EGYPT HEALTH
COMMUNICATION SURVEY
2006
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**INTRODUCTION**

1.1 Background

While existing large-scale nationally representative surveys, such as the 2005 Egypt Demographic and Health Survey, are an excellent source of information for data on knowledge, attitudes, and health behaviors, they typically include very limited information about population exposure to health communication activities. The 2005 EHCS remedies this by asking respondents very detailed questions about exposure to health communication activities, and a more limited set of questions about health knowledge, attitudes, and behaviors. To ensure comparability with the 2005 EDHS data, the sampling frame of the 2005 and 2006 EHCS is based on the one used for the DHS.

The Communication for Healthy Living project is based on the philosophy that households are the producers of health and thus aims at integrating health care services and focusing on systems. The USAID-funded Health Communication Partnership is working with the CHL project to build capacity for health communication in the public, NGO, and private sectors in Egypt. The project involves such innovative activities as a “Newlyweds Initiative”, including a group wedding celebration to focus on young married couples taking responsibility for their own health.

The CHL program has a national television variety show which features newlywed couples, and over 100 television and radio programs featuring messages on health, overpopulation, and in support of gender equity.

To date, CHL has reached close to 1,129 outreach workers and health care providers through specialized training, seminars, and public events in its three project governorates (Fayoum, Menya, Qena) and it has proved a successful way to engage many audiences in selected focal villages in those governorates.

Since December 2005, highly pathogenic H5N1 avian influenza viruses have swept through poultry populations across Asia and parts of Europe. The outbreaks are historically unprecedented in scale and geographical spread. Their economic impact on the agricultural sector of the affected countries has been large. From December 2003 to mid-July 2005, outbreaks of avian influenza A (H5N1) in poultry occurred in nine countries (Cambodia, China, Indonesia, Japan, the Republic of Korea, the Lao People’s Democratic Republic, Malaysia, Thailand and Viet Nam). Since late July 2005, outbreaks in domestic poultry as well as wild birds have been reported in the Russian Federation, Kazakhstan, Romania, Mongolia, Turkey and Croatia. In addition, during this period outbreaks in poultry have increased again in Indonesia, Thailand, Viet Nam and China.

On February 17, 2006, the Government of Egypt has announced finding cases of H5N1 in domestic poultry. Responding to the Government of Egypt request, CHL has produced 3 TV spots on bird flue to increase knowledge about mode of transmission, safe practices, symptoms of the disease, and to increase reporting of suspected infected cases.

The Egyptian State Information Service/IEC Center requested technical assistance from the John Hopkins University Media/Materials Clearinghouse to help them set up the infrastructure and systems to establish and manage an efficient Arabic/English Resource Center. Thus, both the SIS/IEC center and CHL program needed to evaluate their communication interventions. In this regard, the Egypt Health Communication Survey 2005 (EHCS) was designed to provide information about the reach of the communication interventions of avian flu and other health issues and their effect on behavior change.

1.2 Goals and Objectives

The goal of research and monitoring efforts is to assess the reach and impact of the CHL program activities on the family members’ values, attitudes, intentions, and health competency; to encourage life-stage appropriate health behaviors, and to increase demand for and utilization of
health information and services. The 2006 EHCS was designed to provide estimates for key indicators mainly exposure to different messages designed and produced by CHL as well as the effect of the communication interventions on behavior change. The survey results are intended to assist the technical staff at the CHL project and the SIS/IEC Center to design new communication strategies and activities for improving the health status of Egyptians.

The specific objective of this survey is to assess to what extent the IEC campaign on bird flu succeeded in reaching the public in Egypt and in increasing knowledge of modes of transmission, and safe practices. The specific objectives are to:

- Assess the level of exposure to the campaign among different groups in Egypt.
- Assess the level of knowledge of modes of transmission among different groups in Egypt.
- Assess the knowledge of safe practices and reporting among different groups in Egypt.
- Assess the exposure to messages about safe practices among different groups in Egypt.

In addition, a separate module questionnaire was utilized to Sesame Workshop campaign on Avian Flu. The primarily goal of this module is to investigate health hygiene practices and awareness about Avian Flu among children. The results of this part of the survey will be presented in a separate report.

1.3 Organization of the 2005 Egypt Health Communication Survey

The 2006 Egypt Health Communication Survey was a national survey conducted in the whole country under the auspices of the State Information Service/IEC Center. The survey was funded by the United States Agency for International Development (USAID), as part of the external evaluation of the impact of the Health Communication Partnership (HCP). Tulane University’s Department for International Health and Development (Tulane/IHD), School of Public Health and Tropical Medicine, has been selected as the external evaluator for the HCP program.

To assess the reach and impact of the various initiatives of the CHL program, as well as other programs, on national level the 2006 Egypt Health Communication Survey was implemented by El-Zanaty & Associates, with limited technical assistance from Tulane/IHD.


The 2006 EHCS was executed in four stages. The first stage involved preparatory activities, including the design of the sample, as well as development of the survey questionnaires and related instruments. The preparatory stage was initiated in April 2006, and all of the activities were completed by early May 2006. The second stage took place from 10th of May 2006 for three weeks, and involved training of field staff and interviewing of eligible households and individual respondents. The third stage involved all of the data processing activities necessary to produce a clean data file, including the data entry, verification of the data, editing, and coding, as well as consistency checking and tabulations. This stage started soon after the beginning of the fieldwork and lasted till the end of June 2006. The focus of the final stage of the survey was data analysis and report preparation. This phase began in July 2006 and took about 2 months.

