Introduction
As mentioned in the foreword to this edition, over the last year, a number of poor papers have been submitted to the journal. Papers submitted to the journal are now reviewed using one of four checklists, which are designed to evaluate papers that report either a research study or a review of the literature or a systematic review or a case report. Instructions to authors and all four checklists can be downloaded from the journal’s website (www.oral-health.ro). However, it has been apparent that a number of authors either do not read the guidelines and checklists before submitting their paper or read them but forget or ignore their contents.

It may help potential authors to see how a check-list for papers reporting research studies is used by a reviewer and to read an anonymised review of a poor paper. It is hoped that this will help prevent them from making similar mistakes.

Scenario
The paper presented below was submitted to Oral Health and Dental Management in the Black Sea Countries (OHDMBSC) earlier this year. Although it is deals with an interesting and useful topic, it had a number of major faults, many of which have been highlighted by its reviewer. The names of the authors have been changed, as have the details of the country in which the study was performed. As far as can be ascertained, the names and affiliations of authors as they appear below are completely fictitious. The reviewer used the research study checklist.

The different sections of the paper are presented, together with the relevant sections of the reviewer’s report.

Title Page and Abstract as They Appeared in the Paper
ORAL MANIFESTATIONS OF GASTROINTESTINAL DISEASES: AN INTERDISCIPLINARY APPROACH

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Abstract
Aim. The present paper offers a review of the oral manifestations of various gastrointestinal (GI) diseases diagnosed in patients admitted in our department. The review includes peptic ulcer disease, chronic gastritis, gastric cancer, chronic hepatic diseases, gallbladder and biliary diseases, and chronic pancreatitis.

Material and method. We performed a retrospective review of medical records of 430 patients diagnosed with GI diseases in Internal Medicine Department, between 2004 and 2007. Of these, 182 patients (42.32%) also presented oral cavity disorders.

Results and discussions. Main GI diseases associated with lesions of the oral cavity were peptic ulcer disease (20.87%), liver cirrhosis (17.58%), chronic viral hepatitis (15.38%), and chronic gastritis (14.28%) (P < 0.0001).

Conclusions. It is not uncommon for a variety of systemic conditions to be associated with lesions of
Many systemic diseases have oral manifestations. The oral cavity might well be thought of as the window to the body because oral manifestations accompany many systemic diseases [1]. This is particularly true of gastrointestinal diseases. The lesions usually correlate with active intestinal disease. On occasion, however, they may present prior to any evidence of gastrointestinal disease and initiate diagnosis and treatment of the underlying disease process [2].
The structures and lining of the oral cavity can assume importance in detecting and monitoring systemic disease. Essentially, they act as an accessible mirror reflecting the health of an individual. Often they show early changes brought on by an alteration in the nutritional state of the body. Changes may include ulceration, nodularity, atrophy, inflammation, mobility of the teeth, easy bruising, swelling, hyperesthesia, and fibrosis. Recognition of such changes can be most helpful in identification of related disorders [3].

The lesions of the oral mucosa, tongue, lip, osteodental structure, and salivary glands, caused by some of the GI diseases commonly diagnosed in our department are highlighted. These lesions may cause severe discomfort to the patient. In some cases, they even cause extreme destruction to the teeth and periodontium, which results in premature loss of teeth. It is, therefore, important that the oral manifestations be recognized and managed appropriately [1].

Aim as it Appeared in the Paper
The aim of the present study is to evaluate the incidence of the oral manifestations of various gastrointestinal (GI) diseases diagnosed in patients admitted in our department, with suggestions on how they may be relevant to the current medical practice. The review includes chronic gastritis, peptic ulcer, gastric cancer, chronic hepatic diseases, gallbladder and biliary diseases, and chronic pancreatitis.

Reviewer’s comments on the introduction and aim as recorded on the check-list
13. Is the introduction appropriate to the paper’s subject? It is far too short and does not attempt to review previous studies of oral manifestations of gastrointestinal diseases. It is apparent that the authors did not perform a thorough literature search before commencing their study.
14. Is the literature that has been reviewed, relevant and is it comprehensive? No, only three references are cited and one of them is to a paper published 28 years ago.
15. From the introduction does the study seem original in concept? No, but it is on an important topic and the study may be original in Urraria.
16. Do the aims of the study follow logically from the literature review and are they clearly stated? Yes, within the limitations of a very inadequate literature review.
17. If appropriate, is a null hypothesis stated. Not applicable,

Material and Method as They Appeared in the Paper
We performed a retrospective review of medical records of 430 patients diagnosed with GI diseases in Internal Medicine Department, between 2004 and 2007. Of these, 182 patients (42.32%) also presented oral cavity disorders. Statistical analysis of data was done using GraphPad InStat software.

