Leadership in Health Services

Measuring communication competence and effectiveness of ASHAs (accredited social health activist) in their leadership role at rural settings of Uttar Pradesh (India)

Archana Shrivastava Arun Srivastava

Measuring communication competence and effectiveness of ASHAs (accredited social health activist) in their leadership role at rural settings of Uttar Pradesh (India)

Received 16 December 2014
Revised 5 May 2015
16 June 2015
Accepted 6 July 2015

Archana Shrivastava
Business Communication Area, Birla Institute of Management Technology, Greater Noida, India, and
Arun Srivastava
National Health System Resource Centre, Delhi, India

Abstract

Purpose – This paper aims to find out accredited social health activists' (ASHA) communication competence and effectiveness while working as leaders with groups in the rural setting. ASHA, as the "first point of contact" for pregnant women in rural areas, plays a significant role in building awareness and disseminating key information at critical times (e.g. antenatal and post-natal period), promotes healthy maternal and newborn care practices and facilitates identification and referral of maternal and newborn complications. ASHA plays critical role of a leader in bridging the gap between health system and community. In the entire process, effective communication competency is the key to her effectiveness.

Design/methodology/approach – The study adopts seven items from the farmers communication (FACOM) scale of communication measures developed by Udai Pareek and Y.P Singh. Preliminary editing of the items was done keeping certain points in mind such as the items should not be judgemental, should be acts of behaviour, should be observable and should be simple. This scale was adopted for the study, as it was designed to measure farmers' communication competence and suited the context. The evaluation criteria included the seven essential elements of communication identified in the FACOM scale.

Findings – Results from the study identified a need to sensitise ASHAs on the critical role of effective communication and need for investing more in building her capacity for health communication. The trainings being imparted to ASHAs have to be strengthened in terms of communication skills. They should focus upon developing all three variables of communication skills equally and integrating them to get desired results.

Research limitations/implications – The study was conducted in one state while the programme is running across the country. The sample size was small.

Practical implications – The learning of the study will help in developing a better understanding of the beneficiaries' perspectives and their expectations regarding ASHAs communication process in the leadership role which she performs. Such understanding will not only be instructive but may also prove transformative for the benefit of both ASHAs and her community, whose support is critical to the success of the programme. This learning will feed into the policy planning and communication and capacity building strategy of the ASHA programme and may lead to better and more effective strategies and tools of communication.

Leadership in Health Services
Vol. 29 No. 1, 2016
pp. 69-81

1751-1879
DOI 10.1108/LHS-12-2014-0079

Originality/value – Research study is original. Keeping the observers' status in mind, questionnaire was translated in Hindi language. Twenty ASHAs were selected randomly from small villages of Uttar Pradesh, the largest state in India. The scale was presented to at least five observers (all females) for one ASHA. These observers/judges were the ones who knew ASHA well and with whom she had communicated at some point of time as part of her work.

Keywords Decision making, Health leadership competencies, Communications, Health care, Community planning, FACOM

Paper type Research paper

Background

In India, the concept of community health worker (CHW) is quite old. It says that a community volunteer with minimal training may be responsible for health education and referrals, with a worker with greater training providing services to more than one community. In 1960s CHWs work profile included providing condoms, contraceptive pills and to promote early childhood education and nutrition. Various studies conducted in this field reveal mixed reviews about their performances. One reviewer concludes, "There is no longer any place for discussion of whether CHWs can be a key factor in achieving adequate healthcare" (Lehmann and Sanders 2007; Frankel and Doggett 1992). The same authors also concede, however, that many CHW programmes are not successful, and there is a need for careful research to identify and fight the problems.

In 2005, the Government of India launched the National Rural Health Mission (NRHM) to address the health needs of rural population, especially for the vulnerable sections of the society. In the study done by the Ministry of Health and social welfare, it was observed that the sub-centre which is the most peripheral level of contact with the community under the public health infrastructure was serving much higher population than the figure quoted on records (5,000). Before the introduction of ASHAs, mid-level Auxiliary Midwives (ANMs)[1] were responsible for community health education and services such as antenatal care (ANC), delivery, sterilisation referrals, etc. Because of many responsibilities, their community health work was mostly neglected (Mavalkar and Vora, 2010). It was also observed that group of health service providers known as multi-purpose health workers (MPWs) who had direct link and interaction with community at large and beneficiaries in particular were not available. The reason being gamut of services they are expected to provide under MPW scheme is very wide and encompasses promotive, preventive and curative services. They were neither trained nor intended to work as full-time curative service providers, due to which ANMs and Anganwadi workers[2] were heavily overworked, which was impacting the outreach services in rural areas. Considering all this, a new band of community-based functionaries named as accredited social health activist (ASHA) was proposed to fill the void.