Sample design

As previously mentioned, this survey is a national survey that was implemented in 21 governorates. The survey collected data from ever-married women in the age group 15-49 years, husbands of eligible women and never-married male and female youth aged 15-24 years. To permit estimation of the main indicators at the national level, a systematic random self-weighed sample was selected from each governorate (i.e., a total of about 1,530 households). Based on household composition data from the EDHS and the EHCS 2005, it was expected that this process would yield around 4200 interviews with around 1300 women, 1200 husbands, and about 1500 youth.
Sample selection

The sample of the study was a multistage random sample consisting of the following stages:

First Stage: Prior to EHCS 2005 a discussion with the technical staff of Tulane/IHD and the CHL project took place and it was agreed that 21 governorates were selected in this stage with probability proportional to size. Then the number of households in each governorate was determined proportional to the size of the selected governorate (self-weighted sample). The same was applied in the 2006 EHCS.

Second Stage: The PSUs of the 2005 EDHS of the selected governorates were used as a frame for the 2006 EHCS survey. A total of 153 PSUs were selected randomly from all governorates from both urban and rural units (the same PSUs as in the 2005 EHCS). However, for the 2006 survey only one segment was chosen from each PSU.

Third Stage: Using the household listing in these segments, a systematic random sample of about 10 households was chosen from each segment (153 PSU). A total of 1530 households were selected for the survey.

Eligibility: In the selected households, interviews were conducted with all eligible household members. Eligible household members included ever-married women aged 15-49 years, husbands of those eligible women, and never-married youth aged 15-24 years.

Questionnaire development

The 2006 EHCS involved two types of questionnaires: a household questionnaire and an individual questionnaire. The household questionnaire was adapted from the 2005 Menya Village Health Survey (MVHS 2005). The individual questionnaire focused predominantly on exposure to health communication, with a set of additional questions on Avian flu and concern about message and health behaviors.

In addition, a special module about the Alam Simsim program was designed for children and their guardians.

The household questionnaire consisted of two parts: a household schedule and a series of questions relating to the socioeconomic status of the household. The household schedule was used to list all usual household members. For each of the individuals included in the schedule, information was collected on the relationship to the household head, age, sex, marital status (for those 15 years and older), educational attainment (for those 6 years and older) as well as identifying individuals eligible for the individual interview. The second part of the household questionnaire obtained information on characteristics of the physical and social environment of the household (e.g., type of dwelling, availability of electricity, source of drinking water, household possessions, and average monthly income and expenditures on the household.

The individual questionnaire was administered to all ever-married women aged 15-49 who were usual residents, husbands of women in the reproductive age, and never-married male and female youth aged 15-24. In general, individual questionnaires gathered information on the following topics:

- Respondent’s background
- Exposure to media channels and avian flu campaigns
- Knowledge of the mode of transmission of the avian flu virus.
- Reporting avian flu cases.
- Exposure to health messages.
Data collection activities

Staff recruitment. To recruit interviewers and field editors, a list of interviewers and field editors who had worked with El-Zanaty and Associates on the EDHS 2005 was prepared to identify those who were qualified to participate in the training. This action was taken to reduce the duration of training and to enhance the quality of the data.

All candidates for the interviewer and field editor positions were university graduates and had intensive experience in DHS surveys. Another basic qualification was the willingness to work in any governorate covered in the survey.

Training materials. A variety of materials were developed for training personnel involved in the fieldwork. A lengthy interviewer’s manual was prepared and given to all field staff. The manual presented general guidelines for conducting an interview as well as specific instructions for asking each of the questions in the 2006 EHCS questionnaires. Other training materials, including special manuals describing the duties of the team supervisor and the rules for field editing, were prepared.

Supervisor and interviewer training. Interviewer training for the 2006 EHCS data collection began in the 15th of May 2006. Eleven supervisors and 32 interviewers participated in the training program (10 male interviewers and 22 female interviewers). The training program was held in Cairo for 4 days. The training program included:

- Lectures related to basic interviewing techniques and specific survey topics (e.g., Avian flu reproductive health and family planning, communication interventions, healthy lifestyle and passive smoking);
- Sessions on how to fill out the questionnaire, using visual aids;
- Opportunities for role playing and mock interviews;
- One day of field practice in area not covered in the survey;
- One quiz.

Trainees who failed to show interest in the survey, who did not attend the training program on a regular basis were terminated immediately.

A special session for supervisors was conducted during the training and prior to the main fieldwork training. This session focused specifically on the supervisor’s duties including field editing instructions.

Fieldwork. Fieldwork for the 2006 EHCS began in 19th of May and was completed by early June 2006. A total of 40 staff was responsible for the data collection. The field staff was divided into 10 teams; each team was composed of a supervisor and three interviewers (1 male interviewer and 2 female interviewers). Each team worked in 1 to 3 governorates depending on the total sample size assigned for each team.

Data processing activities

Office editing. Questionnaires were collected from teams by staff from the central El-Zanaty & Associates office that was responsible for conducting visits to field teams on regular basis. Office editors reviewed questionnaires for consistency and completeness, and a few questions (e.g., occupation) were coded in the office prior to data entry. To provide feedback for the field teams, the office editors were instructed to report any problems detected while editing the questionnaires; these problems were reviewed by the senior staff. If serious errors were found in one or more questionnaires from any team, a list of those errors and ways to avoid them were reported and sent to all teams.

Machine entry and editing. The machine entry and editing phase began while the interviewing teams were still in the field. The data from the questionnaires were entered and edited on
microcomputers using the Census and Survey Processing System (CSPro), which is a software package for entering, editing, tabulating, and disseminating data from censuses and surveys.

Eight microcomputers with 8 data entry personnel processed the 2006 EHCS data. During the machine entry, 100% of each segment was reentered for verification. By working one shift 6 days per week, the data processing staff completed the entry was completed by the mid of June. In addition, recoding and editing of data was completed by the end of June 2006.

1.5 Coverage of the Survey

Table 1.1 summarizes the outcome of the fieldwork for the 2006 Egypt Health Communication Survey, by region and urban-rural residence. The table shows that, during the main fieldwork phase of the survey, out of 1,530 households selected for the 2006 EHCS, 1,500 households were found and 1,494 households were successfully interviewed, which represents a response rate of almost 100%.

