

**ឧស្សាហកម្មសុខភាព**  
Health Messenger

## **ASSESSMENT FINDINGS**

**January 2007**

**Stung Treng Province Knowledge  
and Attitudes Assessment**

**on the subject of**

**HEALTH MESSENGER**

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**Reference:**

**Project Dates:** January 2006 to December 2006

**Project Description:**

A survey to assess the attitudes and knowledge increase of health staff after the distribution of four issues of the Health Messenger magazine to all health and training staff in Stung Treng province.

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## **Introduction**

In December 2006, PSP, the publisher and distributor of Health Messenger, conducted a survey to help determine the impact of the circulation of Health Messenger magazine after one year of distribution. The survey sought to assess the level of medical knowledge of public health staff in Stung Treng province regarding the topics covered by the publication and also to assess how well the magazine has been received by the health community.

This report details the findings of the survey and reflects on the results from the baseline survey undertaken in 2005 to understand what the impact of the distribution of Health Messenger has been over the past 12 months.

## **Aim**

An initial (baseline) survey was conducted in December 2005 to assess the level of understanding of the health staff and availability of health training materials in the Stung Treng Province. Over the past 12 months, Health Messenger was regularly distributed to all Health Staff in the Stung Treng province through the support of VSO. The aim of this follow-up survey was to understand how the magazine had been received by the health staff, understand their reading habits, to determine the level of knowledge around the subjects covered by Health messenger and where possible contrast it to the level of understanding in the previous survey.

## **Summary of Finding from the Baseline Survey 2005**

The baseline survey was divided into two sections, the first focussing on the information needs of the health staff in Stung Treng and the second focussing on the current medical knowledge of the health staff in a number of chosen topics.

### **1. Information Needs**

A summary of the information needs that were gathered were:

- Most health staff did not actively seek information in books or magazines, but suggested that if it was delivered directly to them, they were likely to read sections that interested them.
- It was noted that key messages need to be highlighted to attract attention. Available time to read health-related publications is limited, so information needs to be presented in an easy and interesting format. Most respondents mentioned that small amounts of regular information would be preferred.
- Khmer language publications would be required for nurses and midwives, as appropriate information is limited in the Khmer. There is an interest in English, as the respondents believe this was a good way to improve their English skills. Improving medical skills knowledge and skills was ranked the highest reason for seeking information among nurses and midwives.
- Nurses and midwives have largely different information needs compared with those of the doctors (in terms of content, use and style). Most respondents deemed it unlikely that one publication could be appropriate to both areas of technical expertise.
- The key topic identified to focus information and knowledge was maternal and child health (covered previously in issues 20 and 21 published in 2005.) Other topics that were identified as interesting/valuable were concerned with new diseases, outbreaks, causes and prevention.

## **2. Medical knowledge**

In the survey in 2005, a number of questions were asked to understand the level of knowledge of the health staff. The following conclusions could be made:

### **Leprosy**

- 37% knew the common signs of leprosy
- 8% were aware of how leprosy is transmitted
- 64% could identify that there are different types of leprosy
- 96% were aware that leprosy can be cured
- 29% knew the duration of treatment

### **Continuum of Care (HIV/AIDS)**

- 24% were familiar with the concept of COC
- 27% understood the usefulness of COC

### **Child Mental Illness**

- 12% were aware of the issues of Child Mental Illness
- 7% could list some of the common causes of Child Mental Illness

### **Eye Care**

- 32% could identify some of the common causes of eye problems
- 95% claimed to know how to manage a patient who was diagnosed with eye problems

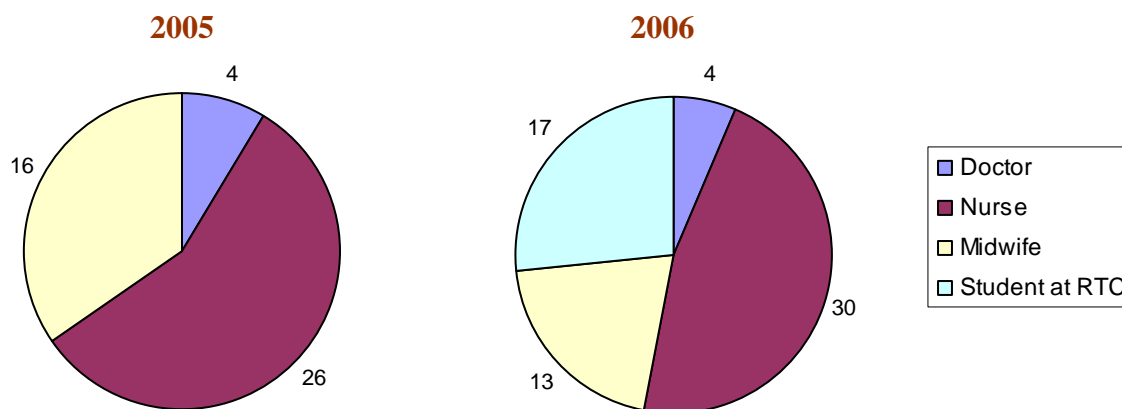
### **Diabetes**

- 36% of respondents were aware of the symptoms of diabetes
- 25% could identify some of the common complications of diabetes

## 2006 Survey Methodology

The survey to Stung Treng in 2006 was conducted from 18<sup>th</sup> to 22<sup>nd</sup> December 2006 and the results were collated and evaluated during January and February 2007. The questionnaire for the survey is attached as Appendix A. The survey was developed using the previous 2005 baseline survey as the foundation, and it was deemed that the demographic and number of people interviewed should remain similar, with the inclusion of students at the Stung Treng RTC. To reflect the addition of students in the demographic and the increase in the number of health staff in Stung Treng over 2006, the number of respondents surveyed was increased from 48 in 2005 to 64.

### *Comparison of the demographic of respondents surveyed by role between 2005 and 2006*



	No. of possible respondents	No. sampled as representative of group	Percentage sampled
Total		64	%
Doctors or Medical Assistants		4	%
Nurses		26	%
Midwives		16	%
Students		17	%

### *Designing the Questionnaire*

Respondents were interviewed using a structured questionnaire, which consisted of open and closed questions. The questionnaire aimed at measuring the success of the Health Messenger publication in terms of distribution and meeting the reader's expectations over the last year. In addition, respondents were assessed on their health knowledge, asked their opinions on how the magazine could be improved and what value they attached to Health Messenger.