Accredited social health activists

ASHAs are local women trained to act as health educators and promoters in their communities. The Indian Ministry of Health and Family Welfare (MoHFW) describes them as:

> […] health activist(s) in the community who will create awareness on health and its social determinants and mobilize the community towards local health planning and increased utilization and accountability of the existing health services (National Institute of Health and Family Welfare, 2005).

Their tasks include motivating women to give birth in hospitals, bringing children to immunisation clinics, encouraging family planning (e.g. surgical sterilisation), treating basic illness and injury with first aid, keeping demographic records and improving village sanitation (Ministry of Health and Family Welfare [MoHFW], 2005b). ASHAs are also meant to serve as a key communication mechanism between the healthcare system and rural populations (Ministry of Health and Family Welfare (MoHFW), 2005a).

ASHA, as one of the first points of contact for pregnant women in rural areas, plays a significant role in information dissemination at critical periods (e.g. antenatal period, immediately following birth, and periodically throughout the postnatal period), promotes healthy maternal and newborn care practices and facilitates identification and referral of maternal and newborn complications. ASHA also plays a critical leadership role in bridging the gap between NRHM and the communities. There is one ASHA per 1,000 population. She has to be preferably aged between 25 and 45 years with strong leadership qualities, effective communication skills and ability to reach community.

Roles and responsibilities of ASHA

To define the role and responsibilities of ASHA in one line, we can say that she plays a leadership role in promoting good health practices in the rural settings of India. Her task is to create awareness on health and its social determinants and mobilise the community to adopt good health practices. Thus, major responsibilities of ASHA as a health leader are to inform, to persuade, to council, to create awareness, to coordinate, to mobilise and to promote.

While playing a key role in identifying issues, involving people and mobilising the community for the cause, etc., communication competency is the key to her effectiveness.

Objectives and scope

The learning of the study will help in developing a better understanding of the beneficiaries' perspectives and their expectations regarding ASHAs communication process in the leadership role which she performs. Such understanding will not only be instructive but may also prove transformative for the benefit of both ASHAs and her community, whose support is critical to the success of the programme. This learning will feed into the policy planning and communication and capacity building strategy of the ASHA programme, and may lead to better and more effective strategies and tools of communication.

Literature review

About half a million mothers lose their lives every year due to child birth and related complications (Koblinsky and Compbell, 1999), out of which 25 per cent of the total global maternal deaths are accounted in India (WHO, 2007). Many studies done in the past suggest communication failures as extremely common cause of inadvertent patient harm. Studies also assert the importance of communication as an essential process in promoting effective healthcare.

Analysis of 2,455 sentinel events reported to the Joint Commission for Hospital Accreditation revealed that the primary root cause in over 70 per cent was communication failure (Joint Commission on Accreditation of Healthcare Organizations, 2004). The complexity of medical care, coupled with the inherent limitations of human performance, makes it critically important that clinicians have standardised communication tools and create an environment in which individuals can speak up, express concerns and share common "critical language" to alert team members to unsafe situations (Leonard *et al.*, 2004).

Molinari (2004) in his research on the training of nurses emphasised on the importance of social connections. Previous researches have also shown that standardised communication package in our health institutions and the sub-standard delivery of the health promotion interventions have affected the realisation of good health and treatment outcomes[3].

Other than communication failure, poor health literacy is another reason for the poor health outcome in India. Reports in the past have suggested direct link of poor health status with the low health literacy leading to larger risk of death (Am J Public Health. 2010;100:1662–1665. doi: 10.2105/AJPH.2009.172742). With the view to eliminate the above-stated limitations, The NRHM was launched nationwide in April 2005. The aim of the programme was to provide "integrated primary care services" to the most marginalised segments of the rural population in India. The core strategies of NRHM include community-based ASHA, the establishment of village health and sanitation committees, the enforcement of Indian public health standards at all community health centres at the block level and convergence of health programmes at the community level. Of all the strategies, the most significant strategy was to introduce the new band of community-based functionaries named ASHA.

