

*Full Length Research Paper*

# Assessment of employment among deaf people: Survey in the city of Asmara, Eritrea

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This research entails an assessment of the employment conditions for deaf individuals in Asmara, Eritrea. The study involved the random selection and administration of semi-structured questionnaires to 40 deaf employees and interviews with 10 employers from various organizations. The data collected was analyzed using SPSS and Microsoft Excel. Given that 64.3% of the total deaf population in Eritrea is unemployed, it is evident that there are significant barriers to employment. Communication emerged as one of the major obstacles, with nearly 50% of respondents indicating that communication greatly influences their employment situation. Education was also identified as a barrier, with 61.8% of respondents stating that their level of education significantly affects their employment prospects. Despite these challenges, 73% of respondents expressed high satisfaction with their work environment. Other factors contributing to the low employment rate among deaf individuals include lack of exposure, economic conditions, and limited access to training and diverse courses, negative psychological impacts experienced by deaf individuals, and higher expectations placed on organizations to address their employment issues. To overcome these difficulties, it is recommended that deaf individuals receive moral support from society to enhance their competence and confidence. Additionally, improvements in salary remuneration are necessary to maintain their financial well-being. Providing literacy programs to enhance sign language skills, as well as psychological and social welfare programs, job training, and diversified courses, is also recommended to empower deaf individuals and enhance their employment opportunities.

**Key words:** Deaf, employment, barrier, people with disability.

## INTRODUCTION

Employment is one of the many measures of an economy in developing countries, such as Uganda, but it is typically used as an indicator for the ability to live independently, attain financial stability, and maintain a quality of life aligned with one's goals. Employment plays a vital role in preserving financial well-being and stability. Low levels of employment have socio-economic

implications, placing increased tension on government social security systems (Houston et al., 2010; International Labor Organization Skills and Employment Department, 2007). Despite the positive acceptance of legal policies for employment, people with disabilities (PWD) often face various struggles in getting employed. According to the World Bank (2005), around 80% of

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total PWD live in developing countries, where they experience the lowest living standards. This highlights an urgent need to address this employment problem as it affects the economy and social landscape. The issue of employability of PWD is often discussed in relation to social inclusion. Powers (2008) showed that PWDs are often excluded from the typical economic system and can be considered as a disregarded population, leading to poverty (Yeo, 2005). The low employability rate of PWD also impacts the productivity of businesses; employers lose valuable and skilled employees and incur costs recruiting and training new staff members. Tiun and Khoo (2013) argued that people with disabilities should be included in the mainstream labor market as part of national social development agendas. According to WHO (2001), the employment of PWD could be explained from two perspectives: promoting and hindering factors. According to Achterberg et al. (2009), the employment of people with disabilities is encouraged by education factors and hindered by physical barrier factors. Besides physical barriers, individual and external factors such as social background, experience, and the impact of organizational structures, services, or systems can positively or negatively impact an individual's performance.

Even with improvements in policies and legislation mandating the employment of persons with disabilities, individuals with hearing impairment continue to face barriers and challenges accessing the labor market, experiencing higher rates of unemployment or underemployment. Hearing-impaired individuals encounter limited opportunities in the job market and are often unemployed or placed in temporary, low-income positions (Jang et al., 2014; Jung and Bhattacharyya, 2012). In deaf society, communication barriers affect the retention of deaf individuals when employees of organizations do not understand or know how to use sign language (Luft, 2000). Gender-wise, recent research indicates that the employment rate of women is significantly lower compared to men among deaf individuals (Anon, 2006). Deaf men are more often employed than deaf women in Denmark, with the likelihood of employment increasing with age.

Other studies have shown that deaf individuals struggle to convert their educational achievements into higher-status occupations compared to their hearing counterparts, with deaf professionals found in a limited number of occupational areas (Crammatte, 1987; Schroedel, 1987).

In the Eritrean context, persons with disabilities (PWDs) are among the most disadvantaged segments of society due to negative attitudes, bias, physical pain, discomfort, and mental anxiety. They also face social exclusion, stigmatization, and consequently have low resilience to adversities (Eritrea, Ministry of Labor and Social Welfare, 2021). Despite the Ministry of Education's inclusive policy, integrated basic skills development remains a

long-cherished goal for young learners with disabilities. A survey by the Eritrean Ministry of Labor and Social Welfare (2015) revealed that speech difficulties were the most affected category of disabilities in terms of employment opportunities, followed by vision impairment, movement difficulties, and hearing impairment.

Regarding this issue, significant studies have been conducted on the employment of deaf individuals in recent years, expanding career opportunities for the deaf population. According to Scherich (1996), employers in many organizations lack sufficient understanding of the accommodations needed for successful work performance by deaf employees. Moreover, employers may view accommodations for adult workers who are deaf as too costly (Scherich, 1996).

Increased knowledge about accommodating this population would indeed enhance their workforce participation (Geyer and Williams, 1999; Scherich, 1996). In Eritrea, despite the moral, financial, and other forms of support provided by the national association for deaf people, individuals with hearing impairment still encounter difficulties in maintaining financial stability and face challenges in various aspects of life. There is a critical need to expand knowledge in this area and provide information for future studies to enhance opportunities for deaf individuals.

This research aims to investigate the assessment of employment among deaf people from various perspectives. The primary objective is to assess employment opportunities for deaf individuals, with the knowledge gained potentially leading to new areas of focus for activities aimed at generating interest and understanding about deaf people in the realm of employment. Other specific objectives include exploring the employment conditions of deaf people in Eritrea, identifying the major barriers to employment within the deaf community, examining employers' perceptions of employing deaf individuals, and finding ways to improve interactions between deaf employees and their employers and coworkers.

The study focuses on deaf employees in the city of Asmara, Eritrea, encompassing individuals of working age from both genders. It is the first of its kind in Eritrea, making it a valuable reference for further studies and policy reforms in this area. Additionally, this research aims to understand the reasons behind discomfort among hearing individuals in interactions with deaf individuals and to address these issues. By identifying challenging factors, the study can contribute to efforts to address barriers to equality in the workplace and reduce the gap between individuals with hearing impairments and those without in the labor market.

