

ASSESSMENT OF SKILL-MIX REQUIREMENT OF ESP



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Executive Summary

Introduction and background of the study

The National Health and Population Program of Bangladesh aims at attaining the goal of improved health and family welfare status among the most vulnerable women, children and the poor. The main purpose of the program is to achieve client-centered provision and client utilization of an Essential Services Package (ESP), which include five broad components: Reproductive Health Care (RHC), Child Health Care (CHC), Communicable Diseases Control (CDC), Limited Curative Care (LCC), and Behavioral Change Communication (BCC).

Government provides ESP services at the upazilla level and below through the Upazilla Health Complexes (UHCs), Maternal and Child Welfare Centres (MCWCs), Union Health and Family Welfare Centres (UHFWCs), Rural Dispensaries (RDs), and Satellite (SC) and Community Clinics (CCs) under its Directorates of Health and Family Planning.

In order to deliver the ESP services at the mandated level at various services outlets (UHC, MCWC, UHFWC, RD, SC, CC) a certain amount of skill-mix of the service providers is required. However, not much is known about actual the skill-mix situation of the various categories of service providers entrusted with the responsibility to provide ESP services. This assessment commissioned by the Human Resources Development (HRD) Unit of MOHFW is intended to fill-in that knowledge gap by providing information on skill-mix to the policy makers to facilitate informed policy making on service-mix, staffing and capacity building.

Objectives of the study

The overall objective of the study was to assess the skill-mix required for the health and FP personnel for implementing ESP at the Upazilla level and below. The specific objectives of the study were to assess the skills required to deliver the ESP; to assess the skills the ESP staffs currently have; to assess whether the existing curricula, courses and training manuals at various levels contribute to the development of skills; and to assess the difference between the skill-mix currently available and skill-mix required.

Methodology

In order to assess the skills-mix requirement of the ESP providers at the Upazila, union and community levels the study covered three categories of sample: facility, provider and manager. Both the qualitative and quantitative techniques for data collection were used including interview questionnaires, FGD guidelines, and service availability checklists (with observation).

Six UHCs were randomly selected with one from each administrative division. One UHFWC, one RD, and one CC were selected on random basis from each selected Upazila. In addition, there was a sample of 6 MCWCs in the study one from each administrative division, The *provider samples* included doctors, nurses and health and family planning workers. A total of 18 categories of service providers in the five types of facilities were interviewed. The *management sample* included a sample of management personnel of ESP service at the Upazila, District and National level.

In congruence with the objectives of the study, an exhaustive list of variables containing 5 areas, 34 sub-areas, 92 sub-sub areas pertaining to the ESP services by various service providers engaged at different levels of facilities has been prepared by the research team.

In order to complete the field data collection activities successfully, six Research Assistants with medical background (MBBS) were deployed. These research assistants were monitored by Research Associates cum Quality Control Officers (QCOs). Appropriate training to the field personnel was conducted by the PI, Consultants and HRD team for appropriate data collection.

Field operations in the study was carried out using six teams - in six districts, namely, Kishoregonj, Kushtia, Nilphamari, Sylhet, Pirojpur and Noakhali and in six Upazilas namely, Austogram, Kumarkhali, Syedpur, Bianibazar, Mothbaria and Begumgonj

FINDINGS OF THE STUDY

Background information of the respondents

Majority of the RMO, MO, MA/SACMO, HI, FPI, AHI and HA were male, and all the Sr. FWV/FWV, Sr. Staff Nurse, FWA were females. Except FPI, the average length of services of all the service providers was within the range of 25 years. Forty percent had the service length of 21 to 25 years, and rest 26 years and above.

Average *length of service* in current office for the managers was 12 years with UHFPO 18.3 years and MOMCH only 2.2 years. Average total length of service was between 23 and 27 years in case of UHFPO, DDFP and CS; and the same was around 9 years for MOMCH and UFPO.

The average *age* of service providers interviewed was 41.3 years. AHI, FPI, and HIs had higher average of 51, 49 and 48.4 years respectively, and Senior Staff Nurse had the lowest average age (32.5 years).

Almost all the service providers interviewed were married, except 14 percent MOs and 12 percent Sr. Staff Nurse.

Educational qualification and training received

Managers: Two-thirds and above of the managers reported that during the last 3 years they attended some training. "Management development training" was most cited one, followed by 'Training on UMIS'.

Service Providers: On an average, 83 percent of the service providers reported that they had received at least one training or orientation on HPSP during three years preceding the study. All respondent RMOs, MO (CL)s, MA/SACMOs, FPIs and HAs had received one to two training. Among the MO(CL)s, three-fifths received two or more training. One-third of Sr. FWV/ FWVs, one-fourth of Sr. Staff Nurse, three-fifths HI, one-fourth of FPIs, AHIs, HAs and one-third of FWAs interviewed reported of having two or more training/orientation during the same period.

