## Table 3 Themes and representative comments from the public health expert key informants (n = 13) for the three areas of inquiry, 2015–16

Theme	Representative comments
Area of inquiry 1: Knowledge and skill sets frequently used in surveyed public health organizations	
Basic public health science (knowledge) and associated skills	"With frequent epidemics in KP [i.e. in this region], our team is routinely involved in epidemics investigation."  "Our organization leads the efforts to deal with nutritional and MNCH related emergencies which are quite frequent in our disaster-prone province."  "Here [in our organization], the quality assurance and monitoring and evaluation functions are taken very seriously and are frequent."
Communication and writing skills	"Writing – be it proposal writing or just a simple report – is the single most important activity done in our organization."  "To be successful here [in our organization], you must be a people person with good interpersonal skills and an ability to work in diverse communities."
Analytic skills	"Literature review, or information gathering in general, is a frequent task assigned to our employees."
Health management skills	"Management of the community staff in the field is something we do on daily basis."  "Our immunization-related field workers have most often got basic nonmedical qualifications. With increasing distrust among communities regarding immunization, managing this human resource poses additional challenges."
Area of inquiry 2: Knowledge and skill sets that the fresh graduates most commonly lack	
Lack of practical public health skills	"Most of them [the existing public health graduates in Pakistan] are lecture-based trainees and have no hands on experience."  "Almost always we end up giving the practical skills from scratch."
Deficient theoretical knowledge	"If you are trained in Pakistan, I would like you to know at least the basics of communicable disease control, and epidemics investigation."  "In my opinion, the graduates have limited knowhow of the existing health policies at the provincial or even national level."  "Our [locally trained] graduates are not aware of the local public health infrastructure."
Communication-related skills	"In Pakistan, when you are working in the field for promotion of vaccination or family planning, good interpersonal communication skills are vital. That's why we cannot afford someone with poor communication skills."  "Evaluation of MPH graduates should be on the basis of assignments that check critical thinking in addition to writing skills. It doesn't seem like it's being done"
Limited information technology orientation	"Forget about a hi fi [sic] data [management] software, the graduates don't know the basic [MS] Excel [functions]."
Area of inquiry 3: Knowledge and skill sets that will get increasingly relevant in near future	
Health system strengthening with system thinking mind set	"Skills related to drafting and implementing contracts will become important in future. Government will have to make contractual agreements with private sector partners [for health care delivery], we [public sector] just can't do it all."  "Skills required for leading change in a constantly evolving [Pakistan's] health system are desperately required of public health professionals."
Health care information technology	"There is a strong [international donors'] push towards transparency and accountability; and to ensure efficient documentation and reporting information technology's role will grow."
Leadership and management skills  KP = Khuber Pokhtunkhum	"With the state of law and order, and community distrust we have in Pakistan, cultural competence becomes even more important."  "We will need growing number of experts that can lead response teams for health related emergencies."

KP = Khyber Pakhtunkhwa.

MNCH = maternal, neonatal and child health.

MPH = Master of Public Health.