## LITERATURE REVIEW

Employment holds significant importance for economic well-being, with paid employment offering critical

psychological benefits (Chabot, 2013). For individuals, especially those with disabilities, employment serves as a crucial factor for livelihood and self-esteem. It not only provides income and security but also helps to alleviate social isolation and feelings of unequal status and respect associated with disability (Schur et al., 2009). Historically, the employment rate among disabled individuals has been lower compared to the non-disabled population (Department for Work and Pensions (DWP), 2014; McLoughlin et al., 1987; Chabot, 2013). Despite the enactment of legislation such as the Americans with Disabilities Act in 1990, employment rates for people with disabilities remain significantly lower than those for individuals without disabilities (Lengnick-Hall et al., 2001). This trend is also observed in developing countries like India; where the labor participation rate for people without disabilities is double that of people with disabilities (Powers, 2008).

However, studies indicate that there has been little increase in the employment rate since the late 1990s, despite the passage of disability laws in several countries. Moreover, the rise in the disability rate has raised concerns about the affordability and sustainability of rehabilitation programs (WHO, 2013). To address the issue of unemployment among this underutilized workforce, governments of various countries have introduced incentives such as tax credits, cash incentives, and awards to stimulate employer demand for the potential talent pool of individuals with disabilities (Lengnick-Hall et al., 2008).

Additionally, anti-discrimination policies and quota systems have been implemented to fill employment gaps for people with disabilities in the labor market (Government of India, 2008; Kang, 2013; Stone and Colella, 1996).

Globally, statistics show that there are over one billion people with disabilities, with 80 percent residing in developing countries (WHO, 2011). In populous countries like India, over 26 million people are reported to have disabilities (Indian Census, 2011), with only a minority (37.6%) being employed (WHO, 2011).

This disparity underscores the marginalization and discrimination faced by the global minority of people with disabilities in employment opportunities, despite recent economic trends and labor market conditions (The World Bank, 2009). Numerous research efforts have emphasized the importance of integrating people with disabilities into competitive employment environments to address the supply gap and meet economic demands in today's era (Baldwin and Choe, 2014; Kang, 2013).

However, people with disabilities encounter various challenges in accessing the labor market and often experience disparities in the employment cycle (Échevin, 2013; ILO, 2011; Schur et al., 2009). These challenges include lack of education (Échevin, 2013), training (Schur et al., 2009; Vandekinderen et al., 2012), financial resources, workplace accommodation (Gustafsson et al., 2013; ILO, 2010; Marumoagae, 2012; O'Neill and

Urquhart, 2011), and employer attitudes. Unemployment rates among people with disabilities range from 50 to 70 percent in industrialized countries and 80 to 90 percent in developing countries (UN Enable, 2011).

Despite the importance of employment, little research has focused on the employment of deaf people. Contemporary studies suggest that deaf and hard of hearing individuals face higher rates of unemployment, are often underemployed, and earn lower incomes compared to the hearing population (MacLeod-Gallinger, 1992; RNID, 2006; Winn, 2007; The Papworth Trust, 2014; The Scottish Government, 2015). Research, such as that by Kendall (1999), has concluded that many employed deaf individuals encounter frustrations due to limited opportunities for professional development, underemployment, restricted career options, lack of promotion, and mobility issues.

Deaf individuals face numerous challenges in obtaining and performing work-related activities. These challenges include inadequate employer understanding of legal mandates and appropriate accommodations (Bowe et al., 2005; Houston et al., 2010; McCrone, 2011), communication difficulties (Haynes, 2014; Houston et al., 2010), poor academic preparation (Luft, 2012; Luft and Huff, 2011), accommodation difficulties, discrimination, lack of employer knowledge about deafness, long working hours, unfair treatment, low morale, excessive work pressure, conflicts related to deaf culture, and limited career advancement opportunities.

One of the greatest contributors to the expansion of employment opportunities for deaf individuals is the increased availability of educational options for this population (Crammatte, 1987; Foster, 1992). The positive impact of postsecondary education on the employment rate and economic status of graduates is well-documented in the literature (Haskins et al., 2009; Williams and Swail, 2005; U.S. Bureau of Labor Statistics, 2013a, 2013b). Research also highlights the positive influence of college completion on the career trajectories of deaf individuals (Boutin, 2009; Schley et al., 2011; Walter and Dirmyer, 2013). Deaf individuals who complete postsecondary training tend to exhibit higher levels of participation in the labor force (Walter and Dirmyer, 2013), secure managerial or professional positions (Boutin and Wilson, 2009), and attain jobs with higher salaries (Moore, 2002; Schley et al., 2011; Walter et al., 2002). A study investigating the impact of postsecondary education on the occupational achievements of deaf adults found positive outcomes, including lower unemployment rates and significantly higher wages, for those who pursued postsecondary technical training and college degrees (Welsh and Walter, 1988).

### **Employers' perspective of employing deaf employees**

According to SegomotsoTsaie (2015), the employer's viewpoint on disability is crucial for shaping company policies and integrating disabled individuals into the

workforce. Deventer (2014) suggests that gaps in regulations contribute significantly to the challenges faced by persons with disabilities. McKinney (2013) notes that legislation is often criticized for being ambiguous and unclear regarding the repercussions of non-compliance. Gilbride et al. (2003) highlight variations in employers' willingness to hire and include individuals with disabilities, with some focusing exclusively on job performance (Kaye et al., 2011). Moreover, applicants with disabilities often need to meet specific criteria to be considered for a position (Gilbride et al., 2003).

In the literature on the employability of hearing-impaired individuals, Santos et al. (2013) conducted a study in Brazil and found diverse views on the minimum requirements for hiring affected individuals.

