

Children, Women and Men with Disabilities in Vanuatu: What do the data say?



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FOREWORD

Children and adults with disabilities face many barriers to full participation in society. This report makes an important contribution to documenting the extent of disability and its impact on people's lives in Vanuatu.

Through detailed statistical analysis of data collected in Vanuatu's census, household surveys and education database, the report estimates the prevalence of disability and explores the situation of children, women and men with disabilities with respect to education, employment, poverty, and domestic violence.

The report points to the existence of significant inequalities based on disability. For example, children with disabilities are much less likely to attend school than their non-disabled peers. Adults with disabilities are less likely to be employed outside the home and more likely to be either self-employed or working in a family business.

Overall, persons with disabilities are more likely to be among the poorest members of the population. This confirms the need to ensure that strategies and interventions to combat educational disadvantage, poverty and other forms of social exclusion recognize children and adults with disabilities as an explicit target group.

The report makes important recommendations to improve the quality of future data collection efforts on disability in line with international standards and best practices. It highlights the set of questions for measuring disability in adults endorsed by the UN Washington Group on Disability Statistics and a new survey module on child functioning and disability developed by the Washington Group and UNICEF.

It is our sincere wish that this report will be used by all relevant stakeholders in Government, civil society and development partners to help inform policies, funding and programmes for children and adults with disabilities in Vanuatu. We also hope that this publication may inspire other Pacific island countries to undertake similar analytical work on disability.



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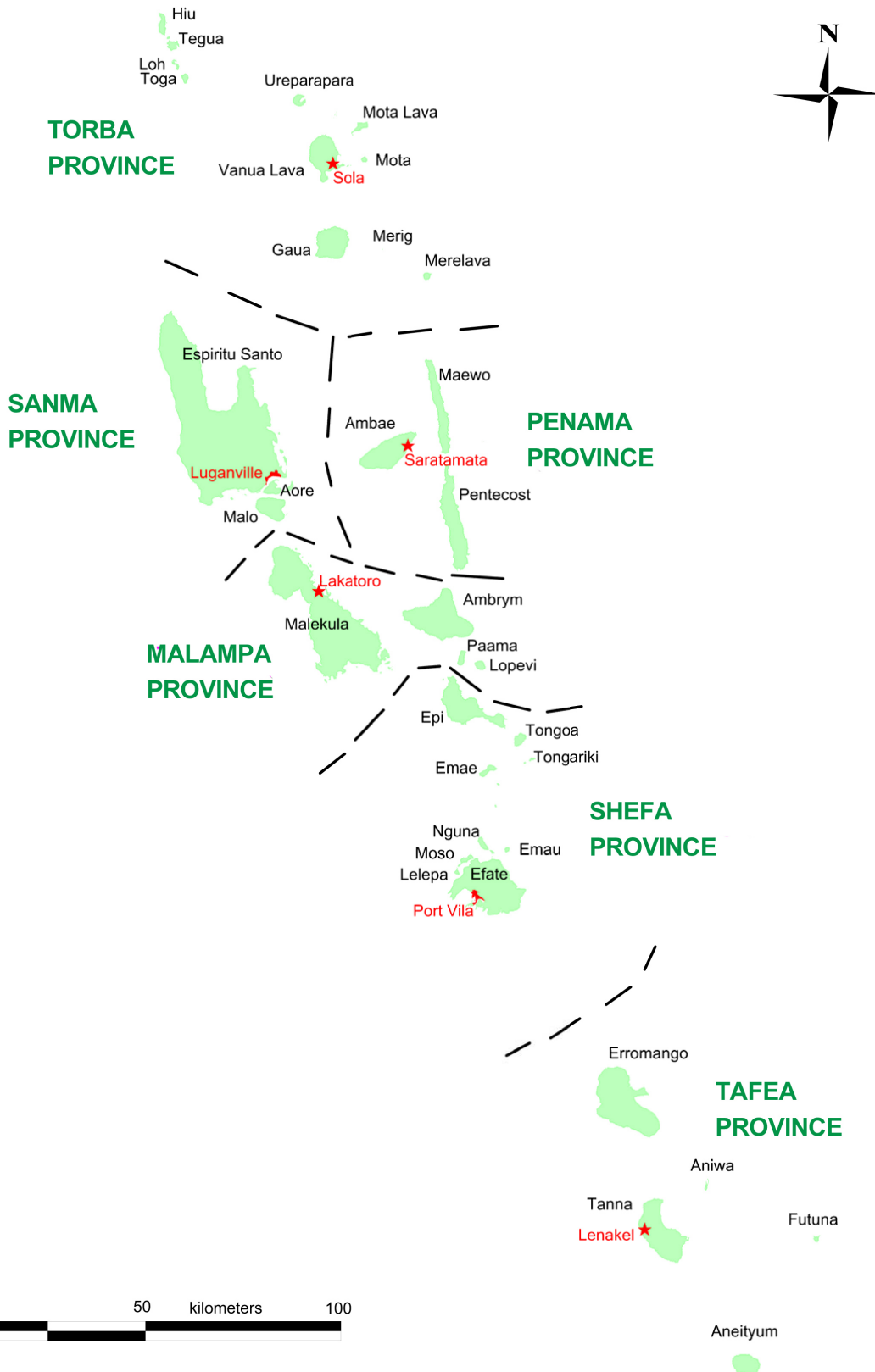
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ACRONYMS