Reviewer’s comments on the methods section as recorded on the check-list
18. Is the design of the study consistent with its aims? No. This is the second major error in the paper. The methods are hardly described at all. Hence it is impossible to know the design of the study. It would be impossible for another group to repeat the study using the same methodology. It is necessary to include a list of all the data that were extracted from each patient record. It is also necessary to explain who carried out this task. If it was performed by more than one person, how did they calibrate? Was the list checked (piloted) before it was used? Were all the records complete enough to assess the presence or absence of oral disease, plus many other features that should have been explained?
19. If applicable, was a pilot study performed to test the methodology? No. It should have been.
20. Is the sample representative of the population in question? It is impossible to tell from the information given. Were all the patients with gastrointestinal diseases who attended the hospital included in the study, or just those whose records were available?
21. Are controls needed and used in the study? Not needed.
22. If controls are used, are they appropriate? Not applicable.
23. Is the method of selecting the sample/cases and controls clearly described? No, see question 20.
24. Are other details such as numbers, time periods, statistical tests used clearly described and consistent? No, there is insufficient detail. Which statistical tests were used to test which data?
25. If relevant, have examiners been trained and calibrated? No details are given. Those who
assessed the patients’ notes should have been trained and calibrated.

26. Are details of such training and calibration given? No and they should have been.

27. If questionnaires and pro forma have been used, have they been tested, are they relevant to the study and are they presented either as figures in the paper or via a link to a website? These points have not been covered in the methods section of the paper. They must be and the data collection sheet that was used when the patient records were assessed should be included in the paper as a Figure.

28. Could there be ethical objections to the study? Probably not as long as none of the patients can be identified.

29. Does the paper include a clear statement on whether or not ethical approval was sought and if so, who from? No.

30. If ethical approval was not sought, is there a clear explanation why? No explanation is given. It should be.

31. If applicable, has patient/parental consent been sought? Probably not applicable in Uraria.

Results and Discussion as They Appeared in the Paper

A number of 430 patients were diagnosed with GI diseases in our department between 2004 and 2007. Of these, 182 patients (42.32%) also presented oral cavity disorders. Mean age at presentation was 46.53 ± 3.4 years (range 22-76) (Table 1).

As we can see GI diseases associated with oral lesions were diagnosed most frequently in the 33-43 and 44-54 age groups (P < 0.0001).

From the 182 patients studied, 109 were men, and 73 women (Fig. 1). As a result, GI diseases associated with oral lesions were much more frequent in males, comparing with females (P=0.0002).

The most frequent GI diseases diagnosed in our department, associated with oral manifestations were: peptic ulcer disease (n=38, 20.87%), chronic gastritis (n=26, 14.28%), gastric cancer (n=6, 3.29%), chronic viral (HBV, HCV) hepatitis (n=28; 15.38%), alcoholic liver disease (n=15; 8.24%), liver cirrhosis (n=32, 17.58%), biliary lithiasis (n=16, 8.79%), chronic pancreatitis (n=18, 9.89%), and Crohn’s disease (n=3, 1.64%) (Fig. 2).

As we can notice the most frequent GI diseases associated with oral lesions were peptic ulcer disease, liver cirrhosis, chronic viral hepatitis, and chronic gastritis (P < 0.0001).

The most frequent oral manifestations associated with GI diseases diagnosed in our study were: lingual mucosa disorders (n=61, 32.44%), oral mucosa disorders (n=40, 21.27%), dental disorders (n=73, 38.82%), and lip disorders (n=14, 7.45%) (Fig. 3).

Table 1: Patients distribution according to GI disease and age group

<table>
<thead>
<tr>
<th>GI Disease/Age Group</th>
<th>22-32</th>
<th>33-43</th>
<th>44-54</th>
<th>55-65</th>
<th>66-76</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic gastritis</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Peptic ulcer disease</td>
<td>3</td>
<td>16</td>
<td>12</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Gastric cancer</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Chronic viral hepatitis</td>
<td>1</td>
<td>9</td>
<td>13</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Alcoholic liver disease</td>
<td>-</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Liver cirrhosis</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Biliary lithiasis</td>
<td>-</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Chronic pancreatitis</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Crohn’s disease</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>48</td>
<td>68</td>
<td>36</td>
<td>18</td>
</tr>
</tbody>
</table>
Reviewer’s comments on the results as recorded on the check-list

