The results of evening check-ups of Uterus
and Breast Cancer during past seven years

Makoto Matsui, M.D.  Masaaki Teranaka, M.D.
Johana Municipal Hospital, (Japan)

Abstract
In our district, the percentage of daytime working women is 52.3% of all the women aged 15 years and above. And this used to result in a smaller number of participants in the check-ups than we expected.

So our municipal hospital has performed the check-ups in the evening during the farmers’ leisure season for the past seven years.

Through this new program, the number of participants increased significantly. As a result, among 1431 women who underwent 2862 check-ups on uterus, four cases of cancer were detected, and out of dysplasias two cases advanced to early cancer during the follow-up term.

Two cases of breast cancer were detected out of 1389 women who underwent 2647 check-ups.

Methods
This program has been performed since 1980 in Johana town and since 1981 in Kamitaira village.

The population of Johana town is about 11,600 and that of Kamitaira village is about 1,000. The objects are women of 30 to 64 years old.

The check-ups have been performed at the outpatient clinic of Johana municipal hospital and its branch office in Kamitaira village.

The check-up time was 6:00 p.m. to 10:00 p.m. during the farmers’ leisure season.

For uterus, history taking, inner examination, and cytologic study have been done. And for breast, history taking, palpation, and ultrasonography have been done.

Results
The percentages of participants in the evening time check-ups and those of used daytime check-ups are shown on the Figures No.1 to No.4.

Significantly the percentages of participants of evening time check-ups have risen.

This phenomenon is prominent in those of breast cancer.

Through this program, 1431 women received 2862 check-ups of uterus cancer.

And four cases of cancer were detected.

And two cases of dysplasias advanced to early caucer, one advanced three mouths later and the other advanced three years later.
Fig. 1  Johana town

Uterus

percentage of participants

20
15
10
5

daytime
eveningtime

Fig. 2  Johana town

Breast

percentage of participants

20
15
10
5

daytime
eveningtime
Fig. 3  Kamitaira village

Percentage of participants

Uterus

daytime

eveningtime

Fig. 4  Kamitaira village

percentage of participants

Breast

eveningtime

daytime


On the other side, 1389 women received 2647 check-ups of breast cancer. And two cases of cancer were detected.

**Discussion**

Since the check-ups were performed in the evening time, the number of participants significantly increased.

Especially, it is remarkable in the check-ups of breast cancer.

In Japan, the number of breast cancer shows a tendency to increase, so we must make an effort to multiply the number of participants in the check-up of breast cancer.

In some of the Japanese prefectures, the CAI (Cytology Activity Index) of the uterus cancer check-ups turn up over 200, while that of the Japanese average is 98.

That of our town used to be 60 to 110. And the mean CAI of daytime check-ups was 74. And by the evening time check-ups, it went up to 111 (78 to 150).

Summing the CAI data of daytime and evening time, CAI marked its best 217 in 1980 and 200 in 1984.

However, in 1981, 1982 and in 1986 the number of participants decreased.

We consider some reasons for it.

One of the reasons would be that only in 1980 the check-up was free of charge, so many women participated. And in 1986 the charge was very expensive.

Secondly, many women think that it is enough to undergo the check-up once in two or three years.

As it is shown on the Fig.5 and Fig.6, the number of new participants has been decreasing every year. That means that we've been checking the same group of low risked women, and this cannot be very effective to find new cancers.

Therefore we're trying to list up and call up high risked women, as it is shown on the Table 1 and Table 2. The risk factors of uterus cancer are having case of cancer in the blood relation, early marriage, and many deliveries. And those of breast cancer are intake of excessive animal fat, especially pork and cheese in Japan, obesity, having of cancer in the blood relation, spinster, late marriage, on experience of pregnancy, no giving of the breast, and hyperprolactinemia.
Fig. 5  Proportion of new participants

Johana town

- Breast
- Uterus

Fig. 6  Proportion of new participants

Kamitaira village

- Uterus
- Breast
### Table 1  Epidemiologic risk factors of Uterus cancer

1) case of cancer in the blood relation  
2) early marriage  
3) many deliveries

### Table 2  Epidemiologic risk factors of Breast cancer

1) intake of excessive animal fat (especially pork and cheese)  
2) obesity  
3) case of cancer in the blood relation  
4) spinster, late marriage, no experience of pregnancy, no giving of the breast  
5) hyperprolactinemia
Conclusion

Our program was successful in multiplying the number of participants. As the new participants have been decreasing recently, we're planning a check-up focused on the non-checked up women and on the high risked women in order to find many cancers.

References

(1) SATO S., TOKI., TAMAU CHI R.
The present status of mass population screening for cancer of the uterine cervix and the therapeutic results on the detected cases in Miyagi prefecture.

(2) TAKAHASHI K., MORIYAMA M., TAKAMIYA O.
Studies of screening, detection and mortality rates in mass screening for uterine cervical cancer in Shimane prefecture.

(3) HIGASHI IWAI H., ISHIDA R., ITO T.
Reasonable interval of undergoing the check-up uterus cancer (symposium).

(4) YAJIMA A., MORI T., WAKISAKA T.
The realities of the check-up of uterus cancer in foreign countries and the interval of undergoing cytologic study.

(5) NISHI M., YAMANE K.
The risky eatings together that cause cancers.
Tokyo, 1986

(6) KUBO K.
The breast cancer ; 7—18
Tokyo, 1980
子宮および，乳癌の夜間婦人検診の総括

城端厚生病院 松井 亮，寺中 正昭

先に一度報告したが，我々は勤労婦人の多いこの地方で子宮癌，乳癌の検診受診率を上げるため，この7年間農閏期の夜間に検診を行ってきた。ここでその結果を報告する。

実施方法
城端町及び上平村で実施。場所は城端厚生病院及び上平診療所。時間は午後6時～10時。対象は30～64才女性。内容は乳癌，子宮癌検診及び内科診察。

結果
城端，上平併せて7年間で1431人が2862回の子宮癌検診を受け，子宮癌4人が発見された。また検診時異形成で後に子宮癌に発展したもののが2例あった。一方1389人が2647回の乳癌検診を受け，乳癌2人が発見された。

考察
図1～4に示すように夜間検診によって受診率は大塚に増加した。特に乳癌検診においてその傾向は著明であった。乳癌は現在日本で増えつつあるから受診率増大の意義は大きい。このように受診率は増大したが，その内容に問題がある。それは受診者の中で新規受診者の割合が年々減っていることである。図5，6に新規受診者率を示した。特に上平村では受診率は非常に高いが，逆に新規受診率の減少が著しい。固定化した受診者は殆どリスクの低い人ばかりであり，その中から新しい癌が発見される可能性は極めて少ない。特に子宮癌は殆ど初回受診の際に発見されているので未受診者への呼びかけを強化せねばならない。同時にこれからは子宮癌，乳癌の発生リスクの低い人を選び出して受診させたいと考えている。

結論
夜間検診により受診率は大きく伸びた。しかし近年新規受診者が減っており，癌発見に効果的な検診とは言えない現状である。そこで癌発見率の増大のため，今後は未受診者を含むハイリスク婦人を主な対象とした検診を行ってゆくつもりである。