The questionnaire was developed in English, on which it was modified and approved by VSO prior to translation to Khmer for use in the field. Before the field data collection, a field-meeting was conducted at the PSP offices to ensure that data collectors understood each of the questions and to reinforce data collection methods to provide a fair and impartial result.

### *Undertaking the interviews*

The data collection was scheduled from December, 18 to December 22, 2006. Each interview schedule took about 30-45 minutes to complete. The interviews were undertaken by two PSP members of staffs (one intern) and two free-lance interviewees.

### *Analysing the data*

Data analysis was undertaken at the PSP offices in January using a spreadsheet to cross-reference and analyse the data. The results section show a selection of the data that was deemed most important.

# The results

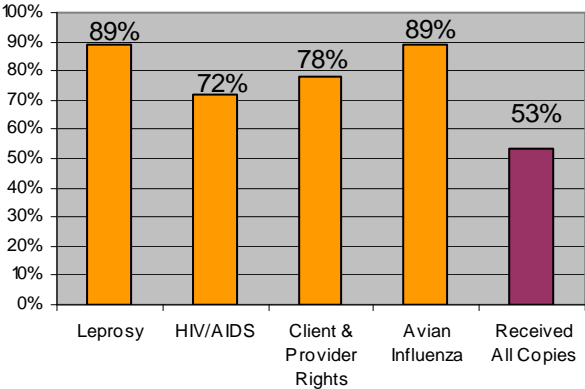
The results are split in to five sections that are listed below.

## 1. Meeting the needs of the readers

### Distribution

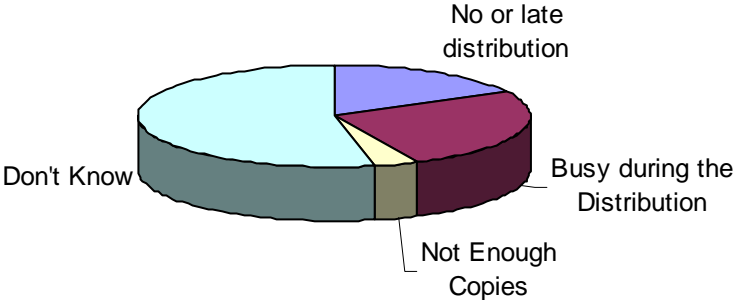
PSP is continually striving to attain a high distribution rate, as it classes this as one of the key indicators to determine whether the Health Messenger project is successful. PSP continually aims at reaching over 90% of its target audience and monitoring undertaken directly after each issues generally shows a distribution rate of higher than 95%. The statistics show that PSP has been unable to meet this target in Stung Treng, with only just over half the readers claiming to have received all four copies of the Health Messenger publication, although both issue 25 and issue 28 were within one percent of this target rate and most health staff received most three copies of the magazine during the year.

*Copies of each issue received by health staff in Stung Treng*



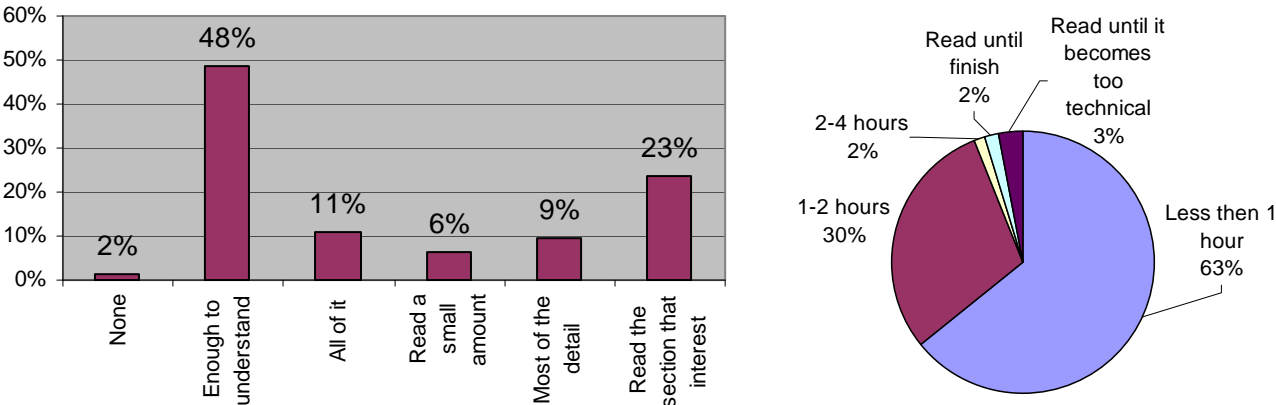
There were a number of possible explanations for the lower than targeted distribution rate. The respondents were unable to provide any solid explanation as to why they believed they had not received the magazine, but many considered themselves to be on leave or away on training during the distribution period. In a few cases it was considered that there had been no distribution of the magazine for a particular issue at some health centres, but it was not possible to corroborate this response, as other staff in the same health facility claimed to have received the same issue. Surprisingly, the figures did not correlate with the regular issue monitoring when checks were made in Stung Treng for issue 26 and issue 28.

*Reasons why respondents believed that they did not receive the magazine*



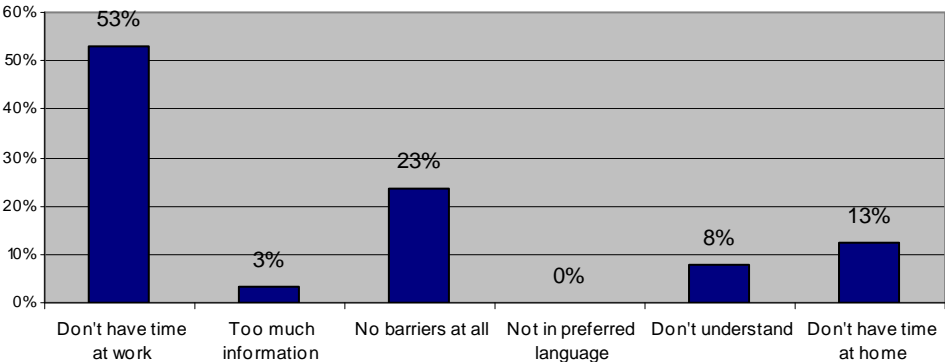
Respondents were asked about their reading habits and through this, what information they had gained from Health Messenger. As with any publication, it was expected that the percentage of readers who read the magazine cover-to-cover would be low. However, it was hoped that readers would digest enough information to improve their understanding of the topic covered. It was also decided to question how long readers devote to each issue of Health Messenger, enabling the Health Messenger team to structure the magazine taking this into account.

