هدف: ارزیابی کیفیت تقریر صبحی در مراکز پرستاری در علوم پزشکی در ایران.

مکان و زمان: این تحقیق در مرکز پرستاری در علوم پزشکی ایران در مراکز پرستاری در علوم پزشکی انجام شد.

درک آماری: این مطالعه به صفر پایداری ناسازگاری و در پنج سطح درست، متوسط، حاد، شدید و بسیار شدید تقسیم شد.

نتایج: بهترین کیفیت تقریر صبحی در مرکز پرستاری در علوم پزشکی در ایران در سطح متوسط بود.

/parser/translate?source=en&target=fa&text=How to Improve the Quality of Morning Report, Department of Internal Medicine, An action research

Background: Morning reports (MRs) are commonly used as an efficient technique in Medical Education. This study was intended to assess the educational process following Iranian process of improving the MRs. The aim was to improve the performance of the MRs in the Internal Medicine Department, Imam Reza General Hospital, Mashhad, Iran.

Methods: Following an initial one-month assessment through direct observation of morning reports held in Imam Reza Hospital Internal Medicine Department, workshops were run for 6 weeks aiming at rectifying the flaws and reforming the trends practiced contrary to current standards. Checklists were filled by the attending researchers, subsequent to which feedback was given regarding possible changes and/or challenges to the attending physicians. Reforms as well as alterations were urged to improve the status quo, which were eventually accepted and implemented by the Head of Department. Reassessment was conducted six weeks afterwards, using checklists having been prepared in advance. An equal number of MR Sessions (n = 25) was evaluated prior to and following the Reform Scheme.

Results: Significant differences can be seen in the level of participation by nephrologists, infection disease specialists and clinical pharmacologists after the scheme (P = 0.001). Better arrangements were made between the coordinator and the resident in charge prior to the MR session, mainly via short text messages (4%). This encompassed the case selection, number of cases to be presented and the chief objective behind these presentations. Of the total of 65 patients presented, 50 (77%) were complicated ones whereas common disorders only reported in 6% of the cases. Presentations became growingly shorter in case of the first cases (P = 0.022) while second and third ones took as much time as prior to the Reformation Scheme. There could be seen no considerable improvement in the accuracy of the final diagnoses yet punctuality was reported to have improved significantly as morning reports routinely and regularly commenced at 8 a.m. following alterations (P = 0.025). A significant rise in the number of cases presented and discussed in every meeting (P = 0.006).

Conclusions: Training and feedback seem to have improved the quality of morning reports in different respects, especially when augmented by applying national as well as international standards used in this and other studies.

Key words: Morning Report, Teaching Method, Action Research

Research design: Action Research

редактор, التحریر

INTRODUCTION

Morning Reports (MRs) are commonly used as an efficient as well as effective technique in medical education, with growing popularity and importance in internal medicine (1). Attendants endeavor to solve a kind of medical puzzle by contributing to discussion and exchange of viewpoints on a presented patient. Cases often vary from simple to complicated, ranging from a newly-admitted patient the night before to an already hospitalized one with new and/or atypical presentations (2, 3).

Cases are introduced by interns and residents, under the consultant instructors’ supervision in line with learning objectives specified in the course lesson plan. Residents put forward a number of differential diagnoses, which are finally narrowed down to a definitive one, with the aid of proper diagnostic procedures. Thus it can be inferred that interns and residents are the key players in this learning process, which not only facilitates clinical skill and knowledge acquisition, but also ensures a fair and accurate assessment defined in the curriculum (4, 5).

Morning reports are also effective assessment tools when it comes to quality assurance in clinical healthcare provision (6), aside from their key role in developing physician-patient communication skills, problem-solving skills and self-assessment and/or criticism (7).

Morning reports constitute a relatively considerable proportion of formal education time- one hour in the morning (1). Given the current observation of limited productivity of MRs in Imam Reza Hospital, and the significance of appropriate and duly-guided conductance in achieving the determined goals, we intended to investigate the ways to promote the quality of performance in MRs.