Some companies considered factors such as education, the company's profile, and the specific job position, while others emphasized the applicant's interest and responsibility (Santos et al., 2013). Gida and Ortlepp (2007) indicate that while many employers express commitment to equal opportunities, only a few have specific policies and structured approaches to recruit persons with disabilities.

Educational attainment and the severity of hearing loss also influence employment and income opportunities. Research shows that more severe hearing loss is associated with a lower likelihood of obtaining paid work (Stam et al., 2013; Boutin and Wilson, 2009), while higher levels of education have a positive effect on employment (Walter and Dirmeyer, 2013; Schley et al., 2011; Rydberg et al., 2011).

Perkins-Dock et al. (2015) found that 100% of hearing-impaired individuals with a Bachelor's or Master's degree were employed. Similarly, Walter and Dirmeyer (2013) observed that hearing-impaired individuals in the USA with less than a bachelor's degree typically experienced a higher unemployment rate than their hearing counterparts, whereas those with a Bachelor's degree had a slightly higher unemployment rate.

However, in South Africa, financial constraints contribute to a high level of functional illiteracy among individuals with hearing impairment and, consequently, low skill attainment (SegomotsoTsaie, 2015). Additionally, the rehabilitation process, which includes aural rehabilitation counseling, sensory management, and communication intervention, is crucial for optimizing the individual's well-being (Makhoba and Joseph, 2016). This type of training equips individuals with the necessary vocational skills to function effectively in the workplace. Overall, employers' perspectives on employing persons with disabilities are influenced by numerous factors. Some of the factors given following.

### ***Previous experience or communication with people with disabilities***

There is significant emphasis in the literature on the

importance of previous experience with people with disabilities, which positively influences employers' decisions to hire individuals with disabilities (Huang and Chen, 2015; Levy et al., 1992; McFarlin et al., 1991; Stone and Colella, 1996; Wiegand, 2008).

Research suggests several reasons for the importance of previous experience. First, contact allows individuals to gather adequate information and details about a group member, leading them to see them more as individuals rather than members of a categorized group (Stone and Colella, 1996). Second, employers who have had successful previous experiences with people with disabilities find it easier to integrate and accommodate them (Gilbride et al., 2003; Popovich et al., 2003). Third, previous experience reduces employers' concerns and fears of excessive employment burdens (Diksa and Rogers, 1996).

Fourth, experience helps to diminish the stigma and negative stereotypes attached to people with disabilities (Zissi et al., 2007). Therefore, employers with experience gain more benefits in hiring people with disabilities than those without experience.

### ***Work performance concerns***

The underlying factor influencing employer attitudes is their opinion regarding the performance of people with disabilities. First, employers generally perceive people with disabilities as less productive (Bengisu and Balta, 2011; Harcourt et al., 2005). Second, employers reveal a fear of the unknown concerning their work performance (Diksa and Rogers, 1996). Third, concerns such as absenteeism, taking sick leaves, and breaks for doctors' appointments have been associated with low work performance (Kaye et al., 2011). These concerns may be attributed to preconceived notions of inadequate job skills held by employers (Kang, 2013; Lengnick-Hall et al., 2008) and the perception of an inability to meet job requirements (Lengnick-Hall et al., 2008). On the other hand, Gilbride et al. (2003) found that employers have a tendency to hire people with disabilities who possess soft skills such as a positive attitude and reliability. Similarly, a number of studies revealed that employers did not discriminate against qualified people with disabilities (Kang, 2013) especially in cases of adequate job matching (Gustafasson et al., 2013; Kaye et al., 2011). A Delphi study conducted in the hospitality industry found that with inclusion, the productivity of people with disabilities increases over time due to their strong determination and willpower, which helps alter employers' negative perspectives (Bengisu and Balta, 2011). Another study by Gustafasson et al. (2013) found that employees with disabilities accomplished extraordinary tasks despite their disabilities, setting an example of high performers and influencing other employers to make hiring decisions in this group. Unfortunately, this can also result in the creation of unrealistic expectations and false

perceptions of people with disabilities; for example, when employers experience lower performance from a candidate, their subsequent recruitment decisions may be negatively affected (Popovich et al., 2003).

### ***Type of disability***

Employers' perspectives vary depending on the type of disabilities (Bricout and Bentley, 2000; Harcourt et al., 2005; Jones, 2011; Pinder, 1995; Schneider and Dutton, 2002; Zissi et al., 2007). The literature presents various views concerning different types of disabilities. First, employers perceive physically or mentally challenged applicants as less employable (Harcourt et al., 2005). Second, individuals who suffer from blindness, low vision, or psychiatric disabilities are unable to fully integrate and participate in the workplace (Mik-Meyer, 2016; Naraine and Lindsay, 2011; Zissi et al., 2007). Third, Pinder (1995) claims that people with invisible or hidden disabilities, such as psychiatric disabilities, are in a relatively disadvantageous position compared to their visibly disabled counterparts. Fourth, employers perceive severely disabled workers as less employable than comparably qualified nondisabled counterparts (Bricout and Bentley, 2000). Fifth, during the hiring process, individuals with visible disabilities are more likely to receive positive reactions from employers than those with hidden disabilities, such as deafness or psychiatric disabilities (Pinder, 1995). Colella (2001) suggests that these different views may result from inadequate knowledge of accommodation and requirements for effective inclusion in the workplace.

Similarly, Mik-Meyer (2016) claims that employers' perspectives stem from the token status of people with disabilities. Existing social barriers concerning the type of disability also affect employers' judgments (Naraine and Lindsay, 2011). However, Diksa and Rogers (1996) noted in their study that these views may change by dispelling fears about hiring them. For example, Diksa and Rogers (1996) and Kirsh (2000) reported that employees with psychiatric disabilities were provided an inclusive atmosphere of respect and care and were accepted as part of the diverse workforce by employers. Therefore, in the employment process, the type and severity of disability greatly influence the disadvantage experienced by individuals, particularly those with mental and psychiatric issues compared to others.