A total of 1,322 women were identified as eligible to be interviewed. Questionnaires were completed for 1,320 of those women, which represents a response rate of almost 100%. A total of 1,230 husbands were identified as eligible to be interviewed; out of those, 1,211 husbands were successfully interviewed, a response rate of 99%. Finally, 1,473 youth were interviewed out of 1,500 eligible youth with a response rate of 98%. No substantial variation in the response rates among different respondents across region and urban-rural residence were found.

<table>
<thead>
<tr>
<th>Table 1.1 Results of the Household and individual Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of household and eligible women, husbands, and youth interviewed and response rates, by region and urban-rural residence, EHCS 2006.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Urban Rural Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban Lower Egypt</td>
</tr>
<tr>
<td>Household Results</td>
<td></td>
</tr>
<tr>
<td>Households sampled</td>
<td>290</td>
</tr>
<tr>
<td>Households found</td>
<td>280</td>
</tr>
<tr>
<td>Households Interviewed</td>
<td>280</td>
</tr>
<tr>
<td>Household response rate</td>
<td>100.0</td>
</tr>
<tr>
<td>Individual Results</td>
<td></td>
</tr>
<tr>
<td>Women sampled</td>
<td>197</td>
</tr>
<tr>
<td>Women interviewed</td>
<td>197</td>
</tr>
<tr>
<td>Women response rate (%)</td>
<td>100.0</td>
</tr>
<tr>
<td>Husbands sampled</td>
<td>174</td>
</tr>
<tr>
<td>Husbands interviewed</td>
<td>172</td>
</tr>
<tr>
<td>Husbands response rate (%)</td>
<td>98.9</td>
</tr>
<tr>
<td>Never-married male youth sampled</td>
<td>131</td>
</tr>
<tr>
<td>Never-married male youth interviewed</td>
<td>126</td>
</tr>
<tr>
<td>Never-married male youth response rate (%)</td>
<td>96.2</td>
</tr>
<tr>
<td>Never-married female youth sampled</td>
<td>101</td>
</tr>
<tr>
<td>Never-married female youth interviewed</td>
<td>100</td>
</tr>
<tr>
<td>Never-married female youth response rate (%)</td>
<td>99.0</td>
</tr>
<tr>
<td>Youth sampled</td>
<td>232</td>
</tr>
<tr>
<td>Youth interviewed</td>
<td>226</td>
</tr>
<tr>
<td>Youth response rate (%)</td>
<td>97.4</td>
</tr>
</tbody>
</table>
The objective of this chapter is to provide a demographic and socioeconomic profile of the respondents in the 2006 EHCS survey along with a descriptive assessment of the environment in which the respondents (ever-married women, husbands, male and female youth) live. This was accomplished by examining the general characteristics of the households in the sample. Information is presented on the age, sex, and education of the household population as well as on housing facilities and household possessions. This chapter also provides a profile of the respondents (ever-married women, husbands, and never-married youth 15-24) who were interviewed in the 2006 EHCS survey. Information is presented on a number of basic characteristics of the 2006 EHCS respondents, including age, residence, education, and work status.

The profile of the households included in the 2006 EHCS, described in this chapter, will provide a context for the results presented in the following chapters. In addition, it may provide useful input for social and economic development planning.

### 2.1 Household Composition (Table 2.1)

Table 2.1 presents the distribution of households in the EHCS sample per region by sex of the head of the household and by the number of household members. The importance of these characteristics is that they are often associated with socioeconomic differences between households. For example, female-headed households are frequently poorer than male-headed households. In addition, the size and composition of the household affects the allocation of financial and other resources among household members, which in turn influences the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavorable health conditions. The household composition is presented based on de jure members (i.e., usual residents).

Females were the household head for 12% of the households (see Figure 2.1). There is minor variation in the proportion of female-headed households by region. In Urban Governorates 16% of households are female-headed, compared to 10% in rural Upper Egypt. The average number of persons per household is 5.0, with some variation across the different regions. The average number of persons per household in Urban Governorates is 4.1 compared to 4.9 in Lower Egypt and 6.1 in Upper Egypt (see Figure 2.2). Slightly more than one-quarter of households has 3 members or fewer, while 20% of the households have 7 or more members.
2.2 Education of the Household Population (Table 2.2)

The educational level of the household members is among the most important characteristics of the household because it is associated with many issues including reproductive behavior, knowledge and exposure to different messages. Results from household interviews can be used to look at both educational attainment among household members and school attendance among children and young adults.

**Educational attainment**

Data on the educational level of the household population (age 6 and over) is presented in Table 2.2 in the annex. Primary and preparatory education (9 years of schooling) is considered basic education and is compulsory. The secondary stage, which includes an additional 3 years of schooling, is not compulsory.

The results in Table 2.2 confirm that there is a gap in the educational attainment between males and females. Overall, 84% of males in the EHCS households have ever attended school compared to only 69% of females (see Figure 2.3). Among those who attended school, the mean number of years of schooling for males is 7.7, while the mean level for females is 6.1 (see Figure 2.4). The highest mean number of years of schooling for males and females was found in urban Lower Egypt (9.5 for males and 8.1 for females).

In general, respondents from urban areas are more educated than respondents from rural areas. Looking at the educational level across the different regions, it is clear that respondents from Urban Governorates are more educated than respondents from the other regions. Only 8% of males and 17% of females from Urban Governorates had no education. In addition, respondents in Urban Governorates and urban Lower Egypt reported the highest percentage of university or higher education attendance, with 30% of males and 22% of females having attended university or higher in Urban Governorates. The situation is different in Upper Egypt where 19% of males and 36%
of females had no education, while only 13% of males and 8% of females have attended university or higher.