METHODS

The entire research lasted four months in four distinct stages:

1) Initial assessment and workshops (4 weeks)

The researcher attended all MRs held since Feb 22, 2014 by the Internal Medicine Department, Imam Reza Training Hospital. Usually 6 professors, 15 residents, 10 interns participate in MRs, which are being held 4 times a week. A checklist was designed, encompassing 20 questions with regard to the curricular content and outline, which was filled by the researcher throughout the reports sessions. Meanwhile, consultant instructors and faculty members involved in clinical training were participating in 4 hours workshops aiming to present the latest approved methods and techniques, both nationwide and worldwide; to be applied in MRs. Residents underwent similar training but separately.

2) Observation and feedback (six weeks)

Another checklist was made to assess consultant trainers’ as well as residents’ performance following the training stage. The researcher observed all morning reports held in the same centre by the same trained professors and students for six weeks, having assessed their performance and providing feedback when and where necessary.

At the end of this stage, guidelines were provided in line with pre-defined national objectives and given the current status and possibilities. These guidelines led to measures and alterations to be entirely approved and adopted by the Head of Internal Medicine Department.

3) Re-assessment following proposed measures and changes (6 weeks)

The re-evaluation took place between May 22 and July 6, 2014, through observation and the subsequent checklist filling.

4) Analysis and outcome

Data were fed to SPSS version 16, having been analyzed applying descriptive as well as inferential tests namely independent T and Chi-Square tests. In cases of abnormal data distribution, non-parametric tests were applied.

RESULTS

In total 50 sessions were evaluated, in which 124 cases were reported. Number of sessions per week increased from 3 to 4. Number of participating faculty members increased from 6 to 9. Allocated time by the intern for the first patient (minutes) decreased from 9 to 7 minutes. The number of presented patients has increased from 2 to 3.

Punctuality improved significantly following the implementation of guidelines (start time: 8 a.m., finish time: 9 a.m.). (p=0.025) There could also observed that MRs patients registry improved in precision (p=0.025).

As for the atmosphere of the held sessions, none were frustrating or aggressive following guidelines, which used to have been reported only in four reports prior to intervention with insignificant statistical difference (p=0.055). The atmosphere was reported amicable (14 sessions) and formal (11 sessions), indicative of changes for the better (p=0.014).

Also, there could be seen a significant rise in the number of attendants, both instructors and trainers (graph 1) (p<0.001), as well as the average number of cases presented and discussed in every meeting. (Graph 2), (p=0.006).

General internists (P=0.001) and nephrologists (P=0.024) also participated more actively in percentage terms. In contrast, GI specialists, pulmonologists, endocrinologists, radiologists and toxicologists did not differ in their participation rates prior to and following the scheme.

Neither the head of department nor the moderator was
How to Improve the Quality of Morning Report

Comprised complications, 11% were rare cases and 6% presented with common conditions.
Interns took less time to present their first case following the scheme (P=0.022) whereas presentation time had not differed significantly in the subsequent cases (second and third patients who were introduced). Time allocation per case also did not change when considering the consultants and residents. The scheme did not seem to improve diagnostication although none of the presented cases had been with a definitive diagnosis (P=0.002).
Table 1 summarized the entire findings, compared where relevant standards existed.

