



Constructing a Structured Medical Presentation

Ahmed Makki^{1*}

¹Department of Surgery, King Abdul-Aziz University, Saudi Arabia.

Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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Review Article

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ABSTRACT

Introduction: Giving presentation is an essential part in the medical practice. Physicians, in general are not expert in giving presentations, as it is not their daily practice. The weakness in conducting presentations comes from lack of the guidelines of making presentations and poor practice. Criticism is often directed to the facts emphasized in the presentations rather than the method of conduction. Therefore physician's skills in making presentations have to be improved. The objective of this article is to provide the physicians or medical students with guidelines on how to prepare and deliver a structured and effective presentation in the medical practice.

Discussion: The structure of making effective presentation is based on 3 pillars (3Ps) Plan, Preparation and Performance (delivery of presentations). Plan starts with selecting an interesting topic for the audience, then to plot down the ideas and objectives with pen and paper. Sketch a script with logical flow of ideas and suggest related images or illustrations. Preparation of presentation passes through 3 steps:- Extensive reading, selective writing /typing before making interesting slides, the latter needs attractive foreground and comfortable background. Performance means the delivery process of the prepared presentation. The speech looks like telling a story, it should have a clear introduction, provocative engaging context and a logical conclusion. The needed skills and the difficulties of conducting speech, in addition to some important tips of giving presentation are fully explained in this article.

Conclusion: Presentation of teaching or research material has an important role in the work of

health care professionals. The structure of medical presentation is based on three pillars: Plan, preparation and performance. Physicians should attain some skills in making effective presentation which are not sufficiently taught in the medical school.

Keywords: Presentation; plan; preparation; performance; making slides.

1. INTRODUCTION

Presentation of teaching material or research is an essential role in the work of health care professionals [1]. Physicians, in general are not expert in conducting presentations as it is not their daily practice. Conducting effective structured medical presentation is a chance to excel in the workplace, therefore, all efforts go mainly to the clinical practice rather than the research and educational works, even the medical trainees focus on the clinical training more than educational and research activities.

The weakness in conducting presentations comes from lack of knowledge about the technique of making presentations and practicing without guidelines. Copeland et al. [2] recommended to provide the medical lecturers with guidelines to improve the medical education courses.

Despite some authors consider lectures as poor method in the development of thinking due to the lack of students involvement, who remain passive recipient of information [3-5], therefore, others consider lectures, as popular form of teaching, especially when it is properly prepared according to the presentations guidelines [6-8]. The objectives of this article is to provide the physicians and medical students with guidelines on how to prepare and deliver a structured and effective presentation in the medical practice.

2. DISCUSSION

The paramount structure of presentation is based on three pillars:- Plan, Preparation and Performance.

2.1 Plan

Plan is a fundamental step in making presentation, initially, it needs to know who are the audience (medical students, health care professional, or public). The selected topic has to be of interest to the audience, relevant to their current practice. The most important feature of the effective presentation is the relevance of material to the audience [9].

Plan has a flexible framework that accommodates the various types of presentations in medicine, as educational lectures, congress lectures, presenting clinical findings, describing a case report or introduction of research project. The objectives of clinical research study should describe materials and methods, results and discussion of the research work, while objectives of the educational medical lecture include etiology, epidemiology, pathogenesis, clinical picture, tools of investigation and lines of management, that means objectives can be tailored according to the type of the conducted scientific material and the background of audience.

Outline the ideas and objectives with pen and pad, that gives a chance to step back from what have been written. Plot down the key points with logical flow and draw ideas for visual graphics which will appear later in the presentation [10]. That provides presentations with informative script and comprehensive illustrations. Title of presentations has to be descriptive and catchy. Ultra-short titles are not always ranked as good titles [11].

2.2 Preparation

The process of preparation of presentations has to go through three steps: Reading, writing /typing and making slides. Reading is the mainstay step of preparation, upon which the informative structure of the presentation can be determined. Effective reading provides presentation with a solid content [10]. Focused reading on the topic helps the presenter to grasp the scientific material well. It has to be extensive and up-to-date from various sources, e.g text books to build a foundational understanding, literatures for up-to-date elucidation of any key point. It is recommended to highlight or underline the selected appropriate information which will be used in the consecutive steps.

The key points and the assembled information can be plotted down on paper sheets or index cards, these cards facilitate classifying the information according to the objectives and allow adding more content to them. The assembled

information can be arranged according to the sequence order of the previously set objectives. This draft of the selected information should be prepared in a comprehensive style with striving for simplicity [10].

The hand written draft is typed according to the sequence order of objectives, using any typing media as Microsoft Word or using program resources as notes of Power Point. Font type and size must be properly chosen, with double spacing between words. Grammar has to be respected, as grammatical mistakes act as attention magnet.

Typing presentation before making slides has many advantages: Short phrases can be copied and pasted in the process of making slides, it also constitutes the hard copy of the presentation and finally, it can be distributed during the event as a handout, that gives the audience a chance to take notes simply by annotating the slides [11].

The slides can be carried out via different media as Microsoft Power Point or any other presentation media. MS PowerPoint helps to build the presentation in layers according to the order of objectives.

Each slide has a background and foreground elements. The slide's background has to be simple, with one color or a gradual color fade, therefore, picture or patterned screen are not suitable to be a slide background. Dark screen or background of the slide has advantages in reducing the brightness and is suitable for small group teaching class, while light (not bright) screen is usually advised in large class. However, it is still no consensus about the exact size of the large class [4]. The aim of selecting proper background is to create a comfortable viewing environment.

The slide foreground has two main components: text and visual graphics (images). Careful choice of the text font type and color is very essential. Font type in academic presentations is limited by some distant readable fonts e.g. Sans-Serif (Arial, Times New Roman, Calibri and Verdana). Other types of font as Serif or Script are advisable for literatures. The chosen font must be consistent throughout the whole presentation. Capital letters are used for the title, headings and at the beginning of sentence.