An examination of the differences in educational indicators between regions indicates substantial differences between regions in the educational attainment of both males and females. For example, the mean number of years of schooling for males is 9.5 years in urban Lower Egypt compared to 7.2 years in rural Lower Egypt and 6.6 years in rural Upper Egypt. Additionally, female education has substantial differences across regions. For example, while the mean number of years of schooling is 8.1 years in urban Lower Egypt and 8.0 in Urban Governorates, the mean number of years of schooling is only 4.4 years in rural Upper Egypt. Also, the gap between male and female years of education is greatest in rural Upper Egypt (2.2 years) and the least in Urban Governorates (0.8 years).

2.3 Household Environment (Table 2.3 – 2.4)

Housing characteristics

Information on housing characteristics, including electricity, the source of drinking water, type of sanitation facilities, type of flooring, and number of rooms in the dwelling is shown in Table 2.3. These are important determinants of the health status of household members, particularly children. They can also be used as indicators of the socioeconomic status of households.

Overall, almost all 2006 EHCS households live in dwellings with electricity, and more than 95% of households have access to piped water, mainly within their dwelling or yard. For most households, the source of their drinking water is within their dwelling or yard. Some variations exist between regions; while all households from Urban Governorates have access to piped water in their dwelling, only 85% of households in rural Upper Egypt have access to piped water in their dwelling or yard.

More than half of the households in the 2006 EHCS have traditional toilets, mainly without bucket flush, and 42% have modern flush toilets. Less than one percent of households have no toilet facility. There are differences in the type of toilet facility across regions. Around 82% of households from Urban Governorates and, 79% of households from urban Lower Egypt have modern toilets compared to only 10% of households from rural Upper Egypt. In general, traditional toilets are more common in rural areas while modern toilets are more common in urban areas.

With regard to flooring, 57% of households live in dwellings with cement tile floors, 19% live in dwellings with cement flooring, 12% live in dwelling with ceramic or marble tile flooring, and 11% live in dwellings with earth or sand flooring. There are differences among the different regions with regard to the flooring materials. Around 3 in 10 households in rural Upper Egypt live in a dwelling with earth/sand floors, while less than 1% of households in Urban Governorates have sand flooring. Cement tiles were used more in urban Lower Egypt (70%) and least used in rural Upper Egypt (37%).

The 2006 EHCS questionnaire included a question on the number of rooms that a household had (excluding the bathrooms, kitchen, and hallways). Merging this information with the information on the number of persons in the household provides a measure of crowding. Table 2.3 shows that
only 8% of households have 1 or 2 rooms, 473% have 3-4 rooms, and 19% have 5 or more rooms. The mean number of rooms per household is 3.8, and there is an average of 1.4 persons per room.

**Household possessions**

Information on household ownership of durable goods and other possessions is shown in Figure 2.5. With regard to durable goods, 95% of EHCS households own a television (color or black and white), four in five households own a radio with a cassette recorder, around 9 in 10 own an electric fan, 94% own a washing machine, 95% own a gas/electric cooking stove, 87% own a refrigerator, and 45% own a water heater. In addition, 57% of the households have a telephone, and more than one-third have a mobile phone.

In general, households in Urban Governorates and urban Lower Egypt own more of these items than households in other regions, while households in rural Upper Egypt are less likely to have the convenience of these items than the other regions.

Less than 30% of households own livestock/poultry: 46% of households in rural areas own these items compared to only 3% of households in urban areas. It is worth mentioning that 49% of households in rural Upper Egypt own livestock or poultry. Reported ownership of livestock/poultry in all regions is much lower than in the 2005 EHCS. This may be the result of the governmental decree on awareness about the risk of contracting avian influenza as a result of handling poultry.

The survey also collected information on household ownership of means of transportation. Overall, only 8% of households own a car/van/truck, with the highest rate of ownership in Urban Governorates (14%) and the lowest rate in rural Upper Egypt (4%). Relatively few households have a motorcycle (1%). Rates of ownership of bicycles vary from 20% in rural Upper Egypt and 21% in rural Lower Egypt to only 2% in Urban Governorates.

As expected, households in rural areas are more likely to own land or a farm compared to households in urban areas (29% and 5% respectively).

**2.4 General Characteristics of Respondents (Table 2.5- Table 2.5a)**

This section discusses the characteristics of the survey respondents, including age, educational level, and work status. The results for ever-married women, ever-married men, and never married youth are discussed separately.

**Background characteristics of ever-married women**

Results of this survey indicate that 37% of the ever-married women interviewed in the 2006 EHCS are 30 years old or less and around one-third are 40 years old or more; there are fewer women in the 15-19 group (4%) than in the other cohorts. This was expected as many women aged 15-19 are not yet married, and hence not included in the sample of ever-married women.

Overall, 94% of ever-married women are currently married and 6% are widowed or divorced.
Regarding the educational level of women, 36% of ever-married women have no education, while 42% completed secondary or higher. Only 14% of women from Urban Governorates have never been to school, compared to more than half of women from rural Upper Egypt.

Regarding work status for women, 12% of women are working for cash. About one-quarter of women from urban Lower Egypt are working compared to 13% of women from rural Lower Egypt. Additionally, 22% of women from urban Upper Egypt are working for cash compared to 6% of women from rural Upper Egypt.

**Background characteristics of husbands**

Background characteristics of husbands are shown in Table 2.5. From the age distribution of husbands presented in Table 2.5 it is clear that husbands are typically much older than their wives. Slightly more than half of the husbands are 40 or older and only 17% are under age 30.

Husbands are also more educated than their wives. Fifty percent of husbands completed secondary or higher and only 21% of husbands have no education. One-third of husbands from rural Upper Egypt have no education compared to 8% of husbands from Urban Governorates. Additionally, husbands from urban areas are more educated than husbands from rural areas.

Ninety six percent of husbands are currently working, with 95% of husbands working for cash. Differences between regions are minimal.

Background characteristics of never-married female youth

Background characteristics of never-married female youth are shown in Table 2.5a. Due to the fact that only never-married female youth aged 15-24 were interviewed, about two-thirds of never-married female youth are in the age group 15-19 and around one-third are in the age group 20-24.