ASHA's main role revolves around creating awareness and health literacy among the rural population in India. During home visits, ASHAs interact with currently pregnant women, recently delivered women and household decision-makers. Apart from building rapport with family members, ASHAs communicate key health messages and offer support and guidance for adopting positive healthcare practices. Various studies were then conducted from time to time to evaluate the performance of ASHAs. United States Agency for International Development (USAID)-funded Vistaar Project led by IntraHealth International (2012) found in their study that weak interpersonal communication (IPC) and counselling skills in ASHAs undermine their self-confidence during home visits and render home visits less effective (www.intrahealth.org/page/vistaar-project).

Since Janani Suraksha Yojna's (safe motherhood scheme) inception, several evaluations have revealed that ANC registration and institutional deliveries have improved significantly in almost all focus states, with some improvements also reported for fully immunised child coverage (CORT 2008; DRS 2009; Khan *et al.*, 2010). These studies, however, also reveal that ASHAs do not actively provide contraception information and services, seemingly because condom and pill delivery do not yield performance fees, due to which ASHAs do not prioritise it (Khan *et al.*, 2010, 2011). Other factors that appear to be associated with poor family planning (FP) service performance include limited or no supervision by ANMs and poor training and lack of knowledge about short-acting contraceptive methods (DRS, 2009; Khan *et al.*, 2011). Various evaluations have been done from time to time to identify the factors for poor delivery of services. National Health Systems Resource Centre's (NHSRC) ASHA programme evaluation identifies poor training as a key limiting factor:

> […] one of the main weaknesses in the training programme is the content of the training module – specially of training module 2- which covers a wide number of vitally important topics in two incomplete and superficial a manner and does not even have a training guidebook accompanying it.

The training module design has a weak understanding of competency-based training (NHSRC, 2011)[4]. The 2011 evaluation report from the NHSRC also emphasise that

while the ASHA programme has been established at a great scale and now serves an integral role in the public health system, the ASHA's functionality and effectiveness must be further optimised. The NHSRC highlights low performance in some areas of work (e.g. newborn care, ANC, postnatal care and nutrition) due to lack of skills and support.

The UNICEF report (2007) on "Building IEC (Information Education & Communication) Capacity in Government Partners" also stated the gaps identified by the stakeholders interviewed during the development of the document. The behaviour change communication (BCC) innovations proposed in the strategy document include the use of short films (compact disc [CD] spots); an IPC tool for home visits; the use of cell phones and SMS for increasing male involvement in maternal health; low-cost cookbook with iron-rich and vitamin-C-rich recipes; "Shubh Vivah" kits for married couples and "Badhai" kits for new borns; Bal Chetak and colour-coded RI strategy and painting and colour coding of the ASHA's home, community notice boards, growth cards and report cards; and *Khushali Diwas*, *Saas Bahu* Sammellans, Swasthya Melas, etc. Capacity-building efforts should include an orientation for all healthcare workers on the "Basics of BCC and UP's Strategic BCC Plan". Detailed plan for capacity building for effective BCC planning, implementation, supervision and monitoring is required to be worked out for the future.

Based on the results presented by various studies, present research is focused upon measuring communication competence and effectiveness of ASHAs in their leadership role at Uttar Pradesh[5] (UP), one of the largest states in India. UP has one of the highest infant and child mortality rates in India. Infant mortality rates in UP are higher in young mothers (<20 years) compared to women aged 20-29 years. UP's maternal mortality ratio is also very high, second only to Bihar. Priority trigger behaviours across all NRHM programmes have been selected based on evidence of association of the behaviours to prevent outcomes such as maternal mortality, neonatal and child mortality, anaemia, tuberculosis (TB), vector-borne diseases, etc., and potential for change through BCC approaches. A core group established for providing strategic inputs for the BCC strategy identified a list of 27 important behaviours across 10 national health programmes; 14 priority behaviours have been further selected from these 27 behaviours.