CRPD	Convention on the Rights of Persons with Disabilities
DHS	Demographic Health Survey
NPHC	National Population Housing Census
UN	United Nations
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNICEF	United Nations Children's Fund
VDHS	Vanuatu Demographic and Health Survey
VDPS	Vanuatu Disability Pilot Survey
VEMIS	Vanuatu Education Management Information System
WG	Washington Group on Disability Statistics

MAP OF REPUBLIC OF VANUATU



EXECUTIVE SUMMARY

Global evidence indicates that children and adults with disabilities are among the most marginalized and excluded groups in society. They are often excluded from the economic and social life of their communities, lacking access to school, health clinics, public transportation, public spaces, work sites and community events. This exclusion can result from inaccessible infrastructure, and from institutional barriers and discriminatory attitudes.

To promote the inclusion and full rights of children and adults with disabilities, the United Nations General Assembly adopted the Convention on the Rights of Persons with Disabilities (CRPD) in 2006, affirming that people with disabilities are entitled to equal participation in society. This idea is encapsulated in the CRPD definition of disability: "Persons with disabilities include those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others."

The Republic of Vanuatu signed the CRPD in 2007 and ratified it in 2008. Accordingly, the Government of Vanuatu has undertaken a number of important steps since then to move forward towards implementing the CRPD. It established the National Disability Policy and Plan of Action 2008-2015, the Mental Health Policy and Plan 2009-2015, and the Inclusive Education Policy and Strategic Plan 2010-2020. The Government of Vanuatu also created a Disability Desk within the Ministry of Justice and Community Services to monitor the implementation of disability-related policies and to coordinate collaboration with government institutions, civil society and development partners. Moreover, efforts are underway on a variety of service provision programmes, including community-based rehabilitation, physiotherapy, sports therapy, and awareness-raising activities.

Disability statistics are essential for informing policy makers and building the case for the advancement of policies, funding and programmes for fulfilling the rights of children and adults with disabilities. The Government of Vanuatu has collected data on disability using different instruments: the 2009 National Population and Housing Census (NPHC); the 2013 Vanuatu Demographic and Health Survey (VDHS); and the 2014 Vanuatu Disability Pilot Survey (VDPS). Administrative data on children with disabilities enrolled in school are also available from Vanuatu's Education Management Information System (VEMIS). Each of these disability data collection instruments has advantages and limitations.

According to Vanuatu's 2009 Census and based on the definitions used in this report, around 5 percent of the population have a mild, moderate or severe disability. However, according to the VDHS, the disability prevalence rate is only 3.3 percent, but there are strong reasons to believe that the survey undercounts people with mild and moderate disabilities. The rate of severe disability according to the VDHS is 2.4 percent, which is similar to the rates found in studies in other countries.

Questions on disability in the Census and the VDHS do not make it possible to determine the prevalence of disability among young children due to the nature of the questions asked about disability. Nonetheless, according to VEMIS, 7–8 percent of primary school children have a disability. If we assume that children with disabilities are less likely to attend school, as has been found in this report and many studies in other countries, then the overall rate of childhood disability is most likely higher.

This report examines the differences in disability rates with respect to three socio-demographic characteristics: place of residence, age and gender. The prevalence of disability is higher in rural areas than urban areas, and among adults, strongly correlated with old age. Due to data limitations, little can be inferred about the relationship between disability and age for children and adolescents. The report did not find a consistent relationship between gender and disability, except at the upper end of the age distribution; i.e. men over 70 years of age are about twice as likely to have a disability.

Among persons who have been identified as having a moderate or severe disability, for both females and males, sight is the most prevalent problematic functional area. The next most prevalent type of disability is hearing difficulties for men and mobility limitations of women. Young people with disabilities are more inclined to have difficulties in the functional domains of cognition and communication than older people.