Only 10% of never-married female youth have no education. Around one-quarter of them obtained higher education. Only 20%-eight percent of never-married female youth from Urban Governorates have no education compared to 21% of those from rural Upper Egypt.

Only 7% of never-married females are currently working for cash. Nine percent of never-married female youth from urban Upper Egypt are working for cash compared to 4% of never-married female youth from rural Upper Egypt.
2.5 Television Watching Habits

Television plays a vital role in providing respondents with information. To obtain information about the role of TV as a source of information, questions were asked to assess respondents’ exposure to TV, and their preferred channels.

The results indicate that females (ever-married women and youth) are more likely to watch TV than male respondents. About 97% or more of ever-married women and female youth reported that they regularly/sometimes watch TV compared to 92% or less among male youth and husbands. Respondents in Urban Governorates are more likely than those in other regions to regularly/sometimes watch TV. Most of those who watch TV prefer channels one and two from the national/local channels. On the other hand, a substantial percentage of all groups of respondents reported a preference for satellite channels. Respondents in urban areas are more likely than rural respondents to prefer satellite channels. Data from the 2006 EHCS revealed that Rotana Cinema is the preferred channel for all groups of respondents, except for husbands who prefer Iqraa/Majd/EIN. Youth were slightly more likely ever-married women and husbands to prefer ART channels.

At least 90% of all groups watch TV, except husbands in rural Upper Egypt
In response to the government’s concern about the outbreak of Avian Influenza, the CHL program has implemented a national communication strategy to provide households with key messages about avian influenza, especially farmers and poultry breeders. This communication campaign included informative TV spots, TV programs, flyers, seminars, community meetings, and seminars at health facilities. In this regard, all respondents were asked a series of questions to identify their exposure to avian influenza messages via the different media channels and to investigate and recall of these messages. The results of those questions are presented in this chapter.

3.1 Exposure to TV Spots about Avian Flu (Table 3.1)

In response to the government of Egypt’s desire to increase public awareness about Avian Flu, three TV spots were produced. Respondents were asked if they watched a TV spot on Avian Flu during the 3 months prior to the survey. If yes, they were asked what they learned from the spots and if they discussed the spot with anyone.

The results indicate that exposure to avian influenza TV spots is higher among women and female youth than among husbands and male youth. Around 80% of women and 76% of female youth watched TV spots on Avian Flu. Respondents in Urban governorates are less likely to report exposure to Avian flu spots than those in other areas. The highest level of exposure was observed among women in Urban Upper Egypt (86%), husbands in Urban Lower Egypt (77%), female youth in rural Lower Egypt (81%), and male youth in Lower Egypt (71%).

Virtually all respondents learned something from the spots. Less than one third of all respondents either did not see the spots or did not learn anything from them.

Respondents were most likely to mention that they learned what Avian flu is, how to protect themselves from Avain flu, how to deal with birds, how to handle birds, how to identify an infected bird, the importance of hand washing, and how to deal with dead birds.

Respondents who saw the Avian flu spots were asked if they discussed the spots with anyone. The results indicate that around 18 percent of women mentioned that they did not talk about the spot. Around one-third of women in Upper Egypt did not talk about the spots compared with only around 7% in Lower Egypt. Male youth are least likely to discuss the spots (26%). Women and husbands are most likely to report discussing the spot with their spouse (48% and 57%, respectively). Male and female youth are most likely to discuss the spots with family members.
3.2 Exposure to TV Programs about Avian Flu (Table 3.2- Table 3.2a)

During the three months preceding the survey, many TV programs about avian influenza were aired. These programs explained what avian flu is, how to protect oneself, how to identify infections, and how to report suspected cases. Respondents were asked whether they saw such TV programs during the 3 months prior to the survey. Tables 3.2 and 3.2a present the results. Exposure to TV programs about avian flu is lower than exposure to the spots about avian flu. Around 45% of women, 43% of husbands, and 46% never-married female youth report watching a TV program about avian flu. Never-married male youth were less exposed to TV programs about avian flu in the 3 months preceding the survey (40%). Significant differences exist by region and urban-rural residence.

Around one third of all respondents reported that the program taught them how to protect themselves from avian flu. Around 25% of women, husbands, and female youth, and 20% of male youth learned what avian flu is and how to handle birds. 5-10% of all groups reported learning how to handle birds, how to identify an infected bird, how to deal with dead birds, and the importance of hand washing.

3.3 Exposure to Printed Media about Avian Flu (Table 3.3- Table 3.3c)

The 2006 EHCS also collected information about exposure to print media about avian flu. Respondents were asked if they read anything about the subject during the 3 months prior to the survey. In addition, they were asked if they saw any posters/flyers/billboards about avian flu in the 3 months prior to the survey. If yes, they were asked where they saw this and what they learned from it.

One in ten women read something about avian flu in the 3 months prior to the survey. Exposure among husbands, female and male youth is slightly higher (17%, 15%, and 13 percent respectively). This is may be due to the higher level of education among these latter groups.

About ten percent of all respondents reported seeing posters/flyers/brochures about avian flu. Urban respondents are more likely to report seeing those materials than rural respondents. However, the highest level of exposure to those materials was observed among women from urban Lower Egypt. Women and husbands are most likely to report seeing posters, flyers, and brochures about avian flu in health units (3%), while female and male youth are most likely to report seeing them on street (4%, and 5% respectively).

Respondents report that print media about avian flu taught them what the disease is, how to handle with birds, how to protect themselves from avian flu, and how to identify infected birds. However,
around 90% did not see posters/flyers/brochures about avian flu, or did not learn anything from them.

3.4 Exposure to Seminars/Community meetings about Avian Flu (Table 3.4)

One of the interventions adopted by the CHL program during the outbreak of avian flu in Egypt consisted of community meetings and seminars that talked about the subject. The 2006 EHCS investigates to what extent respondents were exposed to those activities, and what they learned during these meetings and seminars.

