

Peer Review File

Article information: <https://dx.doi.org/10.21037/jtd-21-1139>.

Reviewer A:

I read the article regarding the current state of thoracic surgery in Palestine with interest. The authors are to be commended for summarising the contemporary situation and also for introducing a uniportal VATS service despite many difficulties in the region. The paper outlines the progression from open to minimally invasive surgery, carefully describes the healthcare system and outlines its strengths and weaknesses as well as presenting aspirations for the future. I have a few points which I believe need addressing:

Comment 1. Considering that you state that the lack of primary care means that diagnosis is difficult, it seems difficult to accept your later quoted figure that 60-90% of all patients presenting with lung cancer are operable (lines 139-140). This needs to be clarified as to what you mean as operable: in the UK less than 20% of patients with primary lung cancer undergo surgery with curative intent, due to either an inability to fully resect the tumour, or patients not being physiologically robust enough to undergo surgery.

Reply 1. We meant by "60% to 90% of lung cancer patients are operable", patients referred to thoracic surgery departments or clinics, which does not include patients referred to pulmonologists or oncologists. Where the patient is likely to come sometimes late due to bureaucratic transactions or delays. Issuance of a pass for him through the checkpoints. As you know, delaying a cancer patient from surgical treatment may cause worsening of the tumor stage and making it non-surgical. We will clarify that in the text.

Comment 2. More information about proctoring and the logistics of implementing the VATS service after Dr Abu Akar returned from overseas is needed. How were the nurses and theatre staff trained? How was the equipment sourced? Did Dr Abu Akar travel to each hospital to train each surgeon individually? How long did it take for the country to reach its current rate of uniportal VATS surgery

Reply 2. During Dr. Abu Akar stay in Shanghai pulmonary hospital for a fellowship in Uniportal VATS, a team consisting of an anaesthesiologist and two nurses was sent to Shanghai for two weeks to get an idea of how to perform these operations and how to introduce these new technologies to Palestine in a sound and correct manner. In the beginning, the hospital purchased some essential equipment to perform the Uniportal VATS operations and then gradually added the rest of the equipment.

Dr. Abu Akar visits the Gaza Strip periodically and continuously every two or three months after obtaining special permission to enter the strip to perform operations and train teams on these new techniques and organise several conferences and workshops where he hosted surgeons from Palestine and Israel to learn these surgeries.

Comment 3. The paper would benefit from some additional editing to improve overall syntax and cohesion.

Reply 3. We will work on checking and modifying the Syntax of the manuscript.

Reviewer B:

It was a privilege to review this manuscript on the state of thoracic surgery in “Palestine”. While the reader may be familiar with the political changes and conflict, most readers will know very little about the delivery of health care in the area controlled by the Palestinian authority. For this paper, the generic term of “Palestine” lacks specificity. It is impossible to ignore the political from the medical aspects.

In their revision, I would ask the authors to expand and educate the reader:

Comment 1. What is the Palestinian authority? How does it control health care? What is the nature of the interaction with the state of Israel?

Reply 1. Through the text, we tried to stay away "as much as possible" from any political terminology or insinuations, as the main focus was on thoracic surgery and how to develop it in this developing country by highlighting the obstacles and challenges. We do not think adding a definition to the Palestinian Authority would add much to this article from a medical point of view. Still, we will do so according to the reviewer's directions.

Comment 2. Does a non-Israeli individual in the west bank or Gaza or East Jerusalem have access to Israeli medical facilities?

Reply 2. All West Bank and Gaza Strip residents are non-Israelis and hold Palestinian citizenship, while most Palestinians of East Jerusalem have Israeli residency and a "Jordanian" passport! However, explaining this may require a long and separate article. The Israeli health system may treat Palestinians if this is at the patient's own expense. In rare cases, the Palestinian authorities cover treatment costs in Israeli hospitals if the service is not available in Palestinian hospitals. We will add this information to the article.

Comment 3. In comparison to Israel, what is the population of the area controlled by the Palestinian authority? How many thoracic surgery programs/surgeons does Israel have in comparison?

Reply 3. The population of Palestine is five million Palestinians, according to the latest census in 2020 (this was mentioned in the text). In comparison, there are about 100 thoracic surgeons in Israel registered in Israeli medical association (including residents who are still under training)

Comment 4. The only data presented in the paper are of 6 centers doing 1000 procedures. I have no basis to understand if this is too small or very large relative to the population.

Reply 4. The population of Palestine is five million Palestinians, according to the latest census in 2020 (this was mentioned in the text). 2 millions in Gaza Strip and 3 millions in the West Bank and East Jerusalem.

Comment 5. Need to add a map defining the geography.

Reply 5. We are to totally agree with the reviewer and a detailed map will be added.

Comment 6. The authors note a lack of primary care access. Please describe what a typical person does for health care. Also, how is this different for a Palestinian living within the geographic borders of Israel (under direct Israeli control). My understanding is that 20% of the voting eligible population of Israel identify themselves as Palestinian. What is health care like for this segment of the population?

Reply 6. Most Palestinian people living in districts under the control of Israel are holding either full Israeli nationality or an Israeli residency “as in East Jerusalem.” This group of people can benefit from the Israeli health system.

Comment 7. This is a challenging paper to review as it is impossible to differentiate the geopolitical from the medical. The title alone is confusing as there is no “Palestine” on any modern political map. The authors are describing a narrow area of geography.

Reply 7. We agree with the reviewer about the difficulties and the challenges.

Comment 8. I applaud Dr. Abu Akar for taking on Uniportal surgery and sharing his knowledge. A more detailed description of the barriers to implementation would be helpful. Who are the other surgeons? Where did they get their training?

Reply 8. We may add names and the references of the other surgeons in acknowledging the paper if they agree.

Comment 9. The manuscript needs far more data to comprehensively understand the true nature of thoracic surgery and the type of work the thoracic surgeon will need to perform.

Reply 9. We will do our best to improve the data making it more comprehensive.

Reviewer C:

Comment: I think this is a wonderful initiative.

The English should be refined a bit more.

Reply. Thank you very much, we will work on improving the language.

Reviewer D:

Comment: A very interesting account of thoracic surgery in a developing country. Of particular interest is the challenges faced due to the political situation which contributes to poorer outcomes due to imposed delays and movement restrictions.

Reply: Thank you for your comment, we will do our best to improve more and more.

Reviewer E:

Comment: I would like to congratulate the authors for writing this article and mostly for contributing to the introduction and development of minimally invasive thoracic surgery in Palestine. But unfortunately, in my humble opinion, I don't think this article is fit to be published in this Journal. This is due the fact that there is insufficient scientific data to detail impact of VATS surgery on Thoracic Surgery in Palestine since it's introduction. The authors do not detail where the numbers shared come from: it would have been helpful to do a Methods section. Moreover, it would be interesting to know what type of surgeries are performed in VATS over the years with results presented in a Table.

Reply: Thank you for your comment, the numbers of patients were counted based on information obtained from the surgeons themselves and the statistics of their departments, and this was counted in an excel table and then transcribed into the text. We will explain it in revision.