

Highlights from the K4Health Global Online Survey

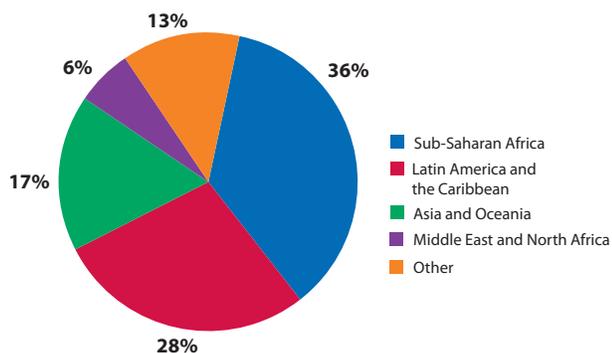
The global online survey is one component of a larger needs assessment undertaken by the Knowledge for Health (K4Health) project, which seeks to bring relevant, evidence-based information to professionals working in family planning and reproductive health (FP/RH) in international public health settings. Results of the survey and the other components of the needs assessment will provide insight into the design and implementation of health information programs at the global, regional, and local levels.

The global online survey was conducted in three languages—including English, French, and Spanish—from March 25, 2009 to April 24, 2009. The survey was disseminated via email announcement to public health organizations and relevant listservs. The survey instrument included 39 questions about respondents' information needs, preferences for obtaining and sharing health information, and use of information and communication technologies (ICTs).

Survey Participants

A total of 808 health professionals, equally divided between men and women, responded to the survey. Ninety percent work in international public health settings (see Figure 1). A reliable Internet connection was needed to complete the survey, which biased the sample toward more educated health professionals working in urban areas. Those who participated reported serving as program managers (27%), technical advisors (20%), service providers and clinicians (13%), teachers and trainers (13%), and researchers and evaluators (12%). Over 80% have a master's or more advanced degree.

Figure 1. Distribution of respondents, by region



Over 40% of respondents are affiliated with non-governmental and private voluntary organizations (NGO/PVOs), 20% with academic and research institutions, and 20% with government ministries and agencies. Over 65% of respondents work in one of four programmatic areas: health service delivery; research, monitoring, and evaluation; health systems strengthening; and health communication. Most respondents are currently engaged in FP/RH, maternal and child health (MCH), and HIV/AIDS.

Reported Needs

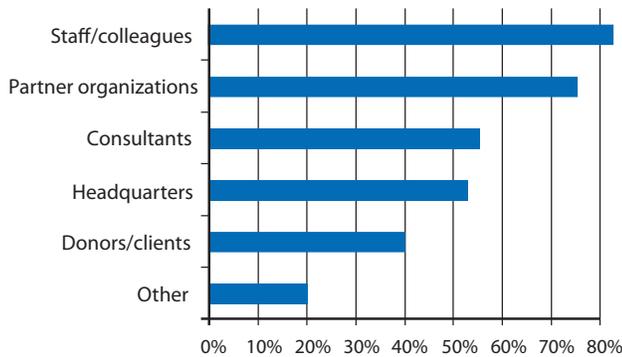
Survey respondents expressed a wide variety of information needs in order to do their jobs, including:

- The top four FP/RH information needs, which include adolescent reproductive health (54%); integrating FP with maternal and child health (51%); community-based FP services (49%); and integrating FP with HIV/STI care and prevention (49%).
- The top four HIV/AIDS topics, which include prevention among youth (47%); integrating FP with HIV/STI care and prevention (46%); prevention of MTCT of HIV (44%); and health systems strengthening (42%).
- The top four program management topics, which include evidence-based programming (64%); behavior change communication (63%); staff training, supervision, and motivation (61%); and performance and quality improvement (58%).



Respondents largely rely on fellow staff and colleagues (84%) and partner organizations (80%) for health information (see Figure 2). They are less likely to get information from consultants (58%), headquarters (47%), or donors and clients (47%). Program managers and technical advisors are more likely than others to obtain information from donors and clients. There is greater reliance on partner organizations in sub-Saharan Africa (SSA) and on consultants in North Africa and the Middle East (NA/ME).