*The amount of information read in the magazine (Bar chart) and the time readers usually dedicate to HM (Pie chart)*



The results showed that nearly half of the respondents felt they read enough to understand the topic and almost a quarter of the readers read on the sections that were of interest to them. 8% read only a small amount or none of the articles, while an encouraging 20% claimed to read either most of the detail or all of it. It was surprising however, that 93% of the respondents committed less than 2 hours to read each issue of health messenger. Respondents were questioned about what barriers they had to reading the magazine. Almost a quarter of the readers told us that there were no barriers that affected their reading habits, while over half informed us that they did not have enough time at work, with a further 8% declared that they did also not have enough time at home to study the publication.

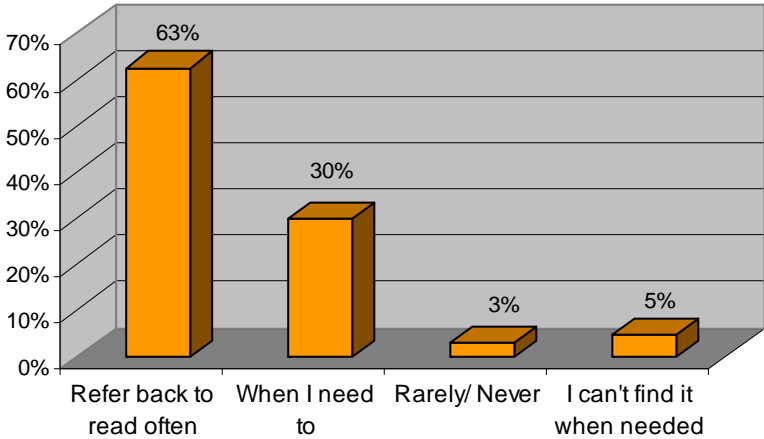
*Barriers that prevented readers from dedicating time to the reading of Health Messenger*



Only a small percentage of respondents were discouraged to read the publication because either there was too much information or because they didn't understand the content. Therefore, taken together, these results show that the majority of health staff find it difficult to dedicate enough time to reading and increasing their knowledge of the health issues covered by Health Messenger.

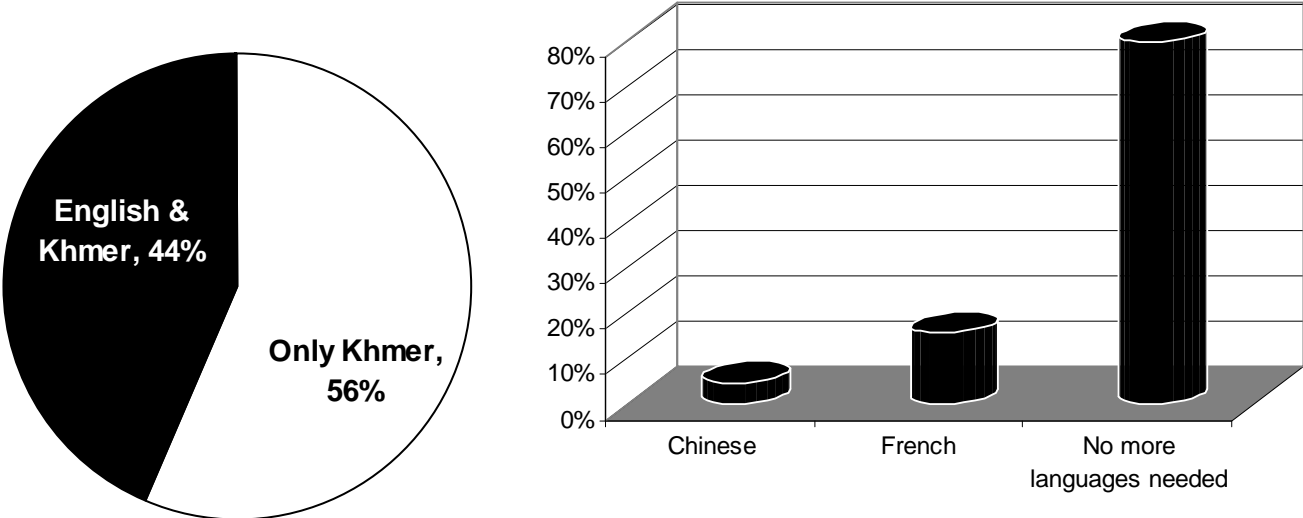
With these figures showing the majority spend only a small amount of time reading the publication when it is first released, it was of interest to discover if health staff continued to refer to Health Messenger in their daily work. The response was that 93% of the reader referred back to the information regularly, and a further 5% would if they could locate the magazine when they required it. These figures were much greater than expected at the outset and ascertain that HM is an important training material and reference guide used for the daily work of the medical staff.

*How often do health staff refer back to their copy of Health Messenger?*



Respondents indicated earlier in the questionnaire that Khmer was their preferred language for the magazine, but as HM is printed in two languages, it is important to establish whether the costly translation and print of dual languages is adding value for the readers. The respondents were also asked if any other languages would be more appropriate.