As confirmed in many previous surveys, attendance of community meetings is very low. 3% of women, 4 percent of husbands, 4 % of never-married female youth, and 1% of never-married male youth attended community meetings/seminars that talk about avian flu. Women from urban areas are most likely to attend community meetings/seminars about avian flu.

Because of the small number of respondents who attended community meetings or seminars about avian flu, we are unable to assess what the respondents learned from these meetings and seminars.
KNOWLEDGE AND ATTITUDES OF THE AVIAN FLU VIRUS

Knowing about the modes of transmission of the avian flu virus helps people understand how to protect themselves from infection. The 2006 EHCS included questions on knowledge about the ways of transmission, about symptoms of avian flu in people and birds, and about the ways to protect oneself from infection. The results of these questions are presented in the following sections.

4.1 Modes of Transmission (Table 4.1- Table 4.1a)

Respondents were asked if they know how avian flu is transmitted. The results indicate that knowledge about how avian flu is transmitted is high; around 83% of women, 85% of husbands, 86% of never-married female youth, and 82% of never-married male youth report knowing how avian flu is transmitted. Knowledge of the modes of transmission varies by region, especially for women and never-married male youth. For example, 97% of male youth in Urban Lower Egypt reported knowing how avian flu is transmitted compared to only 68% in rural Upper Egypt.

The most frequently mentioned mode of transmission is handling live birds (mentioned by 60% of women, 63% of husbands, 62% of female youth, and 59% of male youth). Touching dead birds was reported by 38-45% of respondents. Other responses, such as not cooking birds well, eating birds or eggs, were reported by 10% or more of all respondents. Around 17% of women, 16% of husbands, 14% of female youth, and 18% of male youth mentioned that they do not know a mode of transmission.

In addition, respondents were asked if avian flu can be transmitted from one person to another. Around one quarter of women and male youth and one fifth of husbands and female youth agreed that avian flu can be transmitted from person to another, with significant differences by region. For example, 10% of women in urban governorate believed this, compared with 31% in rural Upper Egypt.

4.2 Symptoms of Avian Flu Virus (Tables 4.2- 4.3a)

Respondents were asked about their knowledge of symptoms of avian flu in people and birds. The results indicate that over 75% of all respondents reported that they know the symptoms of avian flu in either humans or birds. Knowledge is lower in rural than urban areas among all subgroups.
The most commonly reported symptoms of avian flu in humans are fever (70% of all respondents). Other symptoms, such as cough, inflammation in eye bellows, congestion of the throat, and muscle pain were reported by about one third of respondents.

The most frequently reported symptoms of avian flu in birds were weakness (55%), blowzy in feathers (40%), and lack of egg production (reported by 37% of women, 36% of husbands, and 31% of both female and male youth).

4.3 Ways of Protection from Avian Flu Virus (Table 4.4-Table 4.4a)

When respondents were asked if they know ways to protect themselves from avian flu, 91% of women and husbands, 92% of never-married female youth, and 89% of never-married male youth reported that they know ways to protect themselves from avian flu. Some variations exist between regions. Two-thirds of all respondents mentioned that not breeding birds at home is the best way to protect oneself from getting avian flu. Respondents from Urban Governorates are most likely to mention this, while respondents from rural Upper Egypt are least likely to do so. One-third of all respondents noted that it is important to fully cook birds to prevent infection. Other responses include keeping children and elderly away from birds, wearing gloves or plastic bags when contacting birds or dead birds, and regular handwashing with water and soap.

4.4 Attitudes Toward Avian Flu (Table 4.5-Table 4.5a)

To investigate attitudes related to avian flu, a series of statements were read to the respondents and interviewers asked if respondents strongly agreed, agreed, disagreed or strongly disagreed with the statement. Around 95% of all respondents agreed or strongly agreed that getting infected with avian flu would be very serious. Only around 25% of all respondents agreed or strongly agreed that it is possible to get infected with avian flu. Most respondents agreed that careful handling of birds is an effective way to avoid infection with avian flu (82% of women, 83% of husbands, 85% of never-married female youth, and 79% of never-married male youth). Few respondents agreed that it is possible that the avian flu problem will increase in the coming years (27% of women, 25% of husbands, 26% of female youth, and 31% of never-married male youth).
The Avian Influenza communication strategy developed by the Communication for Healthy Living project included a number of messages about the precaution to be taken by Egyptians to avoid contracting avian influenza, and about safe ways to handle and dispose of birds. Thus, the survey collected information to assess the impact of this communication campaign on behavior change.

This chapter examines practices related to bird handling and ownership. In addition, the chapter looks at self-reported behavior changes related to bird keeping and handling.

5.1 Bird keeping at home (Table 5.1-5.1c)

Eligible respondents were asked if they had birds at home at the time of the interview and if so where they keep them. In addition, if respondents reported that they do not keep birds at home they were asked if they had birds at home during the 6 months prior to the interview.

Table 5.1 presents the percentage of respondents who reported having birds at home. Slightly less than one-fifth of respondents mentioned that they had birds at home at the time of the interview. Among those who keep birds at home, around 3 in 5 respondents mentioned keeping the birds in a cage inside the house, either in one of the rooms, on the roof, or courtyard. One-quarter of respondents mentioned that birds were kept in a cage outside the house (in a courtyard or the roof).

About two-fifth of the respondents mentioned that they had birds during the 6 months prior to the survey (i.e., around 40 percent got rid of the birds they had). Almost all respondents mentioned that the birds were slaughtered for food (96 percent or more).

5.2 Behavior changes (Table5.2-5.2c)

Respondents were asked about changes in practices related to keeping and handling birds in the past 3 months preceding the survey. Those practices include avoiding contact with birds, keeping children and elderly away from birds, talking with others about ways to protect themselves against avian flu, practices related to handling birds and eggs, and reporting dead birds to authorities.
Table 5.2 shows that the most commonly reported behavior change in the preceding three months was to discuss with others how to protect oneself from avian flu (70 percent of women, 71 percent of husbands, 69 percent of never-married female youth, and 61 percent of never-married male youth).