### ***Administrative concerns***

Employers exhibit several administrative concerns related to hiring people with disabilities. First, they feel that hiring individuals with disabilities involves more paperwork, hassles, and administrative concerns such as researching legal stipulations and adequate accommodations needed by these individuals (Kaye et al., 2011). Second,

inadequate administrative support from the government has been cited as another barrier by employers for the successful employment of people with disabilities (Lengnick-Hall et al., 2008).

Third, employers with an existing organizational policy of hiring find it easier to employ such individuals than organizations without supportive policies (Diksa and Rogers, 1996). Jackson et al. (2000) argue that employers' willingness to employ people with disabilities may be done to comply with legal stipulations (Harcourt et al., 2005). However, their willingness is an attestation that they are taking legal and moral responsibility towards the integration of people with disabilities. Interestingly, Kulkarni and Valk (2010) found that employers' steps towards disability inclusion are derived from the benefits they are likely to receive, such as promotion of a positive public image and a supportive work environment. However, those undertaking responsibilities view the availability of adequate support from the human resource department concerning legal stipulations as an essential factor to hire people with disabilities (Kang, 2013; Kulkarni and Valk, 2010). Consequently, such coercive government regulations result in assigning this group to hold part-time or temporary jobs, which also puts them at the receiving end of lower pay and benefits (Baldwin and Choe, 2014; Schneider and Dutton, 2002) and being fictionalized in further job promotion (Robert and Harlan, 2006; Schur et al., 2009). This would again build ground for discrimination, which may raise legal suits. The fear of legal suits of discrimination and grievances makes it hard to initially hire a person with a disability and further discipline or fire them (Kaye et al., 2011).

Thill (2015) claims that these employment impediments continue to exist because government regulations and organizational policies are designed based on assumed needs rather than the actual needs of people with disabilities. Bualar (2015) provides another reason for existing employment barriers citing the passage of government regulations without adequate study. Furthermore, organizational policies and practices play a significant role in the inclusion and treatment of people with disabilities. Regrettably, organizations where practices are aimed at recruiting people with disabilities at positions of conventional job profiles would indirectly result in discrimination (Baldwin and Choe, 2014; Schneider and Dutton, 2002; Stone and Colella, 1996).

### ***Co-worker and customer concerns***

Devi and Sonali (2016) suggest that employers who express willingness to employ people with disabilities have cited some concerns regarding customer and co-worker reactions. First, they find it difficult to employ them at a point of direct contact with customers. Second, employers fear customers' negative reactions to people with disabilities, which may impact the organization's bottom line (Lengnick-Hall et al., 2008).

Third, the fear of the unknown faced by co-workers and customers on behaving and communicating with people with disabilities has an impact on employers' perspective (Colella, 2001; Lengnick-Hall et al., 2008). Fourth, supervisors and co-workers, who form the basis of social inclusion and an integrative work environment, have a deep impact on employers' perception of people with disabilities (Chima, 2001; Colella, 2001). Fifth, employers consider their reactions in the accommodation of people with disabilities (Colella, 2001). Kang (2013) provides a reason for not employing people with disabilities at the customer contact point by stating customers' sensitivity towards disability and the difficulty faced by people with disabilities in serving customers directly. Employers are found to harbor concerns over the impact of underperformance of people with disabilities on co-workers and their ability to comply with the rules and regulations, which obstructs employers' hiring decisions (Stone and Colella, 1996). The discomfort of co-workers and supervisors is attributed to potential danger and safety concerns encountered while working with people with disabilities (Lengnick-Hall et al., 2008). Employers of some organizations feel that the entry of the deaf workforce in the organizations may affect the morale and productivity of their non-disabled counterparts (Lengnick-Hall et al., 2008); therefore, co-workers are concerned about an increase in workload, inadequate reward and recognition (Stone and Colella, 1996). Robert and Harlan (2006), in their study, found that employees with disabilities routinely encounter marginalization, fictionalization, stilted interaction, and harassment in their day-to-day interactions with co-workers and supervisors.

Therefore, employers abstain from including a diverse workforce, which also comprises people with disabilities, because of the assumption that they may create a negative environment, lower morale, and a lower level of social togetherness at the workplace (Naraine and Lindsay, 2011; Samant et al., 2009).

### **Eritrean policies regarding to employment and disabilities**

According to the context of Eritrea, integrated basic skills development remains a long-cherished goal for young learners. The Eritrean government is striving hard to uphold the rights of workers, children, orphans, duty retirees, and the disabled through the Ministry of Labor and Human Welfare. Ensuring social justice, equality, and dignity among citizens is a priority for the Eritrean government. The Eritrean family has been given a major role in the development and well-being of Eritrean society. The love and care of children, the respect and care of elders, and the support for disadvantaged persons with disabilities are enshrined in both the preamble and the body of the Constitution of Eritrea, particularly under Article 14(2), Article 16 for human

dignity, and Article 21(1) for equal rights, which states "Every citizen shall have the right of equal access to publicly funded social services."

According to the labor force survey of 2015/2016, there are 225,156 people with disabilities in Eritrea, constituting 7% of the total population and 11% of the working-age population. This number rose from 43,526 in 2001 (Eritrean profile, 2001). The major causes of disabilities include war-related injuries, diseases, congenital factors, accidents, and injuries. A survey conducted by the Ministry of Labor and Social Welfare (2015) revealed which categories of disabilities were most likely to affect chances of employment. Those with speech difficulties were most affected, followed by those with intellectual development disabilities, multiple disabilities, vision impairment, movement difficulties, and hearing impairment. Additionally, the survey indicated a significant gender-based salary discrepancy, with men with disabilities earning more than their counterparts.

The State of Eritrea is committed to providing essential services to all citizens, including health, education, cultural, and other social services, within the limits of its resources, as stated in the Constitution. The Labor Proclamation of Eritrea addresses various aspects related to disability, including working conditions, equality of opportunities in employment, treatment, and remuneration. In cases of workplace accidents, provisions are made for assessing the degree of disablement and determining compensation, with benefits for people with disabilities being non-taxable.

