



SUMMARY OF SURVEY RESULTS: PHYSICIANS' ATTITUDES TOWARD NOTIFICATION OF INFECTIOUS DISEASES

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*The following is the final report of the study of physician's attitude
towards notification, held late last year.*

Demographics:

Most respondents (50%) have been in practice between six and fifteen years, while 30.4% have been practising more than fifteen years, and 19.6% less than five years. Respondents were evenly divided between health centre affiliated practice and practices which are entirely private. Most doctors 80.4% (n=37) were either working in health centres with additional part time private practices 43.5% (n=20) or in full time private practices 37.0% (n=17) only. The remaining 19.6% (n=9) worked only in health centres or were in part time private practice.

There was a significant relationship between years of experience and type of practice for doctors with private practices and those working both in health centres as well as privately ($p=0.000018$ and $p=0.0039$ respectively). Seventy-one percent of doctors in full time private practice had been in practice for at least fifteen years. Conversely, 95% of doctors in the health centres had been practising for less than fifteen years.

Notification Practices:

Previous studies have revealed that doctors may not be aware of their legal responsibility to notify, or the logistics of obtaining and sending in notification certificates. However, given the survey responses, it would appear that in Malta, knowledge of responsibilities and practices

does not seem to be a major barrier to notification.

Legal responsibilities:

Nearly seventy per cent were aware of their legal obligation to notify, when they disagreed that 'physicians were only morally obliged' to do so. However, given that 17.4% were not sure, and that 13.0% believed they were not legally bound, clarification of notification responsibilities by the Public Health Department (PHD) may be of use in some cases. Apparently, doctors' major sources of information on notification (PHD circulars for 37%, medical school for 28.3%, and notification certificates for 21.7%) have not been completely effective in disseminating this basic information.

Certificate availability:

Availability of notification certificates is also not likely to be at the root of under-notification. They seem to be generally obtainable and kept in places where they are accessible for use. Only 10.9% of doctors thought that certificates were not easily available. Most doctors (60.9%) reported getting new certificates at the health centres while 30.4% contact the Health Department. One respondent did comment however, that it took several phone calls before new certificates arrived from the PHD. In addition, 63.0% of doctors carry the certificates at home. However, only 54.3% report that they are on hand for use, should the need arise.

Notification patterns:

With respect to use of the certificates, 34.8% of doctors reported that they usually fill out the certificates in front of their patients, while 21.7% do this after the patient's visit, 28.3% at the end of the day and 13.0% at the end of the week. A further 4.3% fill out the certificate only when prompted by the Department. Many commented that if they did not do the paperwork immediately, they would be likely to forget if it was left for later.

This difficulty in getting around to 'form-filling' may also underlie the variance in the timing of notifications by doctors. Although required by law to notify as soon as they are aware a patient has a notifiable disease, only 41.3% reported that they notify immediately. Another 32.6% notify within the week and 26% believe no time limit exists for notifications.

Criteria for notification:

When asked whether they would notify a list of 22 conditions based on a suspected or confirmed diagnosis, doctors showed a tendency to await confirmation of diagnosis. Indeed, few (28.3%) favoured a switch to notification of all conditions based on suspicion. However, of all the conditions, food poisoning was the most likely to be notified on suspicion (47.8% would notify on suspicion). Indeed, food poisoning is the one of the few conditions which physicians are

required by law to notify on suspicion only. The others are scarlet fever and varicella, although only 28.3% and 39.1% respectively said they would notify these conditions when suspected.

Reliance on others to notify:

Another area of concern is the apparent reliance by 84.8% of respondents on hospital doctors to take the responsibility for notification when cases are referred to hospital. Based on comments by doctors as they filled out the survey, there appears to be a high level of confidence that notification from hospital doctors does consistently occur. This is reinforced by the finding that 87% of doctors agreed that 'physicians do not notify because their patient is referred to hospital where a hospital colleague will be expected to notify'. More doctors concurred on this than any other suggested explanation for non-notification. Given this attitude, two options present: either primary care and hospital physicians would use different reportable disease lists (thus eliminating the redundancy of double notifications, and delaying the report until the diagnosis is confirmed) or the responsibility to notify, even when the case is referred, as is currently the case, must be reinforced for primary care physicians (who are in a position to report earlier, although at the cost of a potentially uncertain or non-specific diagnosis).

Fewer doctors (32.6%) reported such strong reliance on the laboratory to report. It seems that some were unaware that the laboratory is also required by law to report the same list of infectious diseases. Indeed, there was only a slightly positive response (47.8% agreed and 17.4% were not sure) to the suggestion that this is a cause of under-notification.