As researchers visualise ASHA as a leader playing key role in identifying issues, involving people and mobilising the community for the cause, etc., her major responsibilities as a health leader are to inform, to persuade, to council, to create awareness, to coordinate, to mobilise and to promote. The success of ASHA's efforts depends heavily on how well and how professionally she communicates with the stakeholders. Her role as a communicator is crucial as she communicates in a tough environment where understanding the manner in which messages are processed is significant. Several communication theorists talk about important elements and process of communication (David Berlo, 1960; Clude F. Shannon and Warren Weaver, 1949; Jerry C. Wofford A. Gerloff, and Robert C. Cummins, 1977). Of which, two represent the major parties in a communication – *Sender* and *Receiver*. Two other represent the major communication tools – *Message* and *Media*. Four represent major communication functions – *encoding*, *decoding*, *response* and *feedback* (Barbara, 1994). ASHA as a sender must know what audiences she wants to reach and what responses they want to get. The message has to be encoded in such a way that the audience/receiver can easily

decode it. In the process, selection of media that reach the target audience and to develop feedback channel to monitor the responses are equally important. To make your message effective, you need to make them practical, factual, concise, clear and persuasive (Tim Laseter and Rob Cross 2006).

But assessing communication competence is complex. Skills that require performance are difficult to assess through standard written or oral tests but require *in vivo* demonstration. In case of ASHA also, her job does not confine only to tell about the good health practices to the villagers. It has to be two ways. Her competence is not defined solely by the presence or absence of specific behaviours but rather by the presence of effective verbal and non-verbal behaviours within the context of individual interactions with target audience. For ASHA, effective communication includes not only her ability to adapt, to be responsive and to manage self-awareness during the process of talking and listening but also on the behaviours and perceptions of the target audience. For this, key selection criteria such as education level and representativeness of the local community are extremely critical. However, findings indicate that selection processes and criteria are not being met in several areas, which leads to the recruitment of ASHAs who may not be able to perform to the level necessary (Ahmad *et al.*, 2012).

The present study is focused upon gauging communication competency that will help in developing a better understanding of the beneficiaries' perspectives and their expectations regarding ASHAs communication process. Such understanding will not only be instructive but may also prove transformative for the benefit of both ASHAs and her community. This learning will feed into the policy planning and communication and capacity-building strategy of the ASHA programme. It will also help in designing better training modules and may lead to develop better and more effective strategies and tools of communication which will help ASHAs become better leaders.

Methodology

Interaction in face-to-face small groups has been studied for decades – generating information about decision-making, leadership, task performance, interaction and intercommunication patterns (Homans, 1950; Bales, 1950; Bales, Strodbeck, Mills, and Roseborough, 1951; Weick, 1979; Fahy, Crawford, and Ally, 2001; Garrison, Anderson, and Archer, 2001; Bormann, 2003; Gersick, 2003; Henman, 2003; Parker, 2003; Putnam, 2003). However, almost all of them were designed for the literate or semi-literate groups. The population sample selected for the study to be conducted was majorly from illiterate and semi-literate group.

After much study, the researchers planned to adopts seven items from the farmers communication (FACOM) scale of communication measures developed by Udai Pareek and Y.P Singh.

Development of FACOM

FACOM scale of communication measures was developed by Udai Pareek and Y.P Singh.

An attempt was made to use the process interaction analysis techniques of Bales (1950) and Flander (1960). Observation of the behaviour in the discussion group and the interviews with the farmers showed that the situation in the laboratory conditions was too artificial. Farmers remained conscious about tape recorder throughout. Very few

farmers participated. It was then decided to develop a rating scale which would be used by observers of those who knew the farmers very well.

The items of this scale were collected from the tape records of the farmers' group discussions, observations of informal discussion groups in the village and interviews with the workers working in these areas. Preliminary editing of the items was done keeping certain points in mind such as the items should not be judgemental, should be acts of behaviour, should be observable and should be simple. In the process, many items were dropped and only 35 were retained. To avoid duplication, the items were further reduced to seven. They were grouped under three heads: receiving messages, sending messages and delivery skills. The items were made precise and short and were rated by the experts for their importance. The scale was translated in Hindi, and it was validated by comparing the ratings on the scale with an outside criterion. Data collection was done in the medium size village in Delhi. Of 94 farm families' two contrast groups, one of the key communicators (23) and other of the non-communicators (30) were selected. Three persons who knew the farmer very well were selected to rate each farmer separately. The final communication skills of the farmer were the mean value of the score given by three judges.