Duties/responsibilities and job description

More than four-fifths of the medical officers from the service provider category – RMO, MO and MOI(CL) reported that they were aware of their duties/responsibilities according to the current

job description. Many of those joined new to the health service were unaware of job descriptions. In some instances, the MOs were given the current charge of RMOs.

Among non-doctor service providers FWA, HA, AHI and HIs reported to be highly aware of their duties/responsibilities according to the current job description. Job description was one of the topics discussed in the orientation sessions and/or basic in-service training courses under the HPSP.

Awareness of components and sub-components of ESP as part of job description

Overall the service providers reported that they are more or less aware about the broad components of ESP as part of their new job description. But their awareness level appeared to be highly diverged on the sub-components of ESP, and similar variations were also observed among different categories of service providers.

Overall, the medical graduates, SACMOs and FWVs were found more aware of different elements of **Safe Motherhood sub-component** under the **Reproductive Health** component of ESP. For the rest of the service provider categories the job description assigned them the role of referrers; the respondents informed that they were aware of their duties.

The **family planning sub-component** of ESP consisted of nine elements. The service providers of almost all categories except the MO (CL) were less aware about side effect management, post-abortion care and contraception, and referral.

Almost all categories of service providers were more or less aware of their role in providing BCC related to **prevention and control of RTI/ STD/ AIDS**. Less of the RMOs, MA/ SACMOs and Sr. FWV/ FWV, and more of MOs, and MO-CLs reported to be aware on promotion of condom for prevention and control of RTI/STD/AIDS. Others were found to be mostly ignorant about the same. The awareness level on syndromic management, counseling and referral sub- sub components were found to be very low.

Almost all categories of service providers, ranging from one-fifth to more than half reported their awareness on various elements of **maternal nutrition** sub component as part of their revised job description under HPSP.

MO (CL)s and Sr. Staff Nurses appeared to be less informed of **post abortion care** and prevention of unsafe abortion.

Regarding IEC/ BCC on **adolescent health** issues the doctors were found to be well aware about their responsibilities. Other categories were found to be less aware of the same.

Around half of the providers reported providing **IEC/BCC on infertility** to husband and wife as a part of their job. However, only a few reported that **prevention and treatment of secondary infertility** as job part under infertility sub-component.

Around half of the doctors and much lower proportion of others were informed dealing with **neonatal care** sub-component as part of their job. Awareness about umbilical cord care, thermal control of new born, management of birth asphyxia, routine eye prophylaxis, special care of preterm and low birth weight babies as part of responsibilities according to job description had been reported rarely.

For **ARI related IEC/ BCC activities** in the Child Health Care (CHC) component of ESP the awareness level varied from 16 to 60 percent. One-fourth of the FWAs and more than two-fifth of the HAs were found to be aware that **diagnosis and treatment of ARI** is a part of their assignment under ESP. Paramedics and other categories were found less aware about managing severe cases. Most of the RMOs, MOs, MO (CL)s, MAs, and half of FWVs, Nurses were aware of plan A,B, and C for ARI. Awareness of referral of the severe ARI cases was found satisfactory.

Over two-thirds of the FWAs and HAs, almost half of the MA/ SACMOs and over one-third of the MOs informed their awareness about **EPI related BCC**. Awareness of activity related to women TT had been observed among all service providers except HAs and FWAs. It was also low for adolescents TT.

Almost half of the doctors, two-fifths of the MAs/SACMOs, and half of the HAs and FWAs expressed their awareness about providing **Vit-A to infants** during EPI session. However, the awareness about provisioning of vitamin-A to post-partum women was significantly low.

Only one-third of the RMOs, MOs, MO (CL)s each reported their awareness about case management of ARI, diarrhoea, measles, malaria, and malnutrition as part of **IMCI**. While the other categories of service providers were reported to be ignorant about the same. Respondents were found, in general, aware of prevention of childhood-malnutrition as part of their job description under ESP.

More than two-thirds of the doctors informed their awareness about **school health program**. Near about one-half of the MA/ SACMOs shared the same. It was only one-eighth in case of the FWAs.

One-sixth to one-third of the service providers reported aware of **tuberculosis** related BCC/ IEC activities as part of their job for providing CDC under ESP care. More than two-thirds of the doctors, less of the MA/SACMOs and few of the FWVs, FWAs and HAs reported that they are aware of the fact that diagnosis of tuberculosis is a part of their job description.