While these provisions offer some level of protection, they may not be sufficient to fully address the needs and rights of people with disabilities. Therefore, there is a need for special legislation to comprehensively protect their rights, dignity, and equal opportunities across all aspects of life. The current employment situation for people with disabilities remains unsatisfactory, particularly for those with low skills or education levels.

Promoting equal employment opportunities is crucial for improving the income and livelihoods of people with disabilities and their families. Despite more than 50% of people with disabilities being employed, many still face significant challenges and are among the most marginalized members of society.

The land proclamation of 1994 grants people with disabilities the right to own agricultural land on par with other citizens once they reach the age of 18. However, due to a lack of agricultural inputs, such as oxen and ploughing equipment, many individuals with disabilities who head households are forced into share-cropping arrangements. These arrangements often do not provide sufficient returns to meet household needs, leading to food insecurity among affected families.

### **Conceptual framework**

In this research, the researchers took three main

independent variables on organizational and personal factors that might be taken as the factors to assess the employment condition of deaf people.

### Personal factors

- i) Work experience
- ii) Limited job opportunities
- iii) Communication problems

### Organizational factors

- i) Working condition
- ii) Employers interest
- iii) Employers attitude

## METHODOLOGY

### Data collection and procedure

The research conducted was of a descriptive nature, designed to facilitate a clear and straightforward examination of the identified problems. Both qualitative and quantitative data analysis methods were employed to interpret the gathered information effectively. Primary data were collected through interviews and questionnaires, supplemented by secondary data obtained from documents provided by the Ministry of Labor and Social Welfare and the Eritrean National Deaf Association. Additionally, information from published books and relevant internet sources was utilized.

The sampling technique employed was simple random sampling, and the collected data was subjected to both qualitative and quantitative analysis. Quantitative analysis involved numerical examination of the data, while qualitative analysis focused on interpreting non-numerical data. The data analysis process included steps such as verifying the completeness and consistency of the data collection forms, ensuring adherence to instructions, and summarizing the collected data for further interpretation.

### Data analysis

Descriptive statistics were used to analyze the data. The presentation of the research findings follows the order of the questionnaire, which was designed in accordance to the research objectives.

### Background of deaf people in Eritrea

Deaf individuals in Eritrea constitute a distinct linguistic and cultural group, relying on sign language as their primary means of communication, particularly Tigrigna sign language, which has developed within privately owned deaf schools in the country. Although this sign language, along with Finnish sign language, is used in various contexts including education, social interactions, and daily life, it lacks standardization. Considered their mother tongue, sign language plays a vital role in deaf individuals' social lives.

The Eritrean National Association for Deaf (ERINAD) serves as the representative body for deaf people in Eritrea, advocating for their social, economic, and cultural rights. Established in 1998 under the auspices of the Eritrean government, ERINAD promotes inclusivity regardless of factors such as gender, language, religion, or socio-educational status. Headquartered in Asmara, ERINAD

utilizes sign language in all its meetings and activities and operates under the Ministry of Labor and Human Welfare to safeguard the human rights of deaf individuals.

Despite the existence of a few schools for the deaf under the Ministry of Education, the lack of interpreters in mainstream education often leads deaf students to leave school after completing elementary education. This educational limitation negatively impacts their employment opportunities, relegating them to manual and technical jobs rather than professional careers. According to 2022 statistics of the ERINAD, the employment condition of deaf people in Eritrea on regional basis is as follows.

The low employment rate among deaf individuals is attributed to several factors, including low educational levels, communication difficulties, employers' attitudes, and a lack of awareness about deaf culture within society. In the Maekel region, which has the highest unemployment rate among the regions, the prevalence of white-collar and blue-collar jobs makes it challenging for individuals with lower education levels to meet living standards. Conversely, in other regions like Anseba, Gash Barka, and Debub, where farming and manual labor are predominant, deaf individuals engage in agricultural and fishing activities, particularly in coastal areas where some rely on N.R.S and S.R.S. Also, as noted in Table 1, the majority of employed individuals work in manual jobs, accounting for 87.96% of the total number. This study aimed to gain new knowledge on the challenges faced by deaf individuals in the workplace. A random survey was conducted with forty deaf employees from various sectors in the capital city of Asmara. Twelve responses were excluded due to participants not paying attention to the questions or failing to respond to all of them. Consequently, the analysis included responses from 28 participants. Additionally, interviews were conducted with some employers of deaf individuals and the project manager of the deaf. Of the deaf respondents, 13 were male (46.4%) and 15 were female (53.6%). Regarding education status, 28.6% completed elementary level, 42.9% completed junior level, and 25% completed secondary level.

## RESULTS AND DISCUSSION

A random survey was conducted with 40 working deaf employees in different sectors in the capital city of Asmara. Initially, 40 questionnaires were distributed, but responses from 12 participants were excluded from the results due to inattentiveness or failure to respond to all questions. Consequently, the responses of 28 participants (70% of the total) were included in the final analysis. The survey comprised two sections: one gathering demographic and personal information about the participants, and the other assessing their employment status and experiences.