Figure 2. Sources of health information

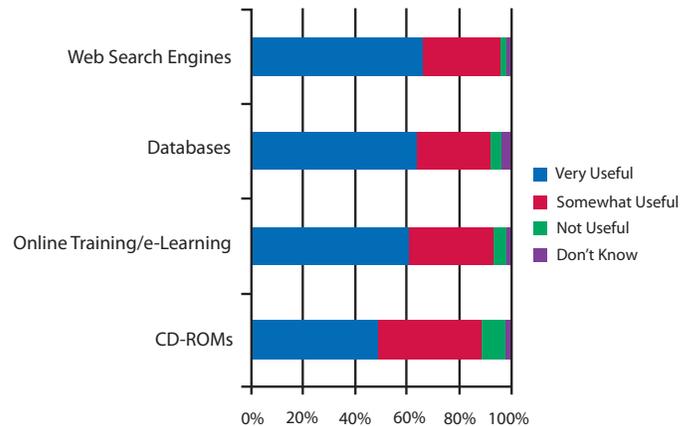


The survey revealed clear preferences for certain information resources:

- Among print materials, respondents consider research and journal articles the most useful resource for obtaining health information. However, 90% also regard a wide range of other print materials as somewhat or very useful, including handbooks, implementation guides, fact sheets, reviews (especially in Asia/Oceania), training curricula (especially in NA/ME), charts, illustrations, and checklists. Handbooks were especially valued by service providers and teachers and trainers.
- The vast majority of respondents consider all forms of interpersonal communication to be somewhat or very useful, but they favor technical assistance and workshops over professional networks, conferences, and meetings. Workshops were especially valued in NA/ME; this was the only international public health setting that ranked workshops ahead of technical assistance.
- Web search engines are considered the most useful electronic resource, followed closely by databases, online training and eLearning courses, and CD-ROMs (see Figure 3). Among the four resources, service providers are far more likely than others to regard online training and eLearning as a very useful resource, while researchers and evaluators value databases more highly than other respondents. However, more than 80% of respondents also find several other electronic resources to be at least somewhat useful for obtaining health information, including online discussion forums, online conferences, online communities of practice,

and listservs and discussion groups. They are less enthusiastic about video clips and YouTube, social/professional networking Web sites, and instant messages. SMS messaging, Web logs, online chat, and RSS feeds are at the bottom of the list.

Figure 3. Usefulness of electronic resources for obtaining health information



According to respondents, the amount of information available in print and on the Internet poses the greatest barrier to accessing up-to-date and accurate health information. They reported that it is difficult to determine which sources are the most relevant and appropriate for a given purpose. Time is also a constraint because many are too busy to conduct thorough information searches. Other barriers include inadequate access to computers, slow and unreliable Internet connections, and the high cost of full-text journal articles.