*The language in which respondents currently read the articles (pie chart) and whether Health Messenger should encompass any further languages (bar chart)*

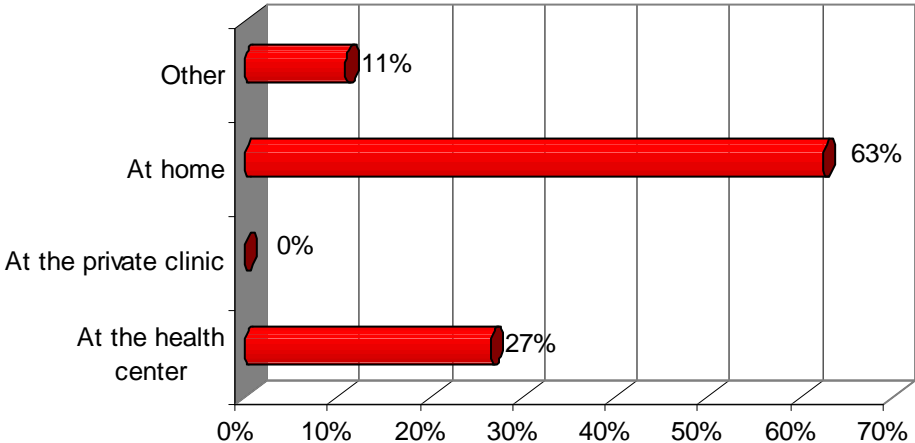


While no respondents read HM solely in English, 44% of the respondents asserted that they read in both English and Khmer. In addition, over 80% of the respondents added that they

were content with these two languages. The remainder of the respondents indicated that either Chinese or French would suit their language requirements better.

Furthermore, we asked respondents to identify where they usually read Health M. This helps us to understand the environment in which most readers were able to study the literature. The chart below shows that a third of all readers read their magazine at home, and a further quarter reading the magazine at their office. It was noted that those who read at home tended to read more of the publication and have a greater understanding of the concepts that were covered, while those who read at the health centre found it harder complete the articles.

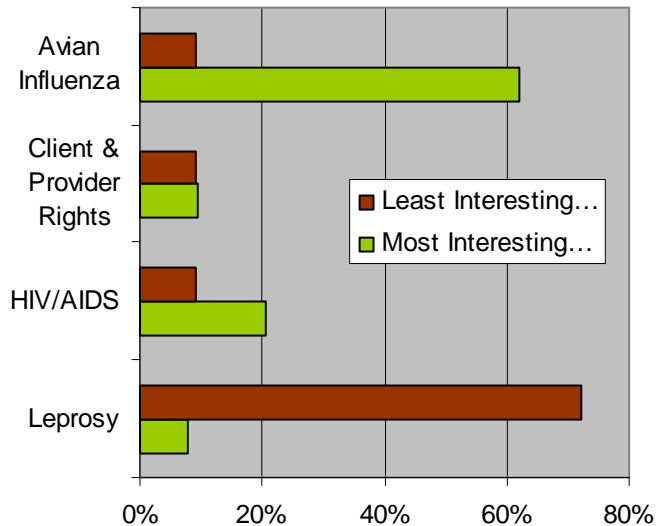
*Where the readers most often find time to read the magazine*



## 2. Readers Interests

We asked readers to identify which of the topics that had been covered in Health Messenger over the previous twelve months was of most and of least interest to them and their knowledge requirements. It was clear that the most relevant topic was concerning the subject of Avian Influenza, while the topic that was of least interest to the majority of readers was leprosy.

*Topics covered by Health Messenger which readers found most and least interesting*



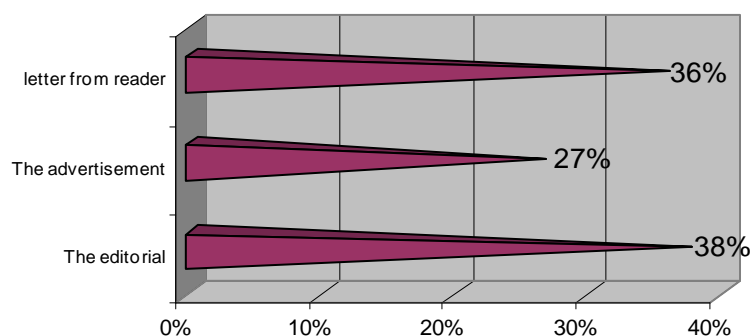
***The Full Picture...***  
*While all the respondents were able to identify their issue of most interest, only 62% were able to determine the issue of least interest and even less could justify the reason for their lack of interest in the topic.*

Respondents answered that Avian Influenza was the most interesting because it was a ‘serious disease’ that ‘can be easily transmitted’ and for which there is currently ‘little medical information’. HIV AIDS was of interest to a fifth of the readers as there is ‘currently no cure’ and was ‘prevalent in their daily jobs’.

Leprosy was deemed the least interesting because the respondents had ‘not witnessed any cases’ of a ‘curable disease’, for which there is already ‘plenty of information’ in the public domain. Client and Provider rights did not produce many strong emotions, with the few who placed it as their most interesting issue, as it was relevant to their daily work and provided guidelines for both patients and medical providers.

It was also of interest to the editorial team to understand which articles were popular with the readers, so as to focus key messages in these sections. The results show that between a quarter and a third of the readers are interested in the articles and advertisements aside from the key health topic covered in each issue.

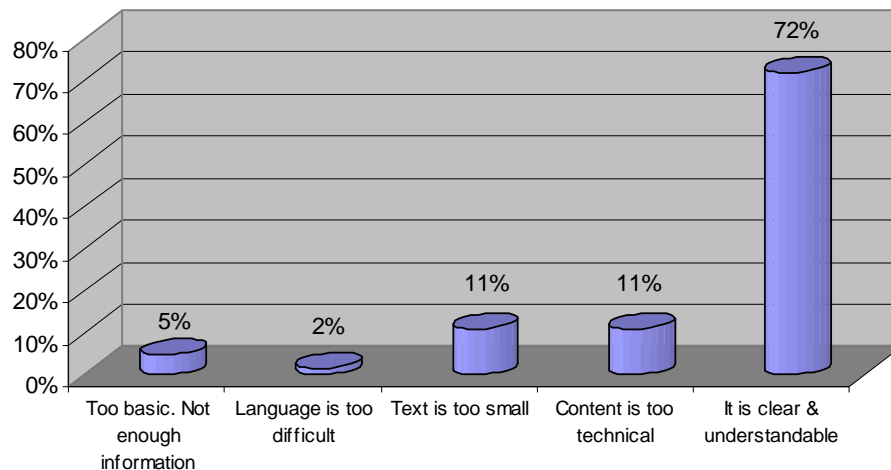
*Other articles that are regularly read by the readership*



### 3. Getting it Right

The team at PSP are continually striving, with the help of VSO and other partners, to improve the Health Messenger publication so that it better meets the needs of the readers. There are many ways that this target can be measured; through content, layout, style of writing, regularity and distribution to list a few. Some of these factors are dependent on our sponsorship cycle, such as regularity of the publication the topics covered. The important indicators in meeting the needs of the readers are that the articles written are of the right length and that the content is clear and understandable.