### Demographic data analysis

Gender-wise, limited research has been conducted; however, several studies suggest that differences between men and women in experiences, feelings, and strategies related to hearing loss have been reported, primarily in qualitative studies. According to ERINAD 2022 statistics, the number of men is 17,422 (57.65%) compared to 12,794 (46.5%) women, totaling an estimated 30,216 deaf individuals in Eritrea in 2022. As

**Table 1.** Employment condition of deaf people in regional level.

Employment condition	Zoba (Region)						Total
	Maekel	Anseba	Debug	GashBarka	N.R.S	S.R.S	
Unemployed	3668	2264	4227	4450	1564	2247	19.420
Work in government companies	320	96	120	58	21	15	630
Work in private companies	177	240	36	25	16	27	521
Have their own small businesses	46	29	19	23	20	11	148
Work in manual layman jobs	2147	1500	2300	1698	1142	710	9497
Total	6358	4129	6702	6254	2763	3010	30.216

**Table 2.** Gender category of respondents.

		Gender category			
	Gender	Frequency	%	Valid %	Cumulative %
Valid	Female	15	53.6	53.6	53.6
	male	13	46.4	46.4	100.0
	Total	28	100.0	100.0	

**Table 3.** Age category of respondents.

		Age category			
	Age (years)	Frequency	%	Valid %	Cumulative %
Valid	<30	11	39.3	39.3	39.3
	31-40	10	35.7	35.7	75.0
	41-50	3	10.7	10.7	85.7
	>50	4	14.3	14.3	100.0
	Total	28	100.0	100.0	

shown in Table 2, female respondents accounted for 53.5%, while male respondents represented 46.4% of the sample. The research considered comparable ratios of males and females, as gender is considered an influential factor, thus making it essential to include an equal number of both genders. Table 3 displays the age range of the respondents. It indicates that most of the respondents are below 30 years old, with 11 respondents falling into this category.

Table 4 presents the employment status, sector, and educational background of the respondents. Among the total 28 respondents, 27 are currently employed in various organizations, while 1 is unemployed but was previously employed, making their participation valuable. Regarding the employment sectors, 13 respondents work in private organizations, while the remaining 15 are government workers, primarily employed in textile factories. In terms of educational attainment, 28.6% of the respondents completed elementary level education, 42.9% completed junior level education, and 25.0% completed secondary level education, with one respondent being uneducated. It is noteworthy that beyond junior levels, education for deaf individuals is

challenging due to limitations in learning using sign languages, although some have managed to attend secondary schools through their own initiative. Regarding marital status, 16 respondents (57.1%) are single, 7 (25.0%) are married, and 5 (17.9%) are divorced.

The second part of the questionnaire comprised 12 questions, consisting of 9 close-ended and 3 open-ended questions. These questions were formulated based on the core objectives of the study, primarily aimed at assessing the employment condition of deaf individuals across various variables such as working conditions, education level, employers' attitudes, barriers to employment, employment from a gender perspective, and the knowledge of employers and co-workers about deaf culture. Through the evaluation of these variables, the researchers aimed to identify solutions for the challenges encountered in the employment of deaf individuals.

#### Working condition suitability

The working conditions and employees' performance



**Table 4.** Demographic status of participants.

Demography		Frequency	%	Valid %	Cumulative %
Employment status	Employed	27	96.4	96.4	96.4
	Non-employed	11	3.6	3.6	100.0
	Total	28	100.0	100.0	
Sector of employment	Private sector	13	46.4	46.4	46.4
	Public sector	15	53.6	53.6	100.0
	Total	28	100.0	100.0	
Educational status	Elementary	8	28.6	28.6	28.6
	Junior	12	42.9	42.9	71.4
	High school	7	25.0	25.0	96.4
	Uneducated	1	3.6	3.6	100.0
	Total	28	100.0	100.0	
Marital status	Single	16	57.1	57.1	57.1
	Married	7	25.0	25.0	82.1
	Divorced	5	17.9	17.9	100.0
	Total	28	100.0	100.0	

are directly correlated, as unsuitable working conditions often lead to a reduction in employee performance. A safe working environment is characterized by factors such as workplace safety, stability, adequate income levels, positive engagement, enthusiasm, and positive employer attitudes. For deaf employees, these factors must be met to ensure suitable working conditions. Based on the gathered data, 8 respondents (28.6%) rated their working conditions as "very good," 13 respondents (46.4%) rated them as "good," and 7 respondents (25%) rated them as "fair," with no respondents rating them as "unsatisfactory." This indicates that almost all respondents were satisfied with the suitability of their working conditions in their workplaces (Figure 1).

#### Interest of employers on hiring deaf people

For a person to secure employment, possessing the required qualifications is crucial. However, simply having the necessary expertise may not be sufficient. Employability encompasses attributes that enable a person to gain employment. While these attributes can vary from one organization to another, one major factor is the interest of employers in hiring the right employees. People with disabilities (PWD) often face challenges in gaining employment, and the lack of interest from employers is reported to be among the major reasons for this issue. This research assessed the dimension of employer interest in hiring deaf individuals. According to the findings, 10 participants (35.7%) reported that the interest of employers is very good, 10 respondents (35.7%) rated it as good, 6 respondents (21.4%) rated it

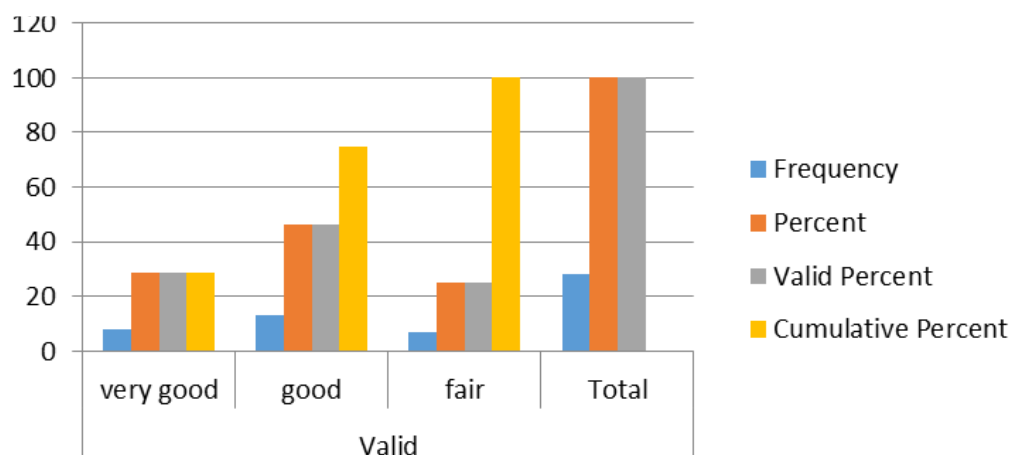
as fair, and 2 respondents (7.1%) indicated that the interest of employers in hiring deaf people is unsatisfactory.