32. Are the results and any statistical tests presented in a clear and unambiguous manner (tables, figures, graphs, etc)? The title of Table 1 is incomplete: it should be ‘Distribution of patients with oral manifestations of gastrointestinal disease by age and type of disease’. A final column, headed ‘Totals’, should be added to the right of the table. Although statistical testing was mentioned in the methods section and p-values are given in the results section, there is no indication of which statistical tests were used to calculate these p-values. It is unnecessary to provide a pie chart for the gender distribution of the patients who had oral manifestations of gastrointestinal diseases and the pie chart (Figure 1) is inadequately titled because it does not specify whether the pie chart refers to all patients whose records were assessed or only to those with oral manifestations of gastrointestinal diseases.

33. Are there any missing data and if so are they accounted for e.g., drop-outs, non-responders, etc? No, there is no mention of incomplete patient records that would have led to the equivalent of ‘drop outs’ and an incomplete data set.

34. Are the numbers, percentages, statistical values accurate and clear? Yes: it is good to see that both raw data (numbers) and percentages are reported in the results section.

35. If statistical tests have been used, are they appropriate? Without knowing exactly which statistical tests were used, it is impossible to answer this question.

36. If statistical tests have not been used, can this be justified? Not applicable.

37. Is the sample too small to justify the findings? Probably not.

38. Although they may be statistically significant, are the findings clinically significant? Probably yes.

39. Are the results believable? Yes

Discussion Section

There was no separate heading ‘Discussion’ in the paper. However, the following section of the paper, which mixed results and discussion, was reviewed as though it was a separate discussion.

Glossitis refers to inflammation involving the tongue. The general pattern is one of papillary hypertrophy leading to flattening, then fusion, and finally atrophy of the papilla. If papillae become swollen, flattened, and mushroom shaped, the surface of the tongue will appear granular. The tongue may become sore, and if engorged, it will turn various shades of red until atrophy sets in with a shiny, smooth and often pale appearance [3]. Lingual mucosa disorders were the following:

– saburral lingual mucosa, as a result of keratinization, inadequate exfoliation of the upper layer of mucosa, and filiform papillae hypertrophy, occurred in 10 patients with chronic gastritis, 16 patients with liver cirrhosis, and 12 patients with biliary lithiasis;
– hyperemic lingual mucosa, with lingual papillae atrophy, thin and shiny mucosa, burning sensation, white or white-blue spots (leucoplakia), occurred in 8 patients with liver cirrhosis and 5 patients with chronic viral hepatitis;
– red lingual mucosa, with atrophied papillae (‘hairy tongue’), was present in 6 patients with chronic pancreatitis;
– dry lingual mucosa, with longitudinal grooves (‘grooved tongue’) was present in 4 patients with gastric cancer.
Gingivitis, or inflammation of the gingival membrane, begins as a break in the epithelium followed by decreased vascularity and nonreplacement of covering cells leading to necrosis. If untreated, gingivitis causes destruction of the periodontal ligament and bone. Eventually these become replaced by chronic inflammatory tissue. If unchecked, gingivitis can result in a painless progressive loosening and loss of teeth [3]. Oral mucosa alterations were the following:

– of inflammatory type (catarrhal gingivitis) were present in 14 patients with peptic ulcer disease; depending on the disease’s onset, various degrees of dental alveoli lesions were present, from alveolar margins atrophy to alveolar ridges atrophy, in 4 cases of ulcers older than 10 years;
– gingival haemorrhages were present in 16 patients with liver cirrhosis, caused by coagulation and capillary permeability disorders [6], and in 6 patients with chronic pancreatitis; in these latter cases, gingival swelling also occurred.

Dental alterations were the following:
– missing teeth in 14 patients with chronic gastritis;
– simple and complex cavities were observed in 18 patients with peptic ulcer disease, as well as apical infections in the lower and upper last molars, chronic marginal periodontitis of superficial or profound tissue, and dental mobility;
– dental plaque and caries, partial or total edentation, hypertrophy of interdental papillae, and dental mobility in 12 patients with liver cirrhosis and 9 patients with chronic viral hepatitis;
– alveolitic processes, complex cavities, and alveolar pyorrea (periodontal disease) in 10 patients with liver cirrhosis;
– marginal or profound periodontal disease was present in 8 patients with liver cirrhosis, and in 2 patients with biliary lithiasis.