Treatment and referral of tuberculosis as part of job was mentioned by half of the RMOs, and more of MOs and MO-CLs. Treatment for the same was mentioned by a lower proportion and referral by a higher proportion. Awareness of follow-up of the tuberculosis cases had been reported by a low proportion. Almost analogous level of awareness among different categories of service providers was observed in case of **Leprosy**.

Awareness about the sub-components -- **Malaria, Filaria and Kala-azar**, among different categories of service providers, was observed to be low than the other CDC sub-components stated above.

Overall awareness about different elements of intestinal parasites sub-component was relatively high among most service providers category.

Although half of the HAs and FWAs each reported that they considered **BCC activities related to STD/RTI-HIV/ AIDS** as part of their job, it was far low in case of others. Their consideration of **diagnosis, treatment of STD/RTI-HIV/ AIDS** as part of job description was very low (one-third and below). Consideration of **Referral of STD, RTI, HIV/ AIDS** as part of job was a bit higher, although a few consider **follow-up** as their part of responsibilities.

The awareness level on various components of **emerging/reemerging diseases** as part of job under ESP is also low. A high proportion of service providers consider **basic first aid** as one of their job responsibilities. **Treatment of medical emergencies** as part of their job responsibilities was admitted by a lower proportion of providers. **Treatment of Common Diseases of Infectious Nature (skin)** including **Pain Relief and Advice** and **Referral** was also low in proportion, as part of job.

The **BCC component of ESP** consisted of following six sub-components: (i) Social change, (ii) Social ownership, (iii) Provider relationship, (iv) Advocacy, (v) ESP intervention programs, and (vi) Social marketing. The service providers reported that they are aware of BCC as part of job description, however, such reporting had varied between 10 and 50 percent.

The managers at different tiers of Health and Family Planning Services (CS, DDFP, UHFPO, UFPO & MOMCH) were well aware of most of the components of ESP services provided at Upzilla level and below. Many UFPOs were reported to be relatively unaware of Adolescent Care, IMCI, Malnutrition Prevention, School Health Service, Kala-azar, Emerging/reemerging Diseases, and LCC sub-components. The MOMCH group was also found relatively less aware of social ownership, social marketing and ESP intervention elements of BCC.

Knowledge (skill) score (co-efficient) and knowledge gaps

The first logical thing for any policy maker involved in skill-mix planning for efficient service delivery in health and family planning should be to know about the overall status of knowledge (skill) score in the ESP system (comprising of various types of service delivery personnel entrusted with the responsibility to provide RHC, CHC, CDC, LCC and BCC services in line with their respective job descriptions). The **estimated overall average knowledge (skill) score (coefficient) is 0.25**. Or, in other words, the **overall skill gap is 0.75**. The overall skill status by ESP components is extremely low for BCC with knowledge score of only 0.12, and comparatively better but still low for CHC (0.37) and LCC (0.35); this was below average for CDC (0.24) and slightly higher than average for RHC (0.29). The overall high extent of skill-gap with very high gaps in BCC followed by CDC, RHC, LCC and CHC implies that in order to actually provide the ESP services as designed in the program there is no alternative but to minimize the skill gaps of the service providers through vigorous human resource development efforts.

The **overall knowledge (skill) situation by types of service provider** is not much encouraging, with the highest knowledge score (coefficient) for RMO and MOCL (0.3 each), and lowest for Sr. staff nurse (0.15) and close to that for FPI (0.17). The knowledge scores of FWA (0.25), HA (0.25), and AHI (0.17) were in between. Therefore, the distance between the ideal knowledge situation (i.e; score/coefficient equals to "one") and the existing (actual) knowledge score is huge.

The **knowledge scenario by broad components of ESP**, namely, RHC, CHC, CDC, LCC and BCC by types of service provider shows the following: The **RHC** knowledge score is substantially high for MOCL (0.60) followed distantly by Sr. FWV (0.34) and very low for Sr. staff nurse (0.12), MA/SACMO (0.16) and HA (0.22). The **CHC** knowledge score is highest for RMO (0.56) followed by HA (0.44), and HI (0.41), MA/SACMO (0.39), and FWA (0.37), but it is deplorable for Sr. staff nurse (0.06). The knowledge score on **CDC** is generally low except for Sr. Staff Nurse with 0.50; other categories knowledge score being 0.34 for RMO, close to 0.3 for MO and Sr. FWV each, around 0.25 for MA/SACMO, HA, FWA, AHI, HI, but very low at 0.1 for FPI. As expected, the knowledge score on **LCC** is relatively high for some categories, namely

RMO (0.78), Sr. Staff Nurse (0.5), MA/SACMO (0.44), MO (0.43), MOCL (0.39), HA (0.36), but it is much less pronounced for FPI (0.11) and FWA (0.15). The worst is the knowledge scenario with BCC, with most categories scored less than 0.15, except MO (0.18) and Sr. Staff Nurse (0.17), which are also very low, by any standard.