The notifiable disease list:

The survey used a list of 22 infectious diseases, all but three of which are notifiable. Exceptions were HIV serology, gonorrhoea, and syphilis. Ninety-three percent of doctors reported that they would always notify AIDS and 89% would do the same for HIV. Conversely, 76.1% said they would never notify varicella, and 52.2% would rarely report gastroenteritis. Responses were weighted so as to determine a rank order of the conditions. Lists below show diseases which doctors would notify with the greatest frequency apposed to those conditions considered most important to notify. Conditions least likely to be notified are listed in descending order (i.e. rubella being notified more frequently than influenza) as are those ascribed the least importance.

Diseases most frequently notified	Most important diseases to notify
1. AIDS	1. AIDS
2. HIV serology	2. HIV serology
3. Typhoid fever	3. Food poisoning

4. Acute encephalitis	4. Typhus fever
5. Typhus fever	5. Acute encephalitis
6. Food poisoning	6. Dysentery
7. Congenital rubella	7. Typhus fever
8. Scarlet fever	8. Pertussis

Diseases least frequently notified	Least important diseases to notify
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1. Influenza	1. Influenza
2. Gastroenteritis	2. Erysipelas
3. Granular conjunctivitis	3. Gastroenteritis
4. Erysipelas	4. Varicella
5. Pneumonia	5. Pneumonia
6. Puerperal fever	6. Mumps
7. Gonorrhoea	7. Puerperal fever
8. Rubella	8. Rubella

Reasons for under-notification:

The following is a rank list of the 'most popular reasons chosen by doctors as reasons for under-notification. The line through the list demarcates the division between those which doctors agreed with and those with which they disagreed.

It is of note that in spite of a number of doctors commenting quite strongly about issues of confidentiality and information disclosure given that Malta is a small tightly-knit country, the group as a whole did not consider this to be a very important reason. This is also reflected below in preferences for interventions. Due to the nature of the doctor-patient relationship, private G.P.s may be more likely to see confidentiality as a barrier rather than those in health centres.

Strongly agree

1. expect hospital colleagues will notify
2. lack of feedback from the PHD
3. certain diseases not considered hazardous
4. disease list is too outdated
5. not all doctors are familiar with the entire disease list
6. no penalties are enforced against non-notifiers
7. expect that the lab will notify the case
8. disease list is too extensive
9. no remuneration for notification
10. no time to notify
11. case is already being treated.
12. involving authorities exposes patients to harassment / embarrassment
13. little is done by the PHD in response to physician notifications
14. pressure by patients not to notify
15. hesitation to notify so as not to cause a false alarm
16. violation of patient confidentiality

17. patient refuses permission to disclose information
18. doctors are morally, not legally bound to notify
19. no disease treatment is available

strongly disagree

Perceptions of the system:

Many have pointed out that the success of any surveillance system depends on a strong relationship between the Health Department and those providing the information. According to doctors in the survey, this is the area in which many of the problems lie. Indeed, 84.8% of doctors say they are not satisfied with the feedback they receive from the PHD.

When asked what they think the PHD does with physician notifications, many doctors' initial response was one of puzzlement: they had never been told. There was, however, a generally favourable response. Nearly half of physicians said the PHD always acts to prevent disease spread and 44.4% thought this happened occasionally. While 22.2% thought notifications were used solely for case counting, only 4.4% believed that notifications were filed away without action. The general perception seems to be that doctors believe the PHD is trying to 'do something' but that its efforts are not enough. That many respondents approached this issue with a degree of cynicism or uncertainty, speaks to the fact that much needs to be done to build up a more positive image of the PHD.

Preferences for change:

The most highly favoured interventions also seem to be a reflection of a desire for a more active role of the PHD in the notification system. In addition, they point to a need for re-evaluation of the notifiable disease list. Interventions are listed from most to least popular as follows:

1. regular PHD publication of outcomes of notification, current disease trends
2. telephone confirmation of outcome of investigation to those who notify
3. feedback of national notification rates for personal comparison
4. have only the lab notify certain diseases
5. use a set of standard diagnostic criteria as criteria for notification
6. emphasize notification responsibilities in medical school
7. shorten the disease list
8. use telephone / answering machine reporting
9. use more discretion in PHD investigations
10. use knowledge of legal obligations as criteria for passing qualifying exams
11. award accreditation units to those who conscientiously notify
12. send reminders to non-notifiers
13. link remuneration with notification
14. use anonymous reporting for socially stigmatised diseases
15. notify only on suspicion
16. enforce criminal penalties for non-notification