Sundhedsstyrelsen
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Danish Centre for Evaluation and Health Technology Assessment

WARD ROUNDS - A HEALTH TECHNOLOGY ASSESSMENT FOCUSED ON PRODUCTION OF KNOWLEDGE

Summary

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Summary

The knowledge basis is limited of ward rounds as a social practice and of the significance and implications of the ward round for the different players. Also, how most appropriately to organize a ward round is only sparsely elucidated. This sparse knowledge has inspired DSI to carry out an HTA with a view to providing a broad and varied understanding of the ward round. The overall aim is that such an analysis may contribute to a discussion of how best to organize and carry out a ward round within the present modern health service.

Objective

The objective of this HTA is to illustrate the ward round as a production of knowledge aimed at managing the diagnostic and therapeutic work. Thus, the ward round should be seen as a production of knowledge created continuously in relations between physicians, nurses, patients and case notes.

The report is aimed at achieving an understanding of the complex relations constituting a ward round – and thus illustrate the obvious practices embedded in the players' way of employing the ward round. Also, the report should discuss some of the practical problems (e.g. patient communication, coordination of treatment, time consumption, use of electronic patient records and training of junior doctors) in connection with the organization of the ward round in a modern health service.

Theory and method

Data have been collected in three internal medicine wards that have organized their way of doing ward rounds differently. In each ward observational studies, focus group interviews, individual interviews and time registration have been carried out. Written material comprising factual data on the wards in question has been collected. Literature studies have also been used to illustrate the historic context of the ward round as well as existing knowledge on ward round practice.

The report outlines a relational theoretical perspective of the interpretation of the empirical data. The way of doing ward rounds in three wards forms the data basis. This may be characterized as a case method where the objective is to achieve a varied and in-depth understanding of the examined phenomenon rather than achieving broad and generalized knowledge.

Results

Firstly, the literature study shows that the ward round has developed from being primarily educational to having multiple objectives as coordination, management of diagnosis and therapy, creating overview, monitoring of patients and training. However, the actual fundamental principle where the physician and the nurse walk from bed to bed and attend to the patients has not changed significantly during a period of several hundred years. Secondly, the literature study shows that it is possible to create a more rational work routine and more continuity in care pathways by introducing alternative formats of ward round. Several studies show that it is essential to have an interdisciplinary forum (pre ward round/whiteboard meeting) before the actual ward round where the different players exchange knowledge. Thirdly, literature on electronic patient records (EPR) at ward rounds shows that EPR only to a limited extent have resulted in new formats of the ward round. EPR involve a larger time consumption for the preparation of the ward round because it is hard to get an overview of the amount of information about the patient comprised in the EPR. The different conclusions of the studies suggest that the EPR technology as such does not encompass definite consequences. Rather, the consequences should be found in the relations and social practices of which the technology is part. In general, the literature study suggests that the ward round is a complex phenomenon as a number of different players with different interests and positions in the ward round practice are involved. Thus, literature render visible that the ward round is experienced differently depending on whether you are the physician, the nurse or the patient.

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The descriptive analysis of the actual technology comprising three different formats of ward round shows that the overall structure of the three different formats is identical as they are all organized around:

- a pre ward round where the patients are reviewed using the record and the nurses' knowledge about the patients, and where the main part of the medical decisions is made;
- a ward round where the physician and the nurse attend to the patient;
- a post ward round where the medical decisions are documented and carried out.

The differences between the three formats of ward round comprise partly whether the format of the ward round functions with daily monitoring of all patients or whether the ward round is according to requirement and partly whether the ward round uses EPR or paper record. The traditional ward round (Glostrup) and the EPR supported ward round (Kolding) are very similar as the physician and the nurse attend to all the patients on the ward. The difference between the two formats of ward round is that the physicians on the EPR supported ward round carry out several documentation tasks in connection with the pre ward round due to the presence of the EPR which means less time for the actual patient contact. The personal counselling (Kalundborg) differs significantly from the other two formats of ward round as the nurses each morning select the patients that need to be attended to by the physician – a meeting which in contrast to the two other formats of ward round takes place in a separate room where the patient is alone withs the physician and the nurse.

The analysis of patient and organization shows that the production of knowledge during the ward round is not a linear process from problem to solution but a continuous exchange of knowledge between the different players of the ward round. These players have different positions in the knowledge production of the ward round and thus express different social understandings of the objective of the ward round and how to achieve this objective. Their perspectives on the ward round are closely connected to the positions they hold in the production of knowledge. The physicians' position is characterized by a biomedical understanding and thus the most important objective of a ward round is to create an overview of the patient history and symptoms with a view to making the correct medical decisions. The position of the nurses is characterized by their sociomedical knowledge about the patients. Their objective of the ward round is to communicate this knowledge about the patients to the physicians and at the same time seek to involve the patients in the ward round. The patients' position is characterized by having focus on the disease experience, on how their disease and the treatment influence their life outside the hospital and on creating hope for recovery. All in all the different ward round players express several different social understandings of the objective of the ward round – objectives which it may be difficult to consider in one and the same format of ward round.

The economic analysis of the ward round shows that the total daily time consumption for ward round activities in the three wards for physicians and nurses on average amounts to between 40 and 55 minutes per patient corresponding to payroll costs of between DKK 192 and 267 per patient. However, the time consumption varies significantly from day to day. The results of the analysis suggest that the total time consumption is largest on the ward with the traditional ward round and smallest on the ward with the EPR supported ward round – a difference that is mainly attributed to differences in the time consumption of the physicians. Furthermore, the time consumption of the ward round varies with respect to how it is distributed on activities, e.g. how large a part is used on the pre ward round and how large a part is used on the actual patient contact (the ward round).

Conclusion

All in all the report shows that the ward round players in their daily practice attempt to integrate ideals of clinical efficiency, patient involvement and training. Thus, on an ongoing basis, the ward round players weigh several considerations and objectives pulling in different directions. In the

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discussion of the main analysis results it is pointed out that with many different players and several different interests represented in the ward round practice one obvious way of practising the ward round does not exist. However, based on both the limited data basis of the report and the characteristics of the modern health service it is proposed that it may be appropriate to reorganize the traditional ward round on internal medical wards by:

- attending to the patients according to requirement;
- letting the ward round patient contact take place in private;
- using EPR as a tool for the administrative part of the ward round, e.g. prescription of medicine and cooperation between wards;
- always having a consultant present during the pre ward round to take care of the training of the junior doctors and to ensure quality and efficiency of medical decisions;
- formalizing the pre ward round (even more) in order that physicians' and nurses' different forms of knowledge about the patients' condition are exchanged in a dialogue.

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