Service providers **knowledge (skill) score scenario by each of the eight sub-components of RHC** are as follows: The knowledge score of safe motherhood is the highest for MOCL (0.87) followed by Sr. FWV (0.61), MO (0.56) and FWA (0.5); and this is absolutely deplorable for HI, FPI and AHI (all having 'zero' knowledge, a situation difficult to explain). The family planning knowledge score is moderate for all categories, except for Sr. staff nurse, MA/SACMO and MO. The lack of knowledge on prevention and control of RTI/HIV/AIDS is most pronounced among Sr. staff nurse, HI, MA/SACMO and FWA. MOCLs are the least knowledgeable about maternal nutrition. The knowledge gap on menstrual regulation and prevention of unsafe abortion is highly pronounced among the RMO (with knowledge score of only 0.08), MA/SACMO (0.13), Sr. Staff nurse (0.13) and FWA (0.13). The lack of skill to address adolescent health is highly pronounced for all providers except the HI (with knowledge score 0.4) and FPI (0.33). The knowledge gap in addressing infertility is very high for all categories, except the HI with knowledge score of 0.4 and MOCL (0.33). The knowledge score on neonatal care is 'zero' for HI, FPI, AHI, MA/SACMO.

Service providers **knowledge (skill) situation by each of the seven subcomponents of (CHC) child health care** shows that in general, the score on ARI and CDD varies from high to moderate for all categories except the Sr. Staff Nurses. Across all categories of service providers, the knowledge scores on IMCI and school health (except HI) are very low.

Service providers **knowledge score and knowledge gaps in terms of all eight subcomponents of CDD** indicates the following: The skill situation on tuberculosis and leprosy is deplorable among Sr. Staff Nurse, FPI, and MO/CL. The lack of skill on Filaria, Kala-azar, malaria, and emerging/reemerging diseases is equally highly pronounced among all the categories of service providers. The knowledge score for intestinal parasites is relatively high for MA/SACMO (0.58), RMO (0.46), and FWA (0.42); it ranges from very low to low among Sr. Staff nurse, HI, FPI, Sr. FWV and MO (CL). The knowledge score about STD/RTI/HIV/AIDS is generally low, except for Sr. FWV (0.41) and FWA (0.38).

The **sub-component-wise knowledge (skill) scenario of BCC** among the service providers is most discouraging. The absolute lack of skill (knowledge) is true for such sub-components as social change, social ownership, social marketing and ESP intervention program.

Additional skill requirement: high and medium priority areas

Based on the analysis of the existing skill scenario the unmet need for knowledge with large extent of knowledge gaps by type of service providers have been identified and prioritized (as high and medium priority areas). The outcome of such an exercise showing the areas of skill-building (capacity building) with high and medium priority by type of service providers is presented in the matrix below for the considerations of the HRD/MOHFW and all relevant policy planners.

The subject areas considered in the exercise (a total of 24) are those on which the estimated knowledge score was less than 0.15, and those on which knowledge score was less than 0.33 but the area is a prime one in terms of the goals (mortality, morbidity, and fertility reduction) of

Recommendations

Based on the in-depth analysis of the comparison of the ideal skill-mix and current scenario of existing skill-mix of the service providers of ESP at the Uapzilla level and below, it is concluded that the additional requirement for skill-mix is huge, across the categories of service providers. A matrix showing unmet need for skill-mix by service providers by sub-sub-components of ESP (e.g., ANC under Safe Motherhood sub-component under the Reproductive Health Care Component of ESP), and that indicating high and medium priority has been suggested.

The relevant recommendations are as follows:

1. Policy makers -- in-order to ensure that scarce resources for human resource development are well spent and facilitate the goals of the program (reduced mortality, morbidity and fertility) -- should brainstorm using the suggested matrix (showing high and medium priority areas for skill-building by types of provider) as the basis. This will ensure the skill-mix optimization efforts of the government.
2. Human resources development related investment should be decided upon only after a thorough exercise of both the demand side (shown in matrix) and supply side factors (availability of inputs and capacities of the supply side institutions).
3. Mechanisms need to be devised to assess the impact of skill-training, as well as to monitor and supervise the skill enhancing efforts of the MOHFW.
4. Service providers skill improvement should be seen as one of the vital process components of the TMIS and PMIS, and be used in making informed decisions about staff deployment by Facilities.
5. System loss in the use of services from skilled person and skill training needs to be minimized using information from service MIS, PMIS and TMIS.
6. Revisiting the orientation and training courses/curriculum is needed to meet the unmet need for skill development by specific types of service provider by facilities.
7. Systems need to be devised to maximize multiplier effects of training obtained by the service providers.