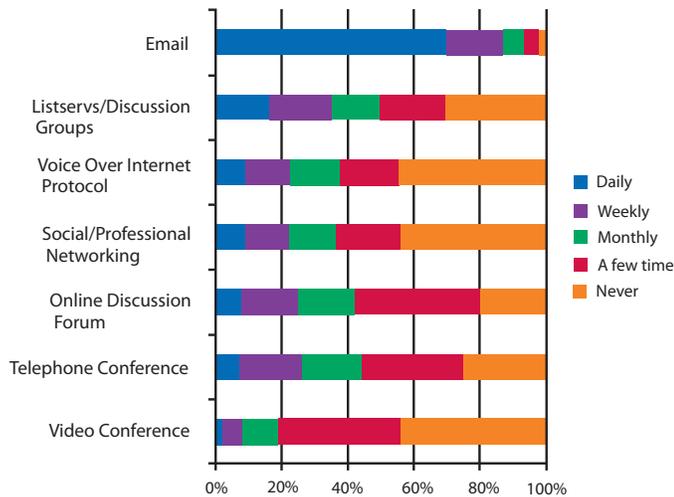
Information Sharing

Email is the most widely used method to share information. As Figure 4 shows, email is the most common method respondents communicate with professionals in other locations—65% of respondents use email daily. Other technologies—including listservs, social or professional networking Web sites, online discussion forums, Voice Over Internet Protocol (VoIP), and telephone conferences—are used, but more often weekly, monthly, or just a few times annually. Teachers and trainers are more likely to use listservs and online forums than other respondents, while technical advisors and program managers rely more heavily on telephone conferences. Respondents working in government are less likely than others to use email on a daily basis. Those working for academic institutions and NGO/PVOs are more likely than others to use listservs and online discussion forums, although not on a daily basis.

Regardless of job, organizational affiliation, and region, respondents also strongly prefer receiving health information by email. The other most popular options for receiving information are from Web sites, interpersonal communication, and print documents.

Although CD-ROMs are the second choice of teachers and trainers, others ranked them relatively low. E-books are also unpopular, and SMS messages are respondents' last choice, regardless of their job function. Respondents working in government have a stronger preference for print documents than others, and respondents at USAID missions are more likely to prefer interpersonal communication.

Figure 4. Technologies used to communicate with other professionals



Over 65% of respondents develop health information products—including manuals, articles, guidelines, and curricula—as part of their work. They see a clear need to adapt health information products and make them more appropriate to the local context, which includes editing the text, translating it, and changing the design and layout. Many challenges to developing and adapting health information products remain, including:

- Poor access to up-to-date, evidence-based information and difficulty in identifying quality resources from the information available;
- Lack of financial and human resources;
- Lack of templates, guidelines, and training to conduct this kind of work;
- Lack of time;
- Limited access to relevant software and the Internet, as well as a lack of technological expertise; and
- Weak capacity to tailor health information products to the target community.

Respondents in LAC are less likely than those in other regions to develop health information products and also reported not having a need to do so.

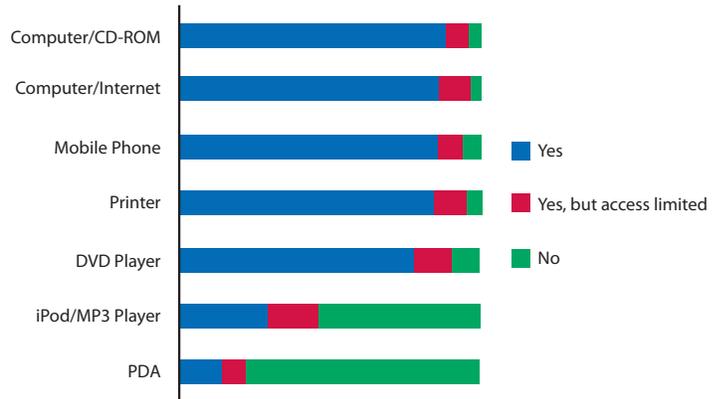
Information Technology Devices Used

Computers and the Internet

Over 80% of respondents have unrestricted access to computers with CD-ROM drives, Internet connections,

and to printers that can be used for work-related activities (see Figure 5). This is not surprising since the survey was conducted online. Access to computers is highest in Asia/Oceania and NA/ME and lowest in SSA. Service providers have less access than other respondent to computers. Nearly all respondents (97%) use computers that run Microsoft Windows, and 80% use Internet Explorer.