Cheilitis, or inflammation of the lips is a common mode of expression for acquired nutrient deficiencies and hydroelectrolytic disorders caused by the disease [3-5]. It manifests itself by vertical fissuring. As a result of superficial denudation, redness develops along the line of closure. Constant irritation to the angles of the mouth causes them to bleed and become encrusted. Repeated episodes cause deepening and scarring with the possibility of secondary infection. Initially pale, the angles of the mouth can macerate due to infection and form yellow encrusted fissures. Early therapy employs either topical antibacterial or antifungal preparations. Specific therapy can be initiated only after the underlying cause is determined. Lesions characteristic of certain types of nutritional deficiency tend to be general rather than localized. Some may involve atrophy of part or the entire oral cavity. As a result of atrophy, erythema develops which reflects the rich underlying mucosal bed. Inflammation can lead to pain, bleeding, ulceration, atrophy, or fibrosis. The latter may terminate in decreased mobility of lips, tongue, and cheek [3]. Lip modifications in the surveyed patients’ lot were as follows:
– color alterations – carmine lips because of local trophic modifications, capillary vasodilatation, and arterial ectasia, were observed in 6 cases of liver cirrhosis and in 2 patients with biliary lithiasis;
– grooves on lip margins and at commissures (cheilitis) were observed in 6 cases of liver cirrhosis.

Other oral manifestations less frequently associated with GI diseases were (Fig. 4):
– taste alterations in 6 cases (3.29%);
– salivary secretion disorders in 6 cases (3.29%);
– bad breath odor in 11 cases (6.04%).

![Fig. 4: Less frequent oral manifestations associated with GI diseases](image)

The predominantly morning bitter-taste sensation was observed in 4 patients with biliary lithiasis and 2 patients with *Helicobacter pylori* positive chronic gastritis. Salivary secretion was increased in 2 chronic gastritis cases and in 2 cases with duodenal ulcer. The quality of saliva was altered in patients using antacids of alkaline neutralizing type; in these cases, salivary pH turned to alkaline levels and helped forming dental plaque, dental caries, and even salivary calculi, while also slowing the enamel and dentine mineralizing process. Salivary secretion decreased (xerostomia) in 2 cases of gastric neoplasm, which created an uncomfortable oral sensation during mastication and speech. Bad breath odor, which became unpleasant because of insufficient salivary secretion, self-cleaning of the tongue, and dental caries, were observed in 10 cases of liver cirrhosis and 1 case of gastric neoplasm.

Oral manifestations of GI disease may be useful in current medical practice in the development of a differential diagnosis for patients with GI com-
plaints, and oral tissues may offer an easy biopsy site to diagnose conditions such as Crohn's disease. In other circumstances the severity and prognosis of the disease can be monitored by the presence or extent of oral manifestations, and the success of the management of GI diseases may be reflected in the response of oral tissues [7]. It is essential to instruct both dentists and internal medicine specialists or gastroenterologists to diagnose and treat oral disorders in patients with digestive pathology because these diseases have a high frequency and because doctors, regardless of their specialty, are responsible for their patients' health. As a result of the interdisciplinary approach, we developed a protocol for check-up and follow-up of these patients which includes:

- **oral inspection** including lips, especially oral commissures, fixed and mobile oral mucosa, palatine velum and oropharyngeal area, tongue, front and sides of salivary glands, salivary fluid and, finally, teeth;
- **patient instruction** includes daily tooth-brushing, including flossing, as well as recommendation for urgent medical check-up in case of oral pain, xerostomia, gum bleeding, dysphagia, taste disorders, and teeth mobility. Patients are also advised to avoid smoking and drinking alcohol.
- **specific diagnosis and treatment** of oral lesions: simple or complex dental cavities, gingivitis, periodontal disease, aphthous ulcers, and xerostomia.

**Reviewer's comments on the discussion as recorded on the check-list**

40. **Does the discussion critique and discuss the methodology used?** No: it should but first the paper has to explain (in the methods section) exactly what methodology was used. It should then critique it, explaining its strong points and weaknesses. In this context, one common weakness when surveying patient notes is that they are frequently incomplete and that the different clinicians who write them may describe presenting symptoms, treatment, etc in different ways.

41. **Does the discussion comprehensively discuss the results?** The discussion of patients' oral disease is covered far better than most other aspects of the paper.

42. **Are the results discussed in relation to other important literature on the topic area of the study?** Hardly at all: only four publications are referred to and one of these is a textbook. This lack of comparison with previous studies underlines the paucity of the literature review.

