Loss to Follow-up of Patients with Abnormal Pap Smear : Magnitude and Reasons

JADSADA THINKHAMROP, M.D., M.Sc.*,
PISAKE LUMBIGANON, M.D., M.S.*,
SUWIT JITPAKDEEBODIN, M.D.**

Abstract

We studied the magnitude and reasons for loss to follow-up in cases of abnormal Pap smears. We studied 162 women whose Pap smear results were abnormal. The lost follow-up rate was 41.1 per cent (95% CI: 33.1 to 49.3). Reasons for not coming to receive treatment was mostly related to communication such as not receiving informed letters from the hospital (35.6%), not understanding the messages in the informed letters (10.2%), were informed from the hospital's letters that their results were normal (5.1%), and perceiving that the test result was not serious (13.6%). One third of them had traveling-related reasons. There were 25.4 per cent of patients who sought treatment at other hospitals and 8.5 per cent went to see a traditional healer for treatment. The results provide information to prevent such unnecessary loss after having a Pap smear screening test for cervical carcinoma.

Cervical carcinoma is the most common cancer among Thai women. Between 1976 and 1985, there were 0.6 per cent cervical carcinomas diagnosed among patients attending the out patient unit of the Department of Obstetrics and Gynecology at Srinagarind Hospital(1). Treatment for this disease in the late stage is not as effective as treatment at the early stage. The 5-year survival rate is quite low. Moreover it consumes an unnecessarily large amount of resources including medical personnel. In the early stage, on the other hand, it is a carcinoma that can be cured. Early detection of cervical carcinoma can be achieved by Pap smear. There are no symptoms and signs at this stage of the disease. Thus, a check-up by this test once a year is recommended for every healthy woman. Many women do so but there are a large number whose test results were abnormal and who did not come

* Department of Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002,
** Department of Obstetrics and Gynecology, Maharaj Hospital, Nakhon Ratchasima 30000, Thailand.

back to the hospital for proper treatment. This implies wasting of resources regarding care providers and loosing the chance to be cured from a deadly disease. Consequently there will be an unnecessary loss due to treatment in the late stage of the carcinoma. This study provides the magnitude and reasons for lost follow-up of women whose Pap smears were abnormal. The findings also suggest some effective measures in preventing such unnecessary loss.

MATERIAL AND METHOD

This is a descriptive study. It was conducted from January to June, 1996, at Srinagarind Hospital, Khon Kaen University, Thailand. A total of 162 women attending the Out patient unit of the Department of Obstetrics and Gynecology who had abnormal Pap smear results were studied. All of them were searched from the hospital records between January and September 1995. Information for classifying loss to follow-up were sought from medical records. Those who did not come back to the hospital for proper treatment 3 months after being detected with an abnormal Pap smear were classified as loss to follow-up. These women were asked for the reasons why they did not come to receive treatment using postal questionnaires. If they did not reply within 3 months, we went to visit them at their homes to complete data collection. Note that, in our setting, an abnormal Pap smear result was classified by the presence of dysplastic of cervical cytology (class III)[2].

This research proposal was approved by the ethical commitee of the faculty of Medicine, KKU.

RESULTS

From a total of 162 study women, whose medical records and addresses could be assessed, we traced 151 of them. There were 62 out of 151 women who did not return for treatment. Thus, the loss to follow-up rate was 41.1 per cent (95% CI: 33.1 to 49.3).

Of the 62 who were lost to follow-up, their age ranged from 19 to 81 years old (mean = 44). All of them were Buddhists. Most of them (94.9%) were married, 49.2 per cent were farmers and 72.9 per cent had primary school education.

There were 59 women who were contacted by post, asking for reasons for the loss to follow-up. The response rate was 95.2 per cent. There were 3 cases who did not reply, one was Vietnamese who had left for her country, one had moved to another place and another one gave the wrong address.

From 59 cases, their reasons for not coming back to the hospital for proper treatment are summarized in Table 1. Most of their reasons (64.5%) were related to communication between health personnel at the hospital and patients. Such reasons included that they did not receive the informed letters from the hospital (35.6%), did not understand the messages in the informed letters (10.2%), were informed from the hospital's letters that their results were normal (5.1%), and perceived that the test result was not serious (13.6%). Thirty per cent of the reasons were related to traveling from their home to the hospital. Such reasons included not having enough money for traveling (18.6%), not having anyone to take them to the hospital since they could not go to the hospital

Table 1. Reasons for lost to follow-up of women whose Pap smear results were abnormal.

Reasons	Number	Per cent (n=59)
1. Never received any informed letter from the hospital	21	35.6
2. Thought that it was not serious	8	13.6
3. Did not understand messages stated in the informed letter	6	10.2
4. Were informed as having normal test results	3	5.1
5. Did not have anybody to bring them to the hospital	6	10.2
6. Seeked treatment from other hospital	15	25.4
7. Seeked treatment from traditional healer	5	8.5
8. Did not have enough money for travelling	11	18.6
9. Had to work at another province	1	1.7

Note : Some of them had more than one reasons

by themselves (10.2%), and had moved to work in another place (1.7%). About one quarter of them sought treatment from other hospitals and 8.5 per cent went to see a traditional healer for treatment.