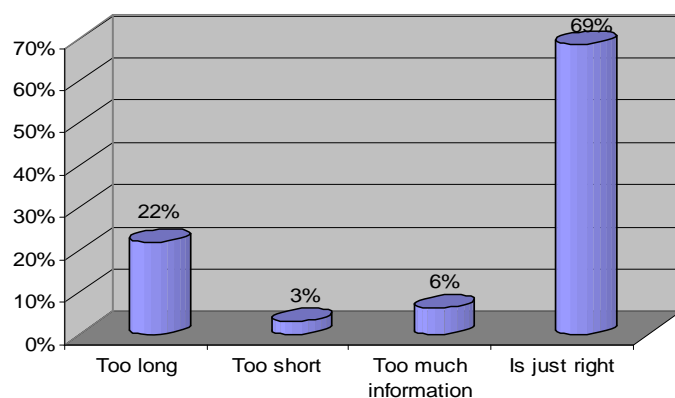
*Respondents were asked about the level and clarity of the content in Health Messenger*



The results show that 72% consider the content and layout of the magazine to be clear and understandable. The feedback from the other respondents mentioned that the content or language is too difficult to enable them to fully understand the topic (13%), which 5% claimed that the content was too basic and there was not enough technical information included in the magazine. Furthermore, 11% of the respondents answered that the text was too small which influenced their ability to digest the information contained in the publication.

*Answers concerning the length & amount of information*

The response on the length of each issue of Health Messenger attracted a similar response, with 69% of the respondents answering that the length was “just right”. However, over a quarter of those asked replied that the publication was either too long (22%) or contained too much information (6%).



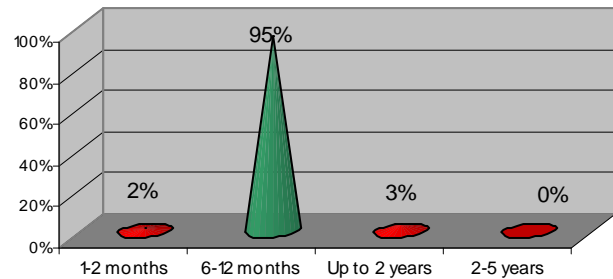
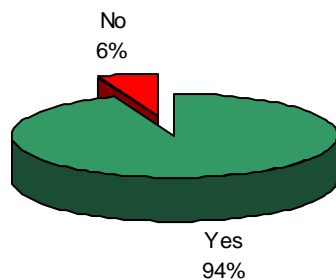
Therefore while it can be concluded that Health Messenger is largely reaching its target in length and clarity, improvements could be made to increase the size of the text, which would also reduce the amount of information and length of the text. It could also look to reduce the technical aspect of some of the content, to help appeal to a greater number of its target readers.

#### 4. Subject Knowledge

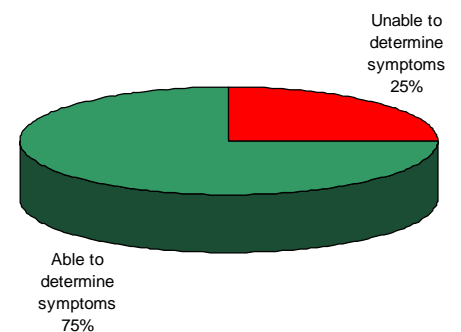
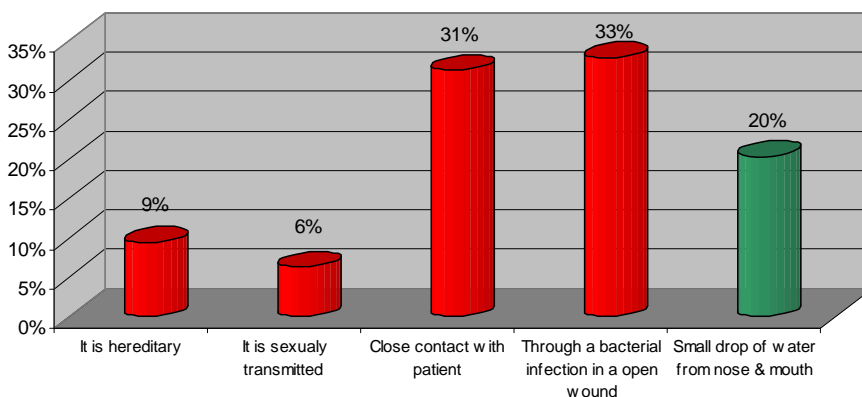
All respondents were tested on a range of questions regarding the information that had been covered by the HM publication over the previous 12 months. The questions were both multiple-choice and open-ended questions, testing the respondent's ability to diagnose a patient with such symptoms and the treatment that should be given. In all the charts below, the correct answers are indicated by with the colour green and the incorrect answers with red.