43. **Does the discussion extend beyond the methods and results of the study?** No

It is good to see that the outcome of this poorly planned study has been the development of a protocol for routine checking for oral problems in patients with gastrointestinal disease. This protocol (check-list) that has been developed should be added to the paper as a Figure.

**Conclusions as They Appeared in the Paper**

It is not uncommon for a variety of systemic conditions to be associated with lesions of the oral cavity. This is particularly true of GI diseases. In many cases, oral disorders are the first clinical manifestation form of digestive disease. These oral disorders are characterized by taste and salivary secretion alterations, modifications of oral, lingual, and lip mucosa, as well as alterations of the osteodental structure [8], and the primary care physician and dentist must be familiar with these problems if the patient is to receive appropriate diagnosis and referral for treatment. Following interdisciplinary research, a protocol of examination and follow-up of these patients has been suggested; this includes oral cavity examination, patient instruction, and specific treatment of oral lesions.

**Reviewer’s comments on the conclusions as recorded on the check-list**

44. **Do the conclusions accurately reflect the results of the study?** They do not appear to report the results of the study. However, they do summarise important principles and reinforce the point that a protocol was developed.

45. **Are the conclusions clear set out?** It would be better if they were presented as bullet points. It is unusual to cite a reference in conclusions.

**Acknowledgements Section**

There were no acknowledgements at the end of the paper. However, the check-list has three questions on this aspect and they appear below.

**Reviewer’s comments on the acknowledgements as recorded on the check-list**

46. **Is any source of funding identified?** No, it may have been that the study was carried out as part of the authors’ day-to-day work in the hospital concerned, in which case they could add an acknowledgement and thanks to colleagues at the ………… hospital for their help and to its Director for authorising the study.
47. Is there a statement of conflict of interest? No, there may well have been no conflict of interest but a statement should be added.

48. Is there a statement of exactly how each author contributed to the paper? No. However, as the one of the themes of the paper is interdisciplinary working, one should be added.

References as They Appeared in the Paper

Reviewer’s comments on the references as recorded on the check-list
49. Are the references accurate, up to date and relevant? As mentioned earlier, two have not been translated into English and reference 2 is incomplete as it does not give the edition and page numbers of the journal concerned. It would have been better to quote a recent paper for reference 5 rather than a textbook published 19 years ago. The lack of references reflects the lack of a full literature review before writing the paper and before performing the study.

Reviewer’s Recommendations
At the end of the review, the reviewer made the following recommendations to the Editor in Chief:

The topic of this paper is important and the outcome (the development of a protocol for hospital doctors to use when assessing patients with gastrointestinal disease) is very useful. It is therefore unfortunate that the study design for the retrospective study was so poor. This failing and the lack of a thorough literature review have led to a poor paper that cannot be accepted for publication in an international peer-reviewed journal.

It is suggested that the authors, perform a thorough literature review and then write a review paper on the topic of oral manifestations of gastrointestinal disease at the end of which they can present the protocol that they have developed. However, they should make it clear that it is a review paper and not include any details of the retrospective study in this review.

It is also suggested that unless they can address all the failings of their retrospective study, which seems unlikely, they do not seek to report it in a peer-reviewed journal.

The reviewer’s overall recommendation to the editor is that for all the reasons set out above the paper is not accepted for publication in Oral Health and Dental Management in the Black Sea Countries.

Editorial Overview
The Editor agreed with all the reviewer’s comments. The check-list was sent to the authors with a covering e-mail that encouraged them to perform thorough literature reviews before embarking on future research projects and to send their research protocol, which detailed the methodology that they intended to use, for external review before they started a project. The Editor also explained that although some gastrointestinal diseases might be seen in the mouth by specific changes in the oral mucosa (e.g., cobble-stoning of the oral mucosa as a manifestation of Crohn’s disease) rampant dental caries or rapidly progressing periodontal breakdown were not necessarily a consequence of gastrointestinal disease and could have been present independently of the gastrointestinal disease.

Final Comments
It is hoped that this paper gives readers (and authors) a better understanding of the way in which papers that are submitted to OHDMBSC are reviewed, the need to read and follow the guidelines for authors, to self-review their papers using the OHDMBSC check-lists before submitting their papers, and to be aware of the standards that they need to achieve if they wish to publish in international peer-reviewed journals.

The Editor in Chief of OHDMBSC is very happy to discuss drafts of papers with authors BEFORE they are submitted, ideally either in person or by telephone.