#### Gender effects on employment choice

Gender plays a significant role in influencing the types of activities in which males and females engage. Traditionally, jobs requiring extensive physical strength have been predominantly performed by males, while those requiring less physical exertion are often associated with females. However, many jobs are now performed by individuals of both genders. According to the findings, 8 respondents (28.6%) agreed that gender has a major effect on their employment choices, while 20 respondents (71.4%) stated that gender does not affect employment choices and that anyone can pursue any kind of job regardless of their gender. Table 5 shows the gender effects on employment choice.

#### Effects of communication on employment condition of deaf employees

Communication is recognized as a significant barrier hindering deaf individuals from securing employment in various occupational fields. Deaf individuals encounter numerous communication challenges in their work lives, including a lack of interaction with colleagues, inability to make voice contacts, and colleagues and employers lacking knowledge of sign language. These difficulties often confine them to certain job roles. According to the findings, 7 respondents (25%) indicated that



**Figure 1.** Working condition suitability.

**Table 5.** Gender effects on employment choice.

		Frequency	%	Valid %	Cumulative %
Gender effect on employment choice.	Yes	8	28.6	28.6	28.6
	No	20	71.4	71.4	100.0
	Total	28	100.0	100.0	

**Table 6.** Effects of communication on employment condition of deaf employees.

		Frequency	%	Valid %	Cumulative %
How does communication affect your employment condition?	Very high	7	25.0	25.0	25.0
	High	7	25.0	25.0	50.0
	Moderate	11	39.3	39.3	89.3
	Low	2	7.1	7.1	96.4
	Very low	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

communication has a very high effect on their employment condition, while 7 respondents (25%) stated that the effect of communication is high. Additionally, 11 respondents (39.3%) reported that communication has a moderate effect, and 2 respondents (7.1%) expressed that communication has a low effect on their employment condition. Only one respondent stated that the effect of communication on employment choice is very low. Table 6 shows the effects of communication on employment condition of deaf employees.

#### Effects of education level on employment condition

Education has a significant spill-over effect on the employment condition of individuals. With many work techniques transitioning from manual to automated and

sophisticated systems, there is an increasing demand for professionals and skilled manpower. However, in the case of deaf people, particularly in Eritrea, most attend only junior levels of education due to a lack of secondary and higher education institutions tailored for them. From the data collected from the respondents, the perception of deaf individuals regarding the effects of educational level on employment condition (Table 7).

#### Knowledge of employers about deafness and deaf culture

Deaf people have their own specific culture, but the knowledge of this culture among employers of deaf employees is limited. According to the data gathered, 11

**Table 7.** Effects of educational level on employment situation.

		Frequency	%	Valid %	Cumulative %
How does your educational level affect your employment situation?	Very high	5	17.9	17.9	17.9
	High	12	42.9	42.9	60.7
	Moderate	9	32.1	32.1	92.9
	Low	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

**Table 8.** Knowledge of employers about deafness.

		Frequency	%	Valid %	Cumulative %
How do you assess the knowledge of your employers and colleagues about deafness?	Very high	11	39.3	39.3	39.3
	High	6	21.4	21.4	60.7
	Moderate	7	25.0	25.0	85.7
	Low	4	14.3	14.3	100.0
	Total	28	100.0	100.0	

**Table 9.** Employers attitude on hiring deaf people.

		Frequency	%	Valid %	Cumulative %
How do you assess employer's attitude on hiring deaf people	Very good	9	32.1	32.1	32.1
	Good	13	46.4	46.4	78.6
	Fair	4	14.3	14.3	92.9
	Unsatisfactory	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

respondents (39.3%) indicated that their employers have a very good knowledge of deafness, while 6 respondents (21.4%) mentioned that the knowledge of employers is relatively high. 7 respondents (25.0%) stated that their employers' knowledge is moderate, and 4 respondents noted a low level of knowledge on deafness and deaf culture among their colleagues and employers. Table 8 shows the knowledge of employers about deafness.

### Employers' attitude on hiring deaf people

Access to the labor market for deaf people is challenging, as they often face discrimination from their employers in most workplaces. This discrimination may stem from employers' lack of experience and unfamiliarity with meeting the needs of deaf employees. According to the findings, 9 respondents (32.1%) reported that there is a very good attitude of employers towards hiring deaf people, while 13 respondents (46.4%) said there is good attitude. 4 respondents (14.3%) mentioned a fair attitude of employers, and 2 (7.1%) respondents stated that the attitude of employers towards hiring deaf people is

unsatisfactory. Table 9 shows employers attitude on hiring deaf people.

The study also aimed to assess the employability condition of deaf people from the perspective of the deaf employees' hearing employers. The researchers conducted interviews focusing on the objectives of the study with employers and owners of some organizations. The summary of the findings is as follows:

### Barriers for employment of deaf employees

The employers' responses were largely similar. They do not perceive deafness as a barrier to employment; however, some acknowledged observing certain effects on deaf individuals. The study summarized the barriers to the employment conditions of deaf employees as follows.

#### *Lack of definite sign languages*

According to the information gathered from ERINAD, the sign language used by deaf people varies slightly from

region to region. The deaf school in the Anseba region, centered in Keren, exclusively uses professional sign language compared to schools in other regions. This slight variation creates communication challenges among the deaf themselves and with hearing co-workers as well.

### ***Cultural perception***

This cultural perception variety is shaped by various factors such as the environment, geographical location, and the level of enlightenment of the society. In some societies, deafness is perceived as a "gift of God," while in others, it is seen as a disability. This difference creates challenges in the workplace. Some deaf people are highly motivated and energetic, perceiving themselves as gifted individuals, while others may feel inferior compared to hearing people.