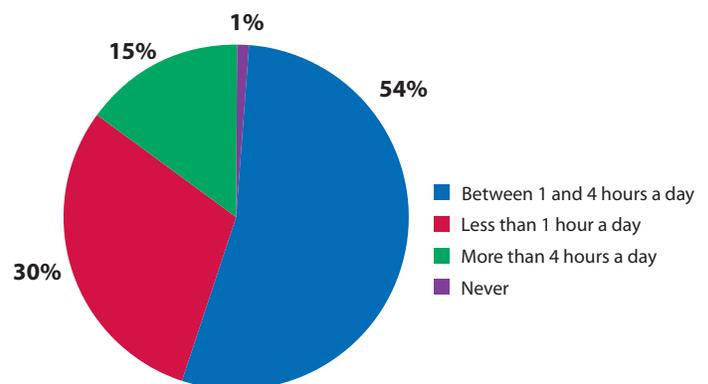
Figure 5. Access to Information Technology (IT) devices



Regardless of their jobs or organizational affiliations, most respondents rely on computer-related technologies rather than paper files to store work-related information. The top three storage locations are personal computers (61%), an organizational Web site or Intranet (11%), and a flash drive or memory stick (9%).

Sixty-nine percent of respondents spend more than one hour daily searching for and sharing health information on the Internet (see Figure 6). Program managers tend to spend less time on the Internet than other respondents, and little difference was reported between regions.

Figure 6. Time spent on the Internet



About 37% of all survey respondents—and nearly 50% of service providers—are familiar with Web-based collaborative writing tools, such as Google Docs. Twenty-five percent of respondents are familiar with Web-based project management tools, such as Sharepoint. Respondents at

NGO/PVOs are the most knowledgeable about Web-based project management tools. Knowledge of both kinds of Web-based tools is relatively high in NA/ME. Respondents in LAC are the most likely to be familiar with collaborative writing tools but the least likely to be familiar with project management tools.

Mobile devices

The majority of respondents have unrestricted access to mobile phones (87%) for work-related activities, but not to iPod/MP3 players (31%) or personal digital assistants (PDAs) (15%). Teachers and trainers, service providers, and those affiliated with government agencies are more likely to have access to mobile phones than computers. The reverse is true for other jobs and types of organizations; however, SMS messaging is not considered very useful for obtaining information and is the least preferred method to receive health information.

Implications for Health Information and Knowledge Management Programs

Health information programs aim to make the latest research evidence and programmatic innovations readily accessible to multiple audiences. Understanding intended audiences and their content and format preferences is crucial; however, few programs have invested substantial resources to systematically measure such needs to guide program design.

This survey attempted to collect feedback from a wide range of audiences representing different professional, technical, and geographic areas globally. The methodology used provided access to specific types of health care professionals (e.g., technical advisors, program managers, and higher-level service providers), who have reliable Internet access and are connected to the global health agenda and current research findings and technical guidance. Despite the survey's limited reach, it is important to note that respondents likely play a key role in effectively informing, facilitating and persuading front-line health care providers to adopt new knowledge and practice to improve service delivery.

Health program designers and implementers can use the results of this survey to:

- Develop a variety of activities and tools to help health care professionals identify, capture, synthesize, and communicate knowledge at the global level;
- Tailor and repackage information products and services to meet specific health information needs of specific groups of health care professionals;
- Identify innovative and appropriate technologies and channels—Internet-based, mobile, or interpersonal—to widely disseminate and share knowledge in a cost-effective way; and
- Inform the design of needs assessments focusing on specific audience groups or settings.

Key Findings

- The top FP/RH information need was for adolescent reproductive health, followed by integrating FP with maternal and child health, community-based FP services, and integrating FP with STI care and prevention;
- The most useful electronic resource was Web search engines, followed closely by databases, online training and eLearning courses, and CD-ROMs;
- The most preferred method to receive health information was by email;
- The majority (80%) of respondents have unrestricted access to computers with CD-ROM drives, Internet connections, and to printers that can be used for work-related activities; and
- The majority (87%) of respondents have unrestricted access to mobile phones for work-related activities.



Knowledge for Health

K4Health is implemented by the Johns Hopkins Bloomberg School of Public Health Center for Communication Programs (CCP) in partnership with Family Health International (FHI), and Management Sciences for Health (MSH).
www.k4health.org