This scale was adopted for the study for many reasons. As it was designed to measure farmers' communication competence, it highly suited the context. The Hindi version helped getting better responses. The responses for one subject were collected from five judges and helped getting unbiased results. The evaluation criteria included the seven essential elements of communication identified in the FACOM scale (Figure 1).

The items were grouped under three heads: ASHA's skills to encode messages, Asha's skills to decoder/receive messages and delivery skills of Asha. Keeping the observers' status in mind, questionnaire was translated in Hindi language. Twenty ASHAs were selected randomly from small villages of UP, the largest state in India. The scale was presented to at least five observers (all females) for one ASHA. These observers/judges were the ones, who knew ASHA well and with whom she had communicated at some point of time as part of her work. Each ASHA was rated separately. Scores were assigned to each item on 5-Likert scale. In all, 35 per cent of the responses were collected directly from the ground; rest were taken on phone. Ratings given by the respondents were added and average scores were calculated (Appendix 1).

Findings and analysis

Five responses for one ASHA were added and average scores were calculated. Exhibit 1 Measures of central tendency were computed to summarise the data for accessing communication competency of ASHAs on three variables. Table AI Measures of dispersion were computed to understand the variability of scores Table AII.

The following are the results of the analysis; for ASHAS' encoding skills $N = 20$, $M = 3.2850$, $SD = 0.54990$; for delivery skills $N = 20$, $M = 3.3250$, $SD = 0.34470$; and for ASHAs' decoding skills, $N = 20$, $M = 3.9550$, $SD = 0.42732$. When we look at the mean, it appears that most respondents graded ASHAs as good decoders (average is near to 4). However, standard deviations were calculated to find whether the scores are really close together or are they far apart. Based on the large standard deviation in case of ASHA as a decoder, it looks like the responses varied quite a bit. With the variance of 0.119 and standard deviation 0.344, most of the respondents felt same for the delivery skills of ASHAs.

COMMUNICATION SKILLS -FACOM SCALE

Name_____ Role_____

Organization_____ Date_____

Person being rated:_____

Based on the experience (in various group settings) with the person named above, rate him on the following aspects:

Write 5- if he always behaves this way.

Write 4-If he frequently behaves this way.

Write 3- If he behaves this way about half of the time.

Write 2- If he behaves this way sometimes.

Write 1- If he rarely/never behaves this way.

1. listens patiently to what others say._____
2. Encourages others to raise questions._____
3. Initiates discussions._____
4. Illustrates a point by example and anecdote._____
5. Summarize points that are made._____
6. Analyze and evaluate the problems._____
7. Talks in a persuasive way with the moderate pitch and proper gesture._____

Figure 1.
Communication skills-facom scale

The results calculated by central tendency gave general and not specific view about the level of communication competency in ASHAs. As an effective communicator, ASHAs need to be good at three identified parameters, i.e. encoding, decoding and delivery skills. Encoding is the process by which a sender converts ideas into symbols that comprise a message. As ideas cannot be directly put into receivers mind, we encode them into certain symbols such as words, gestures or pictures. Here, we need to understand what strategy will help the receiver to understand and interpret the specific idea we intend to convey. In the same way, decoding is the process through which we interpret and try to attribute meaning to the messages shared with us. Delivery skills are the means through which sender conveys messages: oral, written or non-verbal which incorporates the idea of display. The choice of channel can significantly affect the outcome of communication. To be a good communicator, one needs to be good in all three parameters simultaneously. Being good in one parameter and average or poor in other two parameters may not result into a competent communication. Keeping this in mind, it is important to see whether a systematic association exists between the three variables, i.e. to find out whether the ASHA rated high in her encoding skills is also rated high for her delivery and decoding skills. The strength or degree of association will help us decide whether the ASHAs hold good communication competency. To test this, two hypothesis were formed:

H1. There is an evidence of association between the encoding and delivery skills of ASHAs.