Slightly more than half of women and never-married female youth reported avoiding contact with birds. Half of husbands and 47 of never-married male youth also reported avoiding contact with birds during the past 3 months preceding the survey.

Female respondents were more likely to report washing their hands with soap after preparing poultry for cooking, handling poultry and eggs differently, and washing kitchen utensils more carefully after preparing poultry for cooking (58 percent of more among women and 4 in 10 never-married female youth).

5.3 Behavior changes among respondents who have birds at home (Tables 5.3-5.3a)

Respondents, who mentioned that they had birds at home at the time of the interview, were further asked if they changed their behavior or took precautions to avoid infection. Information was collected about changes in how birds are handled, in how birds are kept, and in keeping children and elderly people away from birds.

Forty-eight percent of women, 42 percent of husbands, 54 percent of never-married female youth and 38 percent of never-married male youth mentioned that they changed the way they handle birds. Among respondents who have birds at home, only about one-third of women, 30 percent of husbands, 29 percent of never-married female youth, and 15 percent of never-married male youth reported caging the birds. Around two-fifth of women, husbands and never-married female youth, and one-fifth of never-married male youth mentioned that they kept children and elderly people away from birds.

5.4 Reporting the Infected Cases (Tables 5.4-5.4a)

Respondents were asked what to do if they got infected with avian flu, 98% mentioned going to the nearest hospital. Similarly, most respondents reported that if someone in the family got infected, they should be taken to the nearest hospital.

Relatively few people said they would report people who keep birds at home to the authorities, or that they would report it if they found a dead bird. 48% reported not doing anything if they know that someone is keeping birds at home or if they found dead birds in the street. However, around one-third reported that if they find dead birds in the street they will report it to the authorities.
Promoting healthy lifestyles for households is one of the main objectives of the CHL program. To encourage healthy behaviors and lifestyles, the program aims to increase demand for health services. Thus, with these objectives in mind, CHL communication messages promote handwashing, use of safe injections, avoiding smoking or second-hand smoke, and use of antenatal and postnatal care. Exposure to such messages was investigated in the survey to monitor the reach of those messages.

6.1 Exposure to Messages about Hand Washing (Table 6.1)

Respondents were asked if they saw any messages during the 6 months prior to the survey about hand washing. The results show that around half of women and never-married female youth saw a message about hand washing; husbands and never-married male youth are less exposed to such messages (around 40% of both). Most of those who reported that they were exposed to such messages mentioned that they saw it on TV. Only 4% of women and female youth, and 2% of husbands and male youth reported they heard the message on the radio.

Women are most likely to recall messages about hand washing before preparing food (32%), followed by hand washing to prevent disease (29%). Husbands, female youth, and male youth are most likely to recall messages encouraging hand washing to prevent disease (26%, 31%, and 24% respectively), followed hand washing before preparing food (20%, 27%, and 19% respectively). Messages about hand washing before eating and after defecation had lower recall.

6.2 Exposure to Messages about Safe Injection (Table 6.2)

Several communication programs provide information about safe injections, with the aim of reducing Hepatitis infections. To assess the extent to which efforts to inform Egyptians about safe injection practices are succeeding, all respondents were asked if they saw or heard any messages about safe injections during the six months preceding the survey.

Overall, exposure to safe injection messages was lower than exposure to messages about hand washing. Around one-third of women, husbands, and female youth were exposed to such messages, mainly on TV. However, male youth have lower exposure (around 25%).

The most frequently recalled message was that one should not share or reuse needles; which was reported by around 25% of women, husbands, and female youth and only 20% of male youth. Respondents also recalled messages indicating that hepatitis C, tetanus, HIV/AIDS can
be spread by infected needles (19% or less), that one should ask providers to use disposable needles (15% or less), or purchase a disposable syringe for the provider to use (10% or less).

### 6.3 Exposure to Messages about Second Hand Smoking (Table 6.3)

Non-smokers who are exposed to second hand smoke have a higher risk of suffering of heart disease than those who live and work in a smoke-free environment. Accordingly, to assess awareness of the risk of second hand smoke, the 2005 EHCS questionnaire included questions asking whether the respondents heard/seen any message about the health effect of second hand smoke during the six months preceding the survey from different sources. Those who had been exposed to such messages were asked to recall messages.

Around half of all respondents exposed to second hand smoking messages during the 6 months prior to the survey, mainly on TV. Differentials by region are limited.

Three main messages were recalled by all respondents; the most frequently one was smoking endangers the health of people around smokers which was reported by around 40% or more of all respondents, followed by diseases caused by second hand smoke; which was reported by more than one third of respondents. The other recalled message was effect of smoking on children and pregnant women which was mentioned by much lower percentages.

### 6.4 Exposure to Messages about Antenatal Care (Table 6.4)

Respondents were asked if they seen/heard a message or received any information about antenatal care during the 6 months before the survey, and what messages they received. Exposure is quite high among women only however, among other respondent is low. The main source of information is TV; other sources were reported by very low percentage. Significant differences are clear between regions and urban rural. Respondents from rural areas are more likely to expose to antenatal care messages than urban respondents, especially for never-married female and male youth.

The recall messages reported by respondents were mainly; importance of antenatal care, number of times a pregnant women should receive ANC, and danger sings during pregnancy. Those messages were recalled by around 25% of women or more, however lower percentages of husbands, female youth and male youth recalled those messages.
6.5 Exposure to Messages about Postnatal Care (Table 6.5)

The 2006 EHCS respondents were asked if they received information about postnatal care during the 6 months preceding the survey. The exposure to postnatal care information is very low. The highest level of exposure was observed among women (21%), and female youth (15%). Exposure among husbands and male youth are much lower (10% and 5% respectively). Variations are clear between regions. The main source of information is the TV among all respondents.