**DISCUSSION**

We found that conducting this method improved the number of participating faculty members, the number of presented patients, and the number of sessions per week. Prior arrangements with the moderator, recording in the folder of the morning report, conducting follow up sessions and face-to-face contacts have also improved via this action research.
Morning Reports (MRs), along with Grand Rounds (GRs), are widely used as efficient and effective teaching methods in Medical Education (1).
MRs held in the Internal Medicine Department in Imam Reza General Hospital commence at 8:00 a.m., as has been the norm in many other education centers worldwide (2, 7, 8).
In certain training centers, these sessions are reportedly held at 9:00 a.m., mid-day and even in the afternoon, defying the literal nomenclature (3, 6, 9).
Varying between 30 minutes (10) and 2 hours (3) in duration in other centers, Morning Reports took approximately 60 minutes in our centre, as has been observed in many other hospitals (2, 8, 11, 12).
There were, on average, 4 sessions weekly in this centre, akin to many other universities (7, 8, 11).
Patients here are presented by interns, as opposed to what is conventional across the world, where residents are in charge of this importance (2, 6, 9, 13, 14).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before intervention</th>
<th>After intervention</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punctual time schedule</td>
<td>Irregular</td>
<td>Regular</td>
<td>Improved</td>
</tr>
<tr>
<td>The atmosphere of the held sessions</td>
<td>Formal or friendly or boring</td>
<td>Formal or friendly</td>
<td>Improved</td>
</tr>
<tr>
<td>Prior arrangements with the moderator</td>
<td>No</td>
<td>Yes</td>
<td>Improved</td>
</tr>
<tr>
<td>Recording in the folder of the morning report</td>
<td>Irregular</td>
<td>Regular</td>
<td>Improved</td>
</tr>
<tr>
<td>Follow up sessions</td>
<td>Irregular</td>
<td>Regular</td>
<td>Improved</td>
</tr>
<tr>
<td>Face-to-face contacts</td>
<td>No</td>
<td>Yes</td>
<td>Improved</td>
</tr>
<tr>
<td>Number of sessions per week</td>
<td>3.00 (0.0)</td>
<td>4.00 (0.0)</td>
<td>-</td>
</tr>
<tr>
<td>Number of participating faculty members</td>
<td>6.00 (2.1)</td>
<td>9.00 (1.9)</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Allocated time by the intern for the first patient (minutes)</td>
<td>8.90 (2.8)</td>
<td>7.20 (2.0)</td>
<td>P=0.022</td>
</tr>
</tbody>
</table>
| Number of presented patients            | 2.00 (0.6)          | 2.60 (0.6)         | P<0.001   | 3.00
There could be seen a predominance for complications in our presentations, whereas other centers also consider common (12) as well as rare (15) disorders, with regards to all admitted patients (3, 6, 16, 17, 18) and those the moderator found interesting (14).

This inclination, in the long run, can lead to the negligence of commonly encountered condition, which trainees must learn about during their general training.

On average, it has taken almost 20 minutes for every case, with 3 patients presented in total, similar to other hospitals (7, 12, 18). Likewise, we rarely bring patients to be examined in the MRs (9, 10, 11, 12, 13, 16).

Contrary to elsewhere in which the moderator is often one of the chief residents, our MRs are moderated by a member of faculty (2, 6, 9, 11, 18, 19).

According to our scheme instructions, consultants have to face audience when discussing patients whereas they used to be seated at the front row, with their backs to trainers. Other studies mentioned nothing in this regard.

None of our 25 sessions under observation were attended by specialists from other fields of medicine. Yet MRs following the training and feedback scheme were attended by radiologists, infectious disease specialists, cardiologists and clinical pharmacologists. Other studies were indicative of active participation by 70% of experts from other fields namely clinical pharmacology, nutrition, radiologist and medical ethics (4, 9).

As for the content, MRs in Imam Reza Hospital tend to emphasis history-taking, differential diagnostics and physical examination while topics including patients’ referral, health-associated funds and patients’ right were somewhat neglected. Other research reveals topics of interest including health management, medical ethics, evidence-based medicine (1), history-taking, physical exam, radiological and pathologic. Investigations, medical consultation, prognosis, patients’ care (6), iatrogenic conditions, admission criteria, clinical skills (16), initial assessment, differential diagnosis (7), pharmacological side-effects (19), physiopathology, lab orders, interpretation of lab results and other data, complications, causes of death (18), morale (1, 9), health-associated funds (4, 6, 18), mistreatment (9, 20), and disease trend or progression (7, 19).

While variables related to quantity and quality of MRs is significantly different among various departments, it is plausible applying similar methods may lead to discovery and improvements of the sessions. Tailor made action research are recommended for similar sessions.

It is advised that the following topics are included in the MRs, along with applying national and international standards defined and customized to boost both efficiency and efficacy.

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Conflict of Interest: The authors declare that they have no conflict of interests.

REFERENCES