and a wellness consultant for the employees.

At both hospitals we have identified other types of initiatives, which have addressed the work load during the work day, including better possibilities for break for sleeping at night shift, regular lunch breaks and changes in the way the daily tasks are organised.

Who is producing the food and what food is produced?

At Hospital A the question about who should make the CTA meals became a matter of politics. According to Hildebrandt and Seltz's notion of 'Social constitution of the worksite' the history of the worksite is included as an actor in present political negotiations. Previous decisions, conflicts and cultural differences had changed the worksite's social constitution and created tensions between the

hospital kitchen cooking for the patients and the staff canteen cooking for the staff so the decision about asking the hospital kitchen to produce the CTA food and making the CTA food an adopted version of the patient food put the social constitution of the worksite under pressure with different actors defending and attacking the decision. Earlier to the case about CTA attempts to outsource some of the tasks in the hospital were made, among those the hospital kitchen and the staff canteen. These two areas were separated to make it easier for external companies to make an offer on one of the areas. The result of the process was that the hospital made the lowest offers on both areas, but the areas was kept separated and with different managers. This separation was later on cancelled and the staff canteen was assigned to the hospital kitchen. When the two areas were divided the staff canteen hired a trained chef to manage the canteen, while the kitchen manager still was running the hospital kitchen. We found big cultural differences between chefs and kitchen managers, especially the chefs do not regard the trained personnel in the hospital kitchen as capable of making decent food.

A study of the introduction of team organisation in two other hospital kitchens, however, indicated that kitchen staff finds it important to produce hospital food for patients of good quality and find it frustrating if the management is not ensuring ingredients of high quality or if colleagues are not organizing the food nicely on the trays for the patients (Bilfeldt et al 2003). This indicates that kitchen staff might welcome to be involved in decisions about the quality of the food they produce, including the quality of canteen take-away food.

Who are the users and non-users of canteen take-away?

The two CTA schemes are only used by a small percentage of the employees. From the answers in the survey at Hospital A we see that CTA can release time from food preparation at home. The released time might contribute to reduction in perceived time pressure. Similar results have been found in another type of white collar setting (Poulsen et al., in preparation). In order to use this benefit the employees have to be able to plan ahead because of the deadline. This is mentioned at Hospital B, where the deadline is one day ahead. Amongst the users of CTA at Hospital B it is clear that for some

CTA function as a time saver and some of them describe it as the best of the perks they have at the hospital.

The survey at Hospital A was only targeting users of CTA and can therefore not contribute to information about why many employees choose not to buy CTA. 180 employees answered the questionnaire and 2 % of these said that they did not want to buy CTA again. This was particular due to two conditions: the size of the portions was too small, and the meals had too much resemblance with the food for the patients.

Is the canteen take-away food healthier than the food the users normally would have eaten?

There are some indications that issues of health might be of importance. The issue of whether the meals are healthy is not mentioned specifically in the study at Hospital A. The users who in the survey answered that they did not want to use CTA again said that this was among other things due to the size of the portions. The sizes of the portions are considered to be too small. This could be related to the fact that the users need to order a salad together with the meal in order to get sufficient amounts of vegetables to fulfill the Danish recommendations for healthy eating (Astrup et al 2005). This information is not given to the users when they order CTA which means that they are most likely not aware that they do not get a complete meal compared to the Danish guidelines.

Among the users in the focus group interview at Hospital B they all find the meals to be healthy, while it is not mentioned as a premise for buying CTA amongst the non-users. This can be related to the fact that the non-users have no experience with CTA and does not know what the meals contain, or that healthy food is not considered to be important for them in general, or that some of the non-users were men that maybe never cook at home. A study in another type of white collar setting indicated that the majority of the canteen take-away meals at the worksite contained more vegetables than the dinner meals the users normally eat (Ernst & Poulsen 2009.

5. Conclusion

Hospital employees seem to be under pressure because of their working conditions, including insufficient possibilities for taking regular breaks, which reduce the possibilities for eating regular meals. Nurses seem to internalize the tensions between the work load and the possibilities to have regular breaks and regular meals, which could lead to 'overeating' or 'undereating'. Canteen take away-schemes might improve the accessibility of regular meals for employees at evening and night shifts if the ordering and delivering structures are organized with respect to this and might reduce the workload outside the work day for planning, shopping for and cooking dinner meals at home for employees on day shift. Initiatives that address reduction of the work load during the work day were also identified at the two hospitals. It is not possible to address the hospital as a food arena in a pro-active way without also addressing the hospital as a 'work arena' with focus on work organisation and its influence on the work load and stress and thereby some of those aspects of the working life which influence the dietary habits.

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