#### Leprosy

*Respondents were asked whether they could identify cases of leprosy (pie chart) and the leprosy treatment time (cone chart)*



*Respondents were asked how leprosy is transmitted from infected patients (bar chart) and what how it is possible to distinguish leprosy from other skin disorders (pie chart)*



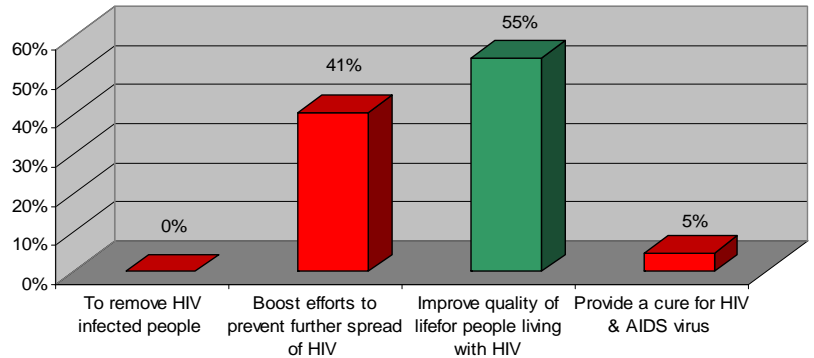
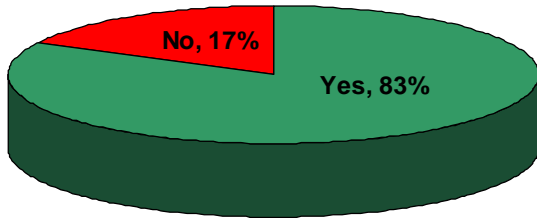
The results are highly encouraging in this area compared with the survey conducted prior to the leprosy issue. Nearly all patients were able to identify cases of leprosy and three-quarters of the respondents were able to distinguish between skin disease and leprosy. This is compared to 2005, where only 37% knew the common signs of leprosy. In 2005, 29% were able to correctly identify the correct treatment time, compared to 95% in 2006.

Troublingly, only a fifth of the respondents were able to identify that leprosy is transmitted through small drops of water through the nose and mouth, with most believing it is transmitted through bacterial infections or contact with a patient. However, in contrast to 2005, where only 8% could identify the cause of transmission, there has been some improvement made.

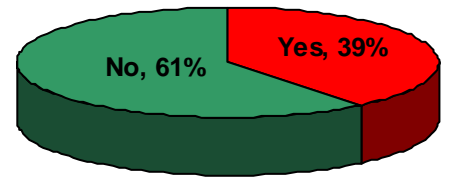
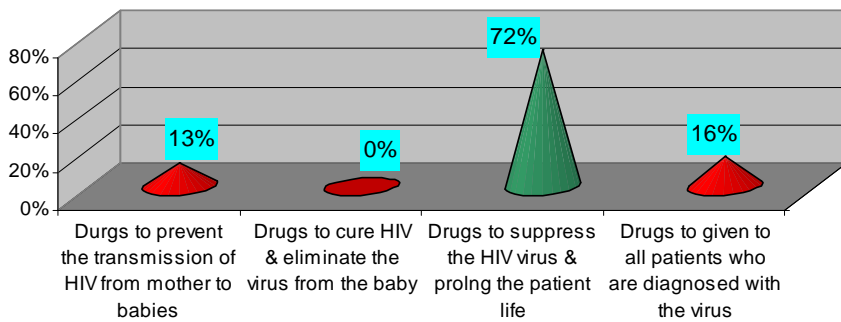
## HIV AIDS and the Continuum of Care

Interviewees were asked a number of questions around the continuum of care (COC) and the treatment of HIV Aids. The results can then be compared to the previous results from 2005 to compare the change in knowledge in this area.

*Respondents were asked if there were aware of the COC (pie chart) and what was the aim of the COC (bar chart)*



*Respondents were asked the purpose of anti-retroviral drugs (cone chart) and whether HIV AIDs could be the direct cause of death (bar chart)*

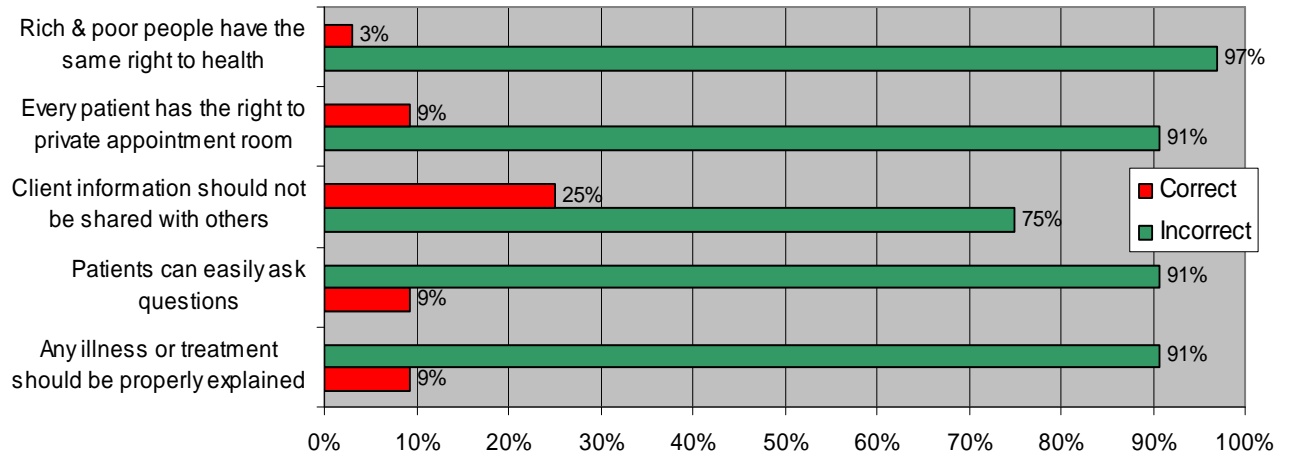


The results show that 83% of the respondents were aware of the concept of continuum of care, a significant improvement from just 24% of the respondents in 2005 and 55% were able to identify the key purpose of the COC to improve the quality of life for patients living with HIV, compared to just 27% of the respondents who were able to identify the usefulness of COC in 2005. 72% were able to correctly identify that the purpose of anti-retroviral drugs was to repress the HIV virus to prolong the patient's life and 61% were able to answer that HIV AIDs could not be a direct cause of death.

## Client & Patient Rights

The respondents were asked to respond on a series of scenarios which covered the five basic patient rights. There was no comparison that could be made with the previous survey, as this area was not addressed.