H2. There is an evidence of association between the encoding and decoding skills of ASHAs.

Chi-square test was conducted to determine whether a systematic association exists between the three variables. First, the test was done to determine the association between encoding and delivery skills of ASHAs Table AIII.

Results reflect Pearson chi-square value 94.16 with the *p*-value 0.53. As the *p*-value is not less than 0.05, we reject *H1* and establish that respondents who rated ASHAs good in their encoding skills did not necessarily consider them to be good at their delivery skills and vice versa.

Next test was conducted to test whether any association exists between encoding skills and decoding skills (Table AIV).

Results reflect that though the *p*-value is less than the previous association which is 0.13, still it is not less than 0.05; hence, we again reject *H2* and establish that respondents who rated ASHAs good in their encoding skills did not necessarily consider them to be good at their decoding skills and vice versa.

Conclusion

Communication in case of ASHAs is strategic as well as goal driven. The primary goal of small group communication in such cases is to share information which leads to effective decision-making and problem-solving. During the study, it was observed that the ASHAs in far reaching corners of the state are reliable, credible and sometimes the only source impacting the health of their communities. They are an important resource complementing the health system and facilitating efforts to achieve the Millennium Development Goals. Millennium Development Goals originated from the millennium declaration adopted by the General Assembly of the United Nations in September 2000. It consists of eight goals of which three address health issues. These three goals are reduce child mortality, improve maternal health and combat HIV/AIDS, malaria and TB.

But ASHAs' main job is their leadership role in advocating the use of health facilities, provide knowledge on health behaviours and dispense basic health products to their community. For this, their communication competence and local representation are extremely critical. However, our findings indicate something different. To determine the effectiveness and appropriateness of any given interaction and to know whether communicator is competent, she should be good at all three skills simultaneously. Being good in any one area of communication process will not help, as the cycle of communication will get disrupted in between leading to either communication break down or ineffective communication.

Results from the study identified a need to sensitise ASHAs on the critical role of effective communication and need for investing more in building her capacity for health communication. The trainings being imparted to ASHAs have to be strengthened in terms of communication skills. They should focus upon developing all three variables of communication skills equally and integrate them to get desired results. Strategies for overall development of communication competence should be designed, documented and pilot tested. Separate training modules should be developed to enhance leadership skills and, perhaps most importantly, her ability to communicate ideas and learning in a manner that community can comprehend easily, and one that is effective in impacting its behaviour and practices. Some reports from developing countries highlighted the positive impact of education and literacy on population, health and, in particular, women's health and health of children (Caldwell, 1986; Bledsoe *et al.*, 1999; Sen, 1999;

Nussbaum, 2000). While public policies need to set certain preconditions for health, researchers also felt that people must also actively participate in their health as part of their contribution to civil society, hence the importance of developing awareness in health literacy. This will enhance the ability of the users to obtain, read, understand and use healthcare information to make appropriate health decisions and follow instructions for treatment.

Notes

1. ANM is the key field level functionary who interacts directly with the community and has been the central focus of all the reproductive child health programmes. Available at: www.iimahd.ernet.in/publications/data/2008-0301Mavalankar.pdf
2. The word *Anganwadi* means "courtyard shelter" in Indian languages. They were started by the Indian government in 1975 as part of the *Integrated Child Development Services* programme to combat child hunger and malnutrition. A typical *Anganwadi centre* also provides basic health.
3. Interpersonal Communication, Manual for Trainers of Health Service Provider-Ministry of Health and Child Welfare, Health Education unit, 1998.
4. NHSRC has been set up under the NRHM of Government of India to serve as an apex body for technical assistance.
5. Uttar Pradesh, lit. "Northern Province", abbr. UP, is a state located in northern India. It was created on 1 April 1937 as the United Provinces, and was renamed Uttar Pradesh in 1950. Lucknow is the administrative capital of UP, http://en.wikipedia.org/wiki/Uttar_Pradesh

References

Ahmad, J., Bhatnagar, I. and Khan, M.E. (2012), *Increasing Access to Family Planning and Reproductive Health Services Through Community Health Workers: A Case Study of a Dual Cadre Model in India*, The Population Council, Washington, DC.