The overuse of capital letters is hard to read, less intuitive and also is perceived as shouting. Italic

font is confined to quotes or to highlight thoughts. Fancy font is not reliable in academic scientific presentations. The most advisable font size is the readable and clearly visible from distance. Proper selection of font type and size increases the impact of the presentation.

Appropriate contrast color combination between text and background is more favorable e.g dark text on light screen or vice versa. Adherence to the color schemes optimizes the visualization of text from distance. Scheme colors as purple, pink, yellow and brown colors are considered as less visible font colors [12,13].

The complementary part of the foreground is the visual elements (graphics) which promote active cognition, and can be used to pace the presentation, however, using them should be careful, in purpose and not extraneous. Pictures, charts, graphs, or tables are some varieties of the applied visual graphics. Spoken words with picture are better than with text only. Pie or bar charts are very efficient in describing data, the former can view the percentages or distribution of population sample, while the latter describes the changes of quantity over time or compares responses of different groups. Tables fit more written manuscript than presentations. Line graph should be simple and without its usual grid which usually confuse the image. Animation is preferred to be used sparingly and selectively, as in the slide transition, which has to be tedious and slow, while word animation may distract the audience [13].

The Final Shape of the Slide is to be large enough to be seen properly by the all audience, avoiding text to run off the slide and also with limited lines and few words in each line [1]. It should have short phrases organized in points or other symbols to present the key ideas, the examples of these symbols are filled or open circles, filled squares or hyphens. Slides have to be enriched with visual graphics that enhance the learning process and give examples of the important points, but chart junk or crowded chart is not a good tool for illustration.

2.3 Performance

Performance means the delivery process of the previously prepared presentation. This phase should start before the event by rehearsal, which means practice before delivery of presentation. It is an opportunity to test pronunciation and

animation, it also gives a chance to learn how to move between slides and to pace the speech to the allotted time.

Appearance with appropriate dressing according to the occasion is only needed for the lecturer [14], who is supposed to arrive early to the venue, that early arrival helps him to get familiar to the room setup and to reduce nervousness. It also keeps adherence to the allotted time without crossing the time limit.

All necessary tools should be brought to the venue with the presenter, e.g. lap top, back-up drive, power cable, extension cord and adaptor to avoid any connection faults. Hard copy of the script has to be available. Manual or laser pointer is only used to refer to a point, the speaker must be familiar with the laser device use, with attention to avoid the random movement of its light [13].

Speaker has to attain an upright position, facing audience not the screen without hiding behind the podium [14]. Normal voice, appropriate gesture and facial expressions reflect the professional attitude of the speaker. Speaking slowly and clearly, in conversational tone rather than monotone voice is an essential rule in the delivery of presentation [13]. Gelula in his article also focused on the aspects of voice clarity and speaking speed as keys for effective lecturing [15]. Reading the whole text is boring and not a good practice. Short phrases in points with verbal explanation of each point per one slide give the audience a chance to follow [13]. Pause at key points with giving enough time for each slide are considered as professional conduction of presentation [14].

Van Dockum stated in his study that; the two basic elements of presentation are to be scientific and entertaining at the same time [12], and also according to Gagne's conditions of learning, it is first necessary to motivate and gain attention of the audience in order for learning process to take place [16]. Novelty and humor were suggested by Gigliotti for developing an effective slide presentation [17]. Naftulin et al. [18] also referred in their study to the importance of entertainment in the effectiveness of lectures. Anecdotes play this role effectively in presentations by incorporating a short story or personal experience in the medical practice. Anecdotes may also come in the form of cultural material as relevant quotes, history, arts or general knowledge. They act as effective illustration of a point and engage the audience

[11]. They also attract attention and add fun around. The amusing anecdotes have to be appropriate, not annoying and used in moderation.

The speech looks like telling story, it has to have clear introduction, provocative engaging context and logical conclusion. Speaking professionally with enthusiasm and showing interest in the topic are highly appreciated criteria in conducting presentation [13]. Introduction is the vital component of presentation as it sets a platform for the context material to the audience [3]. The speaker should explain the title and display the objectives. Context provides presentation with details and examples, it is advised to be divided into small sections with logical flow according to the previously set objectives. It has to be presented in unbiased fashion without showing favoritism [13]. Conclusion of presentation follows naturally after the context in few clear statements to give a brief summary of the whole work to remind the attendees with the main key points of the presentation [3]. It also helps to taper the end of the presentation to avoid finishing abruptly.

The main difficulties in this process are anxiety and the audience attention. Nervousness is normal during presentation, the speaker has to adhere to the professional guidelines of conducting presentation, as good preparation and several rehearsals to eliminate that tension. Early arrival to the venue, smiling and taking a deep breath during speech offer a good help in melting this natural nervousness.

Audience attention is usually limited, that needs a great effort to be exerted by the lecturer during preparation to explain each point clearly. Varying the pace of the presentation and incorporating anecdotes, in addition to asking questions and engage the audience into a discussion, all these measures help to keep them more attentive.

This experience needs training on the teaching skills through customized educational courses and continuous practice [19]. Wall D et al. [20] in his study emphasized the importance of practice on the teaching skills. All these studies concluded the great value of learning and exercising the guidelines to construct an effective presentation in the medical field.

3. CONCLUSION

Presentation is not just a mere transfer of information. Giving presentation is an essential

part of the physician's practice, who should learn the technical steps of constructing an effective medical presentation which include plan, preparation and performance. Physicians should attain some skills in making effective presentation according to guidelines, which are not sufficiently taught in the medical school.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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