



November 3, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 14179-review.doc).

Title: Economic and medical benefits of ultrasound screenings for gallstone disease

Author: Hung-Ju Shen, Chung-Te Hsu, Tao-Hsin Tung

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 14179

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

Reply to Referee 02664504

(1)The Authors can clarify if the patients were accompanied everytime by an Attendant. If yes, then cost and wages lost of the Attendant has to also be taken into consideration. Or else the authors can state that Attendant was not required.

Ans. Thanks for the reviewer's useful comments. The descriptions have been corrected. Please see page 7.

(2)All Short forms to be expanded as footer below each Table

Ans. Thanks for the reviewer's useful comments. The descriptions have been corrected. Please see table 2.

(3)For the Readers Authors can explain what the signs mean in Decision tree in a small inlet box. Also the meaning of A and B. This would help the non-management audience.

Ans. Thanks for the reviewer's useful comments. The descriptions have been corrected. Please see page 6-7.

Reply to Referee 02844817

(1)Minor language corrections.

Ans. We apologize for the bad English grammar. The manuscript has been revised and corrected by an English editor. Problems with the English usage should be improved.

(2)Laparoscopic cholecystectomy isn't performed for routine for stone/s(only polyp > 1 cm). You are confused about cholecystectomy (you recommend only in cases with multiple stones): exist cholecystitis who required cholecystectomy with one stone or no stone.

Ans. Thanks for the reviewer's useful comments. The limitations have been described. Please see page 12.

(3)The methods are too long and the results: see your table 1,2, 3. In my opinion the results should be more detailed.

Ans. Thanks for the reviewer's useful comments. For the readers, we explain what the scenario mean in

Decision tree. This would help the non-management audience for the detail descriptions. The descriptions from table 1 to table 3 have been corrected. Please see page 8-10.

Reply to Referee 00761276

This manuscript by Shen et al purports to show that there are economic and medical benefits from ultrasound screening for gallstones. Using a Markov Decision model they calculated QALY gained by different screening regimens. They said their previous study showed that: 'screening for GSD reduced the necessity of cholecystectomies'. I do not understand how screening for gallstones can reduce the necessity for cholecystectomy. The WJGNET kindly provided me with a copy of this paper from Asia Life Sciences 2013, which provided interesting data for the rate of development of gallstones and their transition from single stones to multiple stones to cholecystectomy. The authors then made the strange statement that 'screening..... have the effect of reducing cholecystectomy' then concluded, without providing any evidence or reasons, that 'screening for GSD is worthwhile and annual screening should be recommended'. In the present manuscript the authors calculated a 'series of utility scores' by asking an unknown number of 'participants' how much of their life they are willing to sacrifice to restore their health status to perfect health. The present health status of these patients is not described. Since most gallstones are asymptomatic, I would imagine most of the patients are already in perfect health. They came up with a table listing the 'cost per life-year gained' even though I do not see how screening for gallstones can possibly result in any gain in lifespan. It is unclear how these numbers are worked out. Screening for a disease is only worthwhile, as the authors mention in their introduction, 'If the early treatment of GSD was known to reduce the incidence of the disease or slow its progression and reduce the need for cholecystectomy,' but unfortunately this is not the case. There is no known way of slowing the progression of gallstone disease or reducing the need for cholecystectomy. Perhaps the authors feel that cholecystectomy in asymptomatic gallstones is beneficial compared to cholecystectomy in complicated gallstone disease. This may be so in an individual case but has certainly not been proven and many unnecessary cholecystectomies would have to be undertaken. I am afraid this manuscript does not make any sense.

Ans. Thanks for the reviewer's useful comments. From the academic research viewpoint, although our study population was just in the small area in the world, the results still also reflected the comparable information to other international findings. In the past ten years, the author also published valuable papers from the study population at Cheng-Hsin General Hospital.

Chen JY, Hsu CT, Liu JH, **Tung TH**. Clinical predictors of incident gallstone disease in a Chinese population in Taipei, Taiwan. **BMC Gastroenterol**. 2014;14:83. **(corresponding author)** [SCI] (IF=2.113, *Category: GASTROENTEROLOGY & HEPATOLOGY, Ranking: 44/74*)

Hsu CT, Liao Y, Liu JH, **Tung TH**. The clinical investigation of disparity of utility values associated with gallstone disease: A pilot study. **Gastroenterol Res Pract** 2013; Article ID 216957 **(corresponding author)** [SCI] (IF=1.502, *Category: GASTROENTEROLOGY & HEPATOLOGY, Ranking: 61/74*)

Hsu CT, Lien SY, Jiang YD, Liu JH, Shih HC, **Tung TH**. Screening gallstone disease by ultrasound decreases the necessity of cholecystectomy. **ASIA LIFE SCI** 2013;22:51-60. **(corresponding author)** [SCI] (IF=0.180, *Category: BIOLOGY, Ranking: 81/83*)

Chen JY, Tsai ST, Hsu CT, Liu JH, **Tung TH**. Cost-benefit analysis of screening for gallstone disease among Chinese population in Taiwan. **The Open Access Journal of Science and Technology** 2013;1: 1-7. **(corresponding author)**

Chen JY, Hsu CT, Liao Y, Liu JH, Chang NT, Shih HC, **Tung TH**. The clinical epidemiology of assessment for willingness-to-pay values associated with gallstone disease: The experience at a teaching hospital in

Taiwan. *ASIA LIFE SCI* 2012;1;1-9. (corresponding author) [SCI] (IF=0.180, Category: BIOLOGY, Ranking: 81/83)

Liu CM, **Tung TH**, Chou P, Chen VT, Hsu CT, Chien WS, Lin YT, Lu HF, Shih HC, Liu JH. Clinical correlation of gallstone disease in a Chinese population in Taiwan: Experience at Cheng Hsin General Hospital. *World J Gastroenterol*. 2006;12:1281-1286. [SCI] (IF=2.433, Category: GASTROENTEROLOGY & HEPATOLOGY, Ranking: 36/74)

In addition, gallstone disease was one of important public health problems in Taiwan. The results in the present study not only provide the economic evaluation of ultrasound screenings for gallstone disease, but also compare the similarities and dissimilarities between Taiwan and other developed countries. As described above, we think the manuscript is worth to consider for publication. However, there were still some limitations in the present study and discussed in the section of "Study population and methodological consideration". Please see Page 11-12.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

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