### ***Education***

The world is progressing rapidly, requiring professionals in various fields to perform tasks efficiently. However, many deaf individuals are trained primarily for technical jobs rather than professional ones. In the Eritrean context, schools for deaf individuals typically provide education only up to the 8th grade. Consequently, many deaf individuals cease their education at the junior level and opt for technical training in fields such as tailoring, carpentry, auto mechanics, and others. While some may continue their education in secondary schools, the limited educational opportunities often result in deaf individuals working in blue-collar jobs. As per the 2021 employment statistics from ERINAD, 64.8% of deaf individuals in Eritrea are engaged in embroidery and tailoring activities.

### **Challenges facing employers and employees working with deaf people**

The major challenges facing the employers and the deaf people's colleagues are mainly the following.

#### ***Intra- culture difference***

The disparity between the culture of hearing individuals and that of deaf minorities creates challenges in mutual understanding. Deaf individuals often expect hearing individuals to recognize their unique needs and communicate with them accordingly. However, hearing individuals may not easily grasp these expectations. For instance, deaf individuals may prefer meetings to be conducted in a rectangular seating arrangement rather than a rounded one. This preference stems from their need to visually communicate with each other through gestures and hand movements, which is facilitated more effectively in a rectangular seating arrangement.

### ***Long working hours' difficulty***

Deaf people prefer to take short breaks during long working hours. According to some of the respondents, on average, they needed a 15-min break for every 2 h of work.

### ***Difficulties in managing extra work facilities***

Deaf people can be disrupted by excessive duties or stressful environments.

### ***Communication difficulties***

This problem is prevalent in almost all organizations. Sharing information with deaf people becomes challenging as coworkers and employers may not be proficient in sign language to effectively communicate with them.

### **Reasons for low employment rate among deaf people**

According to the information gathered from the employers, the main reasons for low employment rate among deaf people are:

- 1) Lack of exposure.
- 2) Limited provision of trainings and diverged courses.
- 3) Negative/ Psychological complain by the deaf people.
- 4) Higher expectation on the organizations to resolve their employment problems.
- 5) Low understanding (communication barrier).
- 6) Employment opportunities are provided mainly only on the big cities.

### **Conclusion**

Employment is a crucial aspect of individuals' livelihood and self-esteem, significantly impacting their quality of life, economic survival, and social and psychological well-being. However, research indicates a low employment rate among deaf individuals. Communication barriers pose a significant challenge for many deaf employees, with approximately 50% of respondents reporting communication problems in their workplaces due to the uncommon use of sign language. Moreover, there is a lack of understanding and knowledge about deaf culture, leading to misunderstanding and ignorance.

Another major barrier to employment for deaf individuals is the limited access to higher education, with 61.8% of respondents citing this as a significant challenge. Additionally, negative attitudes from employers contribute to the difficulties faced by deaf employees. Changing these perceptions is crucial for fostering an inclusive work environment that accommodates individuals with disabilities.

The study also highlighted the importance of punctuality, discipline, and adherence to workplace rules and regulations for successful employment. Lack of these factors contributes to poor employment conditions for deaf individuals. Moreover, factors such as salary increments, financial stability, and a suitable work environment are identified as key motivators for deaf employees.

### Recommendation

Based on this research and the results obtained from the data, it has been observed that some weaknesses need to be eliminated, as well as opportunities and strengths have to be encouraged. The possible strategies and interventions that should be pursued by the employers working with deaf people are:

1. Increase the awareness of deaf people's needs: Deaf people have their own specific needs. These needs have to be addressed by the employers. For example, deaf people need a short break time while working for long hour.
2. Improve communication: Organizations have to give sign language courses to the colleagues and employers of the deaf people to minimize the communication problems for deaf people.
3. Improve relations among staff: Organizations need to create suitable environment where deaf employees work without pressure with their colleagues.
4. Better understanding of deaf employees by employers: Employers need to understand the deaf employees, their needs, their culture and fulfill their demands.
5. Equal access to meetings and instruction: Employers need to give equal treatment for the deaf people as the hearing employees and participate them in every activities of the organization
6. Increased knowledge about deafness: Employers need to gain knowledge about deaf people's needs and traits so as to help them on understanding their needs and fulfilling them.
7. Better opportunities for advancement: Deaf people need to be provided with higher education levels, regular training and development programs by the government, the deaf association as well as the Organizations that deaf people work at.
7. Moral supports: The employers and coworkers of deaf individuals provide support to them not only within the workplace but also outside of work settings. During visits to various organizations, the researchers encountered instances of employers demonstrating support for deaf employees. For example, the owner of a small to medium-sized tailor shop expressed a positive attitude towards deaf employees, stating that he finds them committed to their work and appreciates their ethical behavior. Additionally, the employer mentioned that he willingly provides training to deaf individuals in clothes

designing and specialized tailoring techniques during his free time, without any additional payment.

8. Salary increments: Some employers mentioned to the researchers that they offer salary increments to deaf employees in their organizations as a specific measure to motivate them further. Additionally, according to information provided by the Eritrean National Deaf Association (ERINAD) and publications from the Ministry of Labor and Social Welfare of Eritrea, the ministry provides various forms of support for individuals with disabilities, including those who are deaf. The primary objective of this study was to generate new insights into the challenges faced by deaf individuals in employment, with the aim of prompting employers to develop better accommodations for them. Due to time constraints and the dispersed distribution of the deaf population, the study was limited to Asmara, involving approximately 35 employees and employers from various business sectors. However, to gain a better understanding of employment opportunities for the deaf, researchers also conducted interviews with officials from the national deaf association.

According to their responses, the deaf association provides support to deaf individuals in various aspects across different regions of the country. However, due to limited personnel, a lack of deaf professionals, and administrative challenges, the program does not reach every deaf person living throughout the country.

Nonetheless, the deaf association endeavors to organize various training programs and projects in collaboration with the government, as well as national and international bodies. The key pillars of this support are:

- 1) Literacy programs.
- 2) Enhancing skills of sign languages.
- 3) Psychological and social welfare.
- 4) Giving Job trainings.
- 5) Giving Diversified courses by professionals

### CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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