Barbara, B.S. (1994), "A revised communication model for advertising: multiple dimensions of the source, the message and the recipient", *Journal of Advertising*, Vol. 23 No. 2, pp. 5-15.

Bledsoe, C.H., Casterline, J.B., Jonson-Kuhn, J.A. and Haaga, J.G. (Eds) (1999), *Critical Perspectives on Schooling and Fertility in the Developing World*, National Academy Press, Washington, DC.

Caldwell, J.C. (1986), "Routes to low mortality in poor countries", *Population and Development Review*, Vol. 12 No. 2, pp. 171-220.

Frankel, S. and Dogget, A.M. (1992), *The Community Health Worker: Effective Programmes for Developing Countries*, Oxford Medical Publication.

Joint Commission on Accreditation of Healthcare Organizations (2004), "Sentinel event statistics", available at: www.jcaho.org/accredited+organizations/ambulatory+care/sentinel+events/sentinel+event+statistics.htm (accessed 29 June 2004).

Khan, M.E., Hazra, A. and Bhatnagar, I. (2010), "Impact of JSY on selected target behaviour in rural UP", *Journal of Family Welfare*, Vol. 56.

Khan, M.E., Darmstadt, G.I., Tarigopula, U.K. and Ganju, D. (2011), *Shaping Demand and Practices to Improve: Designing a Behaviour Change Communication Strategy in Northern India*, SagePublications, Bihar, New Delhi, Vol. 2.

Koblinsky, M.A., Campbell, O. and Heichelheim, J. (1999), "Organizing delivery care: what works for safe motherhood?", *Bull World Health Organ*, Vol. 77 No. 5, pp. 399-406, MotherCare/JSI, Arlington, VA.

Lehmann & Sanders (2007), *Community Health Workers: What do we know about them? The State of the Evidence on Programmes, Activities, Costs and Impact on Health Outcomes of Using Community Health Workers*, World Health Organization, Geneva.

Leonard, M., Graham, S. and Bonacum, D. (2004), "The human factor: the critical importance of effective teamwork and communication in providing safe care", *Quality & Safety in Health Care*, Vol. 13 No. S1, pp. i85-i90. doi: 10.1136/qshc.2004.010033.

Molinari, D.L. (2004), "The role of social comments in problem-solving groups in an online class", *The American Journal of Distance Education*, Vol. 18 No. 2, pp. 89-101.

National Health Systems Resource Centre (NHSRC) (2011), *ASHAs: Which Way Forward Evaluation of ASHAs Programme*, NHSRC, New Delhi.

National Institute of Health and Family Welfare (2005) "Frequently asked questions on ASHA", Government of India, available at: www.nihfw.org/ndc-nihfw/UploadedDocs/FrequentlyAskedQuestionsASHA.doc+accredited+social+health+activist&hl=en&ct=clnk&cd=3&gl=ca&client=firefox-a (accessed 23 April 2007).

Nussbaum, M.C. (2000), *Women and Human Development. The Capabilities Approach*, Press Syndicate of the University of Cambridge, Cambridge.

Ministry of Health and Family Welfare (MoHFW) (2005a), "NRHM: Mission Document: Government of India", available at: http://mohfw.nic.in/NRHM/Documents/NRHM%20Mission%20Document.pdf (accessed 1 July 2008).

Ministry of Health and Family Welfare (MoHFW) (2005b), "ASHA: Government of India", From care in *Indian* villages. It is a part of the Indian public healthcare system. Basic healthcare activities include contraceptive counselling and supply, nutrition education and supplementation, as well as pre-school activities, available at: mohfw.nic.in/NRHM/asha.htm (accessed 20 July 2008).

Sen, A. (1999), *Development as Freedom*, Oxford University Press, Oxford.

Tim, L. and Rob, C. (2006), "The craft of connection", *Strategy + Business*, pp. 26-32.

Further reading

Behaviour Change Communication (BCC) Strategy for NRHM in Uttar Pradesh (2008).

Boon, H. and Stewart, M. (1998), "Patient-physician communication assessment instruments:1986 to 1996 in review", *Patient Education and Counseling*, Vol. 35 No. 3, pp. 161-175.

