



rainfall. Unless water is made safe or treated for human consumption, it may be hazardous to health and transmit diseases. The main contaminants of these water sources are human excreta, animal waste and effluent because of open field defecation practices. Thus, the majority of rural communities use water from

were also carried out while the sample collector collected samples at each site.

Samples for microbial indicators (TC, FC,) were analyzed by 100 ml membrane filtration technique, using 0.47 mm

of the samples had all kind of indicator bacteria. 100% of the positive samples had total and fecal coliforms, of these 35.7% had E. coli. Eight five of protected wells and springs had all kinds of indicator bacteria. Moreover, the same proportion (85%) of the samples had both total and fecal coliform. On the other hand, analysis of water line (tap water) demonstrated that 50% of the samples had indicator bacteria, 33.34% fecal coliform and E.coli (Table1 and 2). The result of microbiological water quality parameters of each sources were compared with WHO, (2004) standard.

DISCUSSION

Fecal pollution of drinking water introduces a variety of intestinal pathogens (Mengesha et.al. 2004). The presence of indicator organisms calls a need for further survey, investigation and examination of drinking water sources. The site from where waters are collected can be a source of disease. If the site is unprotected there is a risk that women and children collecting water from these sources will be infected. In this study the majority of the rural areas was using unprotected sources and some protected ones but not regularly disinfected and maintained. Observation showed that the unprotected wells mostly found in towns are constructed very near or down to latrines (WHO, 2006). In the case of ground water, like protected springs, wells and protected water connection systems, it should be possible to achieve veryton aevell (f

hence the residents are exposed to a wide range of diseases.

One of the possible reasons might be constructional defects on casing, concrete covers, fences, diversion ditches, protection of eye of springs and other plumbing accessories. Furthermore, lack of regular supervision, disinfection and proper maintenance might be the reasons for contaminating protected water sources (MOH, 1997). The high level of E.coli can also be explained by the fact that poor sanitation habit and hygiene education influences the use of protected water supplies. Study conducted in Bangladesh revealed that 95% of the urban population had access to safe drinking water and 35% of the population had access to sanitation. But data on the level of hygiene education was much lower

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