DISCUSSION

The loss to follow-up rate among women whose Pap smear results were abnormal was high. A quarter of them reported that they had sought treatment at other hospitals. After subtracting these women, the loss to follow-up was still as high as 33 per cent. This is a waste of resources in performing Pap smears. The consequence, late stage of the carcinoma, is also far too expensive for management. The average cost for treatment of one case of carcinoma was estimated to be about 819,495.59 Baht (mean 27,316.52, SD 26,930.86, median 21,209.53)[3]. However, it usually ends up with the death of the patients.

In this study we asked the reasons why they did not come back to the hospital for proper treatment using a postal questionnaire. This way of data collection is believed to be appropriate. The answers we got were unlikely to deviate from their true reasons since they did not directly face the interviewers. The high response rate of 95.2 per cent suggests an effective mode of communication using postal mail as well as valid address obtained from medical records. Thus, a letter informing the test result should efficiently be delivered by this mode.

The proportion of loss to follow-up in a previous study by Mitchell at Melbourne in Australia was about 20 per cent. The main reasons was that women got pregnant and went to other hospitals. However, in this study they received the replying postal questionnaire from only 47 per cent[4]. This could be for reasons different from ours. Other reasons for the differences concerning reasons for loss to follow-up could be due to differences in demographic characteristics, and socio-economic status. Comparison of findings need to be made with caution.

In another study by Marcus, which was a large randomized trial involving over 2,000 women with abnormal Pap smear, there were three clinically-based interventions tested as strategies to increase return rates for screening follow-up[5]. One was a personalized follow-up letter and pamphlet. The second was a slide-tape program on Pap smears. The third was transportation incentives (bus passes/parking permits). Results of this study supported a high rate of loss to follow-up screening among women with abnormal Pap smears even giving such interventions (29% overall). In a study by Paskett conducted in women with abnormal Pap smears, they were randomized and received either the pamphlet plus a notification letter or the letter only[6]. The compliance rate was 64.2 per cent in the intervention group and 51.3 per cent in the comparison group. Stewart followed-up cases for 18-24 months comparing two groups one received leaflet informed knowledge and significance of abnormal Pap smears and the other, did not receive the leaflet[7]. They found that women who received the leaflet had more completed treatment and follow-up compliance (75.4%) than did those who did not receive the leaflet (45.8%). Findings from all previous studies imply that there are many steps to encourage patients to come back to the hospital for proper management after having an abnormal Pap smear. Any considered intervention should be based on the causes or reasons for not coming back to receive the appropriate treatment. This study revealed at least three major causes of loss to follow-up. These reasons related to communication, traveling and knowledge of the clients about the result of the test. This data may provide the information required for preparing such intervention.

SUMMARY

Loss to follow-up among women whose Pap smear results were abnormal was high. Common reasons involved communication between health personnel and patients and traveling from home to the hospital by the patients. To increase the follow-up rate, effort is needed to ensure that they are informed about the test results and request them to come back to the hospital for treatment. Informed letters *via* postal mail is considered cost effective for such communication. However, the messages must be clear and easily understandable by lay persons. The letter should also provide information about seeking treatment from other hospitals that are convenient for the patient. In this case, appropriate feedback information needs to be established to ensure that the patients actually get proper treatment.

(Received for publication on May 7, 1998)

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ขนาดของปัญหาและสาเหตุที่ผู้ป่วยไม่มารับการรักษาเมื่อตรวจพบความผิดปกติของเซลล์ปากมดลูก

เจศฎา ถิ่นคำรพ, พ.บ.,*
ภิเศก ลุมพิกานนท์, พ.บ., สุวิทย์ จิตภักดีบดินทร์, พ.บ.***

การศึกษาอัตราและสาเหตุที่ไม่มารับการรักษาของผู้มีเซลล์ปากมดลูกผิดปกติ จาก 162 ราย มีอัตราผู้ที่ไม่ได้กลับมารับการรักษา 41.1% (95% ช่วงเชื่อมั่น อยู่ระหว่าง 33.1 ถึง 49.3) เหตุผลที่ไม่มารักษาส่วนใหญ่เกี่ยวข้องกับการติดต่อสื่อสาร เช่น ไม่ได้รับจดหมายแจ้งผล 35.6% ไม่เข้าใจข้อความในจดหมายที่แจ้งไป 10.2% ได้รับแจ้งผลว่าปกติ 5.1% คิดว่าตนเองไม่เป็นอะไรมาก เพราะไม่มีอาการผิดปกติ 13.6% หนึ่งในสามมีปัญหาในการเดินทาง นอกนั้นไปรักษาที่โรงพยาบาลแห่งอื่น 25.4% ไปรักษากับหมอแผนโบราณ 8.5% ข้อมูลนี้อาจใช้เป็นแนวทางป้องกันแก้ไขความสูญเปล่าของการตรวจหามะเร็งระยะแรก

* ภาควิชาสูติศาสตร์-นรีเวชวิทยา, คณะแพทยศาสตร์ มหาวิทยาลัยขอนแก่น, จ.ขอนแก่น 40002

** แผนกสูตินรีเวชวิทยา, โรงพยาบาลมหาราช, จ.นครราชสีมา 30000