The recalled messages mentioned by women were; need to check mother’s health (18%), need to check child’s health (18%), early detection of disease (7%), and when mother should start use of family planning (5%). Same messages were recalled by husbands, female and male youth.

6.6 Exposure to Messages about Family Planning (Table 6.6)

Respondents were asked if they saw/heard or received any information about family planning during the 6 months prior to the survey. The majority of women reported receiving information about family planning during the 6 months prior to the survey. The main source of FP information is the TV (74%), followed by “from a family member and friends” (17%) and “from a health worker at a health facility” (15%). Differences are minor between regions. Exposure among never-married female youth (68%) is lower than among women, however, exposure is much lower among husbands and male youth (59%, and 50% respectively).

The most frequently messages recalled by all respondent was knowledge of FP methods, which was reported by around two-thirds of women, around half of husbands and female youth, and by more than one-third of male youth. Benefits of small family was recalled by a significant percent of respondents; 22-33% of all respondents. Other messages were recalled but with lower percentages; Spacing births 3-5 years, and using FP after birth of first child.

6.7 Exposure to Messages about HIV/AIDS (Table 6.7)

Respondents were asked if they have heard/seen and information about HIV/AIDS during the six months preceding the survey. The results of the 2006 EHCS show that never-married male and female youth are more likely to see/hear information about HIV/AIDS (about 30% )than women and husbands do (21% and 25% respectively). All respondents reported TV as the source of information they received about HIV/AIDS. Minor variations were observed between regions.

The most frequently message the respondents reported seeing/hearing is how HIV/AIDS is transmitted, which was reported by 17% of all women, 21% of husbands, 22% of never-married female youth, and 25% of male youth. The other message which was reported by all respondents is How to avoid getting HIV/AIDS which was reported by almost same percentages (16% among women, 20% among husbands, 20% among never-married female youth.
6.8 Exposure to Health Campaigns (Tables 6.8-6.10)

One of the objectives of the EHCS 2006 was to monitor the level of exposure to health communication activities in Egypt that can be used to assess the impact of such programs on health knowledge, attitudes, and behaviors. Specifically, the survey aimed to collect data that can be used to inform the design of the Communication for Health Living Project, and to help measure its reach and impact.

The 2006 EHCS remedies by asking respondents very detailed questions about exposure to health communication activities, especially; family doctor spot, youth health is your wealth slogan, and Issal Istasher. The results are presented in Tables 6.8-6.10.

Exposure to family doctor spot is very low, only 17% of women and never-married female youth mentioned that they saw such a message on TV, while 14% of husbands, and 13% of male youth reported seeing the spot on TV. Family’s doctor is available in every health unit is the messages recalled most by all respondents. Other messages were recalled by only 7% or less among all respondents; Among theses messages are Family’s doctor will be a private doctor for all family members to check their health, there will be a file for the history of diseases and their reasons for each family member, sharing in the cost of treatment in
Family’s doctor system, and family health clinics will include all kinds of examinations. Variations are clear by region.

Exposure to your health is your wealth slogan is significantly more than family’s doctor. More than half of women and never-married female youth have seen/heard your health is your wealth (around 55%, 60% respectively), and close to 50% of husbands and male youth admitted seeing/hearing it. The main source of their exposure is TV, 5% of respondents reported other sources; newspaper, posters, and in health facility.

As for Isaal Istashir spot, around 60% of women, and never-married female youth have ever seen the spot, around 10 percentage points higher than exposure among husbands and male youth. Exposure to Issal Istashir spot is higher in Upper Egypt compared with other regions. The main source of exposure as usual was TV followed by pharmacy or clinic. For example 55% of women reported that they saw the spot on TV, while 20% reported that they saw it on pharmacy or clinic. Same pattern was observed among other respondents. The most frequently messages recalled about Issal Istashir are; Advise people to consult a doctor/pharmacist about problems/inquiries, consult a doctor/pharmacy/medical center that has the symbol of "isaal istashir, and Describes/promotes use of FP methods. Those messages were reported by 11% of all respondents or more.

6.9 Safe Practices Changes

A series of questions were asked to respondents in the EHCS 2006 to assess their behavior in the main area of concern to CHL. First respondent were asked if they called the hot line to get information about AIDS, if visited a health facility to get information or advice on AIDS, wash hands more to protect from diseases, purchased disposable syringes, and asked provider if he uses disposable syringe. The results indicated that less than 1% of respondents called the hot line to get information about AIDS. Women and husbands are more likely to go health facility to get advice than youth do, where 3% of female and male youth visited a health unit to get information or advice on AIDS compared with 4% among husbands and 9% among...
women. Surprising respondents from Upper Egypt, especially rural, are more likely to report contacting health units to get information or advice about AIDS.

Practices related to health hygiene and safe injections are more common. Around one quarter of male respondents reported washing hands more to protect from disease, and by around one third of female respondents.

Around 25% of all women and one-fifth of husbands reported purchasing disposable syringe’s, which is almost double the percentage among youth (12% of females, and 14% of males). Seven percent of women and 6% of husbands asked providers to use disposable syringes, compared with 2% of youth (male and female).

Some other practices were asked about to all respondents including; creating non-smoking areas, avoid second hand smoking. Only 7% or less of all respondents reported creating a non-smoking area in their home, with no significant differences between regions, except Urban Upper Egypt, where around 18% of women and husbands mentioned creating a non-smoking place. The percentage of respondents who reported that they avoid second hand smoking varies from around 22% of women, 20% of female youth, to 17% of male youth, and 13% of husbands. The percentage of respondents who reported avoiding second hand smoking was more common in rural than in urban areas.

Other practices were addressed to women only; family planning use went for antenatal care, and for postnatal care. The results indicated that 9% of women went for ANC and only 4% went for postnatal care. The percentage of women who used FP methods is much higher (29%). Some differentials were observed between regions.