Candib, L. (1999), "When the doctor takes off her clothes: reflections on being seen by patients in the exercise setting", *Families, Systems, & Health*, Vol. 17 No. 3, pp. 349-363.

Family Health Outcomes: Designing a Behavior Change Communication Strategy in Rural Uttar Pradesh, The Population Council, New Delhi.

Holladay, S.J. and Coombs, W.T. (1993), "Communication visions: an exploration of the role of delivery in the creation of leader charisma", *Management Communication Quarterly*, Vol. 6 No. 4, pp. 405-427.

Mavalankar, D., Sankara Raman, P. and Vora, K. (2011), "Midwives of India: missing in action", *Public Systems Group*, Indian Institute of Management, Ahmedabad.

Millennium Development Goals – India Country Report (2015), "Social statistics division ministry of statistics and programme implementation government of India", available at: www.mospi.nic.in

Pareek, U. and Purohit, S. (2010), *Training Instrument in HRD and OD*, Tata McGraw Hill Publishing Company, New Delhi.

SIFPSA (2003-2004), "Behaviour change communication (BCC) strategy", *State Innovation in Family Planning Services Project Agency*, SIFPSA.

Appendix

ASHAs	Sending message Mean score	Delivery skills Mean score	Receiving skills Mean score
1	2.5	2.9	3.4
2	3.1	3.1	3.6
3	2.7	3.3	3.3
4	3.4	3.6	3.4
5	4.2	3.5	3.7
6	3.3	3.9	4
7	4.2	3.9	4.3
8	4.5	3.6	4.5
9	3.4	3.6	4.5
10	3.3	3.6	4.3
11	3.2	3.0	3.3
12	3.1	2.7	4
13	3.8	2.9	4.2
14	3.6	3.5	3.9
15	3.2	3.1	4.3
16	2.8	2.9	4.3
17	2.7	3.5	4.2
18	3.1	3.5	3.6
19	2.6	3.2	3.7
20	3.0	3.2	4.6

Table AI.
Five responses for one ASHA were added and average scores were calculated

Statistics	Encoding skills	Delivery skills	Decoding skills
N			
Valid	20	20	20
Missing	0	0	0
Mean	3.2850	3.3250	3.9550
Median	3.2000	3.4000	4.0000
Mode	3.10	3.50[a]	4.30
SD	0.54990	0.34470	0.42732
Variance	0.302	0.119	0.183
Range	2.00	1.20	1.30

Notes: [a]Multiple modes exist; the smallest value is shown

Table AII.
Statistics

Statistics on ASHA	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	94.167[a]	96	0.534
Likelihood ratio	65.057	96	0.993
Linear-by-linear association	4.122	1	0.042
Number of valid cases	20		

Notes: [a] 117 cells (100.0%) have expected count less than 5; the minimum expected count is 0.05

Table AIII.
Chi-square tests

Statistics on ASHA	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	1.242E2[a]	108	0.137
Likelihood ratio	71.649	108	0.997
Linear-by-linear association	2.163	1	0.141
Number of valid cases	20		

Notes: [a] 130 cells (100.0%) have expected count less than 5; the minimum expected count is 0.05

Table AIV.
Chi-square tests

About the authors

Archana Shrivastava works as an Associate Professor – Business Communication in Birla Institute of Management Technology, Greater Noida. She holds a doctoral degree and possesses more than 15 years of teaching experience which comprises approximately 9 years at leading management institutes and colleges. She had excellent opportunities to teach/train a variety of courses including written communication skills, oral communication skills and managerial communication. She has conducted many management development programmes for the employees of renowned organisations such as NTPC and Power Grid and GAIL. She has also been mentoring and developing students in the area of soft skills especially people skills.

Arun Srivastava is a development professional with more than 15 years of experience in diverse areas. He has a post graduate degree in Economics from Allahabad University, India. For past 7.5 years, he has been working as a Consultant – as part of the national resource team for ASHA programme of Ministry of Health, Government of India, in New Delhi. ASHA programme has about 8.5 lakh village-level community volunteer women, across 33 states and UTs. The programme has a huge focus on the training and capacity building of ASHAs in various aspects of knowledge, skills and motivation.