*Interviewees were asked to answer a series of questions concerning the basic rights of patients*

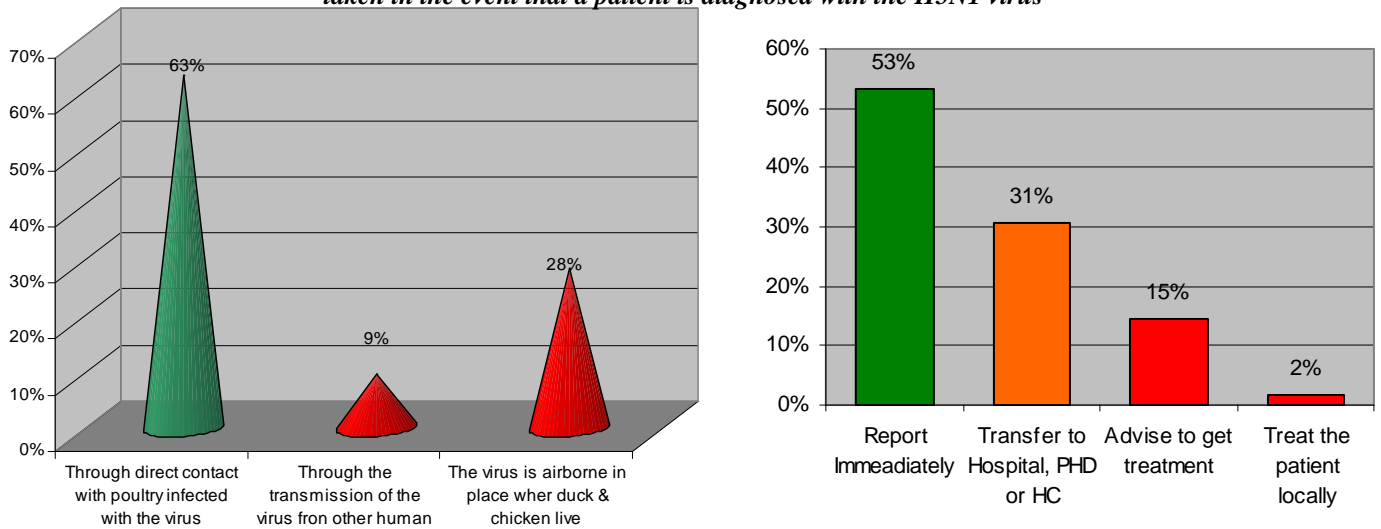


The results show that there is a high understanding of the basic patient rights, with providers appreciating that patients have the right to care, irrespective of their financial situation; have the right to information, irrespective of their education or background; have the right to information about their medical condition; and have the right to privacy and confidentiality.

## Avian Influenza

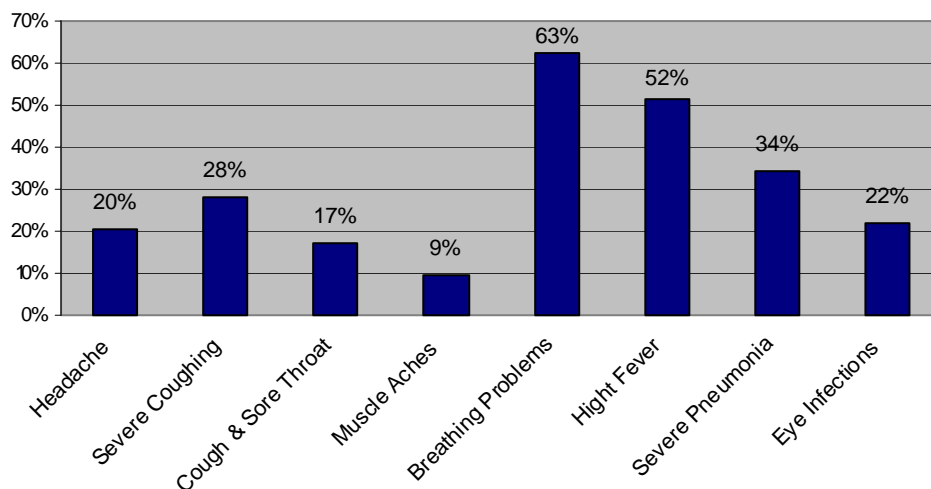
Avian Influenza was the latest and most widely distributed issue of Health Messenger magazine to date. It was also the issue that was rated as most interesting among the respondents. This topic was not included in the previous survey, but as the topic is relatively new, it is unlikely that much knowledge was available a year ago. However, there has also been a large amount of information available through the news and media on the subject Avian Influenza, although this has not covered any of the medical aspects of the flu and focuses on the aspects of community prevention.

*Interviewees were asked how the Avian Influenza virus could be contracted in humans and what action should be taken in the event that a patient is diagnosed with the H5N1 virus*



63% of the health staff interviewed identified the correct way of contracting the virus in humans is through direct contact with infected poultry. When asked what action should be taken to a patient diagnosed with the H5N1 virus, 53% mentioned that they would report it immediately. Finally, interviewees were asked to identify the difference between normal flu and avian influenza. 63% identified that breathing problems would also accompany a flu in the case of avian influenza.

*Interviewees were asked to identify the symptoms which distinguish Avian Influenza from normal flu symptoms*



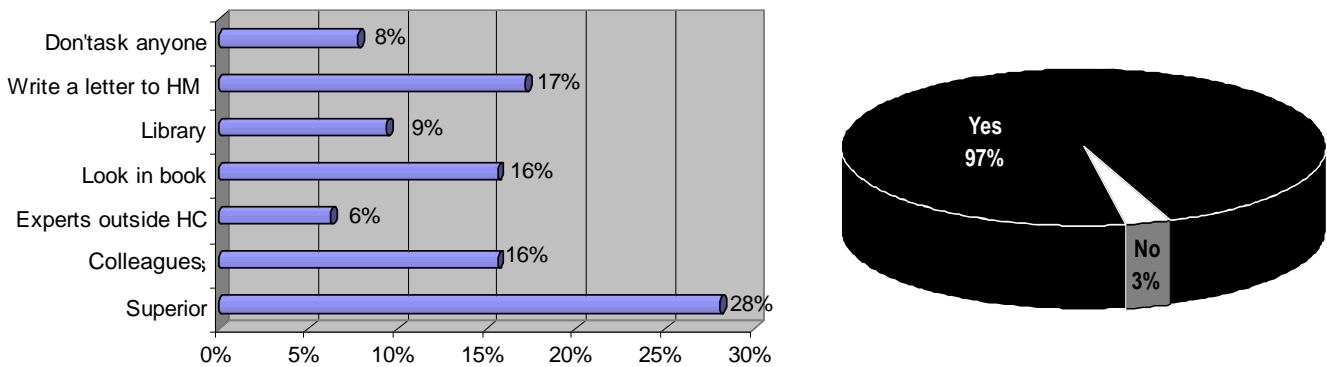
Therefore, over half the participants were able to correctly answer the questions concerning avian influenza and it can be deduced that there has been a significant knowledge increase in the health staff concerning this topic.

## 5. Moving Forward

This section evaluates both how Health Messenger can move forward in future and how PSP and VSO can work together in Stung Treng to further increase the knowledge and strengthen health training and expertise.

VSO was interested in understanding the support network that is available to the medical staff for questions or concerns that arise in their daily work or that are raised through the reading of the magazine. We asked staff to identify which networks of support they used should a question arise. A quarter of the staff said that they would ask their superiors any questions that arose, while 16% mentioned that they would ask a colleague. The same proportion of health staff would both refer to a book or published literature to search for their answer or write a letter to Health Messenger to find out the answer. The latter response was surprising, as Health Messenger has yet to receive any correspondence directly from Health Staff.

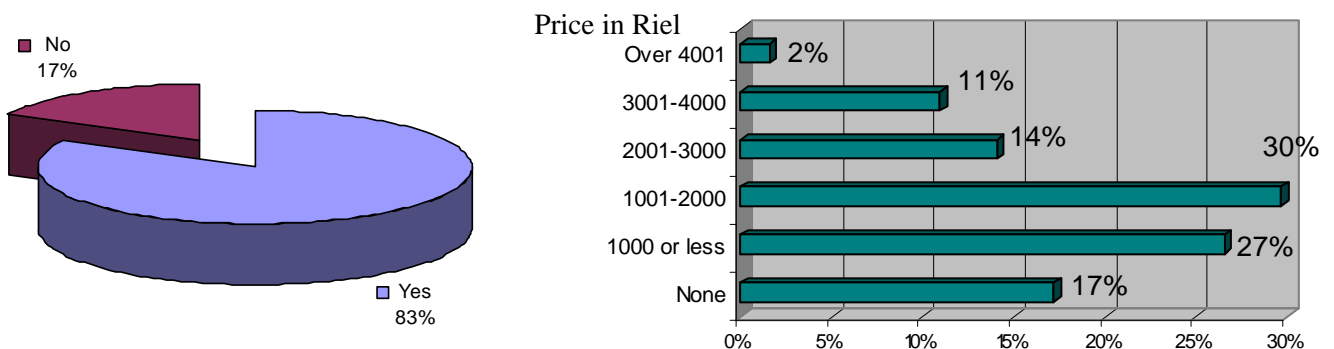
*The support network of the health staff when concerns arise (bar chart) and whether training would be beneficial to support the Health Messenger publications (pie chart)*



Staff were also asked if training around the subjects covered in the Health Messenger publication would be useful and help them to digest and reinforce the information covered. Almost all the respondents believed that training would be beneficial and would help to reinforce the information.

Health Messenger has also been searching for ways to become more self-sustaining and one of the possibilities was to understand if readers would be prepared to purchase each issue of Health Messenger and if so, what price would they be willing to pay for the publication.

*Would readers be prepared to pay for each issue of Health Messenger? (pie chart) and what price did respondents consider to be a fair price for the magazine (bar chart)*



83% of the readers surveyed said that they would be willing to pay for the magazine, which is an encouraging statistic. However, of all the respondents three-quarters of the readership were only prepared to pay 2000 riel or less for the publication. This price is less than the printing cost of the magazine (currently \$0.70 per copy) and therefore would not even cover the variable costs of producing the magazine. It would also be difficult to collect this money from those who wanted to purchase the magazine, which would be both difficult and costly to orchestrate. Therefore, from the results of this survey, it seems that it would not be viable to recuperate any of the costs of the Health Messenger publication directly through the readers.

## Conclusion

Firstly, from the methods used and the size of the population surveyed across the Stung Treng region, the survey provides a fair representation of the views of the health staff in this region.

The survey shows that the length and quality of the information in the Health Messenger publication is of a good quality. However, there needs to be a further focus on ensuring that PSP continues to improve its distribution rate to the Stung Treng area to ensure that the magazine reaches more of its target audience.

The survey showed that regarding the health topics that were surveyed, the knowledge of the staff could be deemed as adequate and in cases where it has been possible to compare the data to last year, the knowledge increase had been significant. There are a number of possible explanations as to reasons for the increase in knowledge, although there is strong evidence to suggest that Health Messenger is the prime, if not sole, reason for this increase in knowledge. This is shown in the strong correlation between those interviewees who received the magazine and the people who were able to identify the correct answers to the questions that were surveyed. Also, it was apparent from the responses that the medical staff in Stung Treng utilise very few other sources of technical medical information.

It is our conclusion from the results of the survey that the circulation of the Health messenger magazine has helped to have a noticeable impact on the health knowledge and the reference materials available to the health staff.

Finally, it is clear from the results that selling the magazine would not be a viable option, as the average cost that medical staff would be prepared to pay is less than the actual print cost of the magazine. The cost of collecting the money from the medical staff would also make this an less viable way of achieving financial sustainability for the Health Messenger project. It is a further setback to PSP and the Health Messenger project that the SHINE project will be unable to continue funding the distribution to the Stung Treng region in 2007, as this may mean that the region may become excluded from distribution in future issues. However, PSP is keen to continue to support the distribution of Health Messenger to Stung Treng for as long as it can find the additional funding and will be pleased to support the VSO Shine project with other initiatives, such as training staff on the subjects that are covered by each edition of Health Messenger.