Associated factors, or correlates, may be either risk factors for the development of disability or consequences of disability, such as discrimination or restricted social participation and exclusion. This report examines the relationship between disability and other selected indicators available in Vanuatu's datasets, including educational attainment, poverty, employment, marital status, attitudes towards domestic violence, and child disciplinary practices. Due to data limitations, it was not possible to look at the association with health variables such as child immunization or nutrition. Key findings include the following:

- *Education:* Children with disabilities are significantly less likely to attend school than their non-disabled peers. For example, among 10-19 year olds, the gap in primary school attainment is more than 53 percentage points. Among adults, differences in educational attainment based on disability status are less pronounced, likely because a majority become disabled when they have passed the school age.
- *Poverty:* People with disabilities are much more likely to be poor; nearly 31 percent of people with severe disabilities are living in the lowest wealth quintile, compared with 16 percent of people without reported disabilities. The causal connection between disability and poverty is complex and multi-directional: disability could be caused by conditions associated with poverty; having a disability could inhibit one's ability to obtain wealth; and/or households with more wealth may have better access to health care or other

services that lessen the degree of disability even if it does not eliminate its presence.

- *Economic activity:* While people with disabilities are equally likely to take part in productive activities as non-disabled people, they are less likely to be employed outside the home and more likely to be either self-employed or working in a family business. This shows that despite the willingness and capability of people with disabilities to undertake productive activities, there are barriers preventing them from obtaining employment.
- *Domestic violence against children and women:* The data suggest that parents of children with disabilities are more likely to use the disciplinary practice of psychological aggression and less likely to use severe physical punishment than parents without children with disabilities. The husbands of women with disabilities were less inclined to justify wife-beating under certain circumstances. Since this finding differs from studies in other countries, further investigation is needed to determine if the finding is accurate, or merely skewed by certain methodological issues.

The data explored in this report show clear gaps in access to basic services and participation based on disability status, but due to data limitations, these findings should be taken as indicative only. Recommendations are made in the report to improve the methodology of future studies in line with international standards, and to scale up the Vanuatu Disability Pilot Survey, with a focus on exploring the barriers to participation. In addition to knowledge that disability is associated with less education, less wealth, and less employment, it is important to understand the most important barriers to participation in order to design more cost-effective policies.



1

Introduction

Persons with disabilities represent an estimated 15 percent of the world's population (WHO/World Bank 2011). These people are disproportionately poor, underemployed and uneducated (Groce et al. 2011; Mitra, Posarac, and Vick 2013; WHO/World Bank 2011). They are often excluded from the economic and social life of their communities, lacking access to school, health clinics, public transportation, public spaces, work sites and community events. This exclusion can result from inaccessible infrastructure, and from institutional barriers and discriminatory attitudes.

To combat this exclusion and promote full rights for people with disabilities, the United Nations adopted the Convention on the Rights of Persons with Disabilities (CRPD) in 2006. The CRPD maintains that people with disabilities are entitled to equal participation in society as full members and not merely as objects of charity. Vanuatu signed the CRPD in 2007 and ratified it in 2008.

In order to implement the CRPD, the Government of Vanuatu has undertaken a number of important steps. It established the *National Disability Policy and Plan of Action 2008-2015*, the *Mental Health Policy and Plan 2009-2015*, and the *Inclusive Education Policy and Strategic Plan 2010-2020*. The Government of Vanuatu also created a Disability Desk within the Ministry of Justice and Community Services to monitor the implementation of disability-related policies and to coordinate collaboration with government institutions, civil society and development partners. Moreover, efforts are underway on a variety of service provision programmes, including community-based rehabilitation, physiotherapy, sports therapy, and awareness-raising activities.

Disability statistics are essential for informing policy makers and building the case for advancement of such policies, funding and programmes. Both globally and in the Pacific region, there is growing attention for the issue of disability, accompanied with calls to improve the state of disability statistics:

- The UN Convention on the Rights of the Child (CRC, 1989) is the first human rights treaty to explicitly address the rights of children with disabilities. It includes a prohibition against discrimination on the grounds of disability (article 2), and obligations to provide services for children with disabilities, in order to enable them to achieve the fullest possible social integration (article 23).
- Article 31 of the Convention on the Rights of Persons with Disabilities (CRPD, 2008) puts an obligation on governments to collect appropriate information, including statistical and research data, to enable them to formulate and implement policies.
- The report of the High Level Panel of Eminent Persons on the Post-2015 Development Agenda explicitly states that (among other groups) those with disability must not be 'left behind' and calls for all data to be disaggregated by disability.
- Member States of the UNESCAP have declared 2013-2022 as the 'Asian and Pacific Decade of Persons with Disabilities' and adopted the Incheon Strategy to 'Make the Right Real' for Persons with Disabilities in Asia and the Pacific. This Strategy includes a specific goal to improve the reliability and comparability of disability data.
- In 2009, Pacific Island Forum member countries adopted the Pacific Regional Strategy on Disability 2010-2015. The 2nd Forum Disability Ministers' Meeting in 2012 urged national and regional stakeholders to work together to increase the disability data, research and knowledge and use this to better inform decision-making.
- The 4th Regional Meeting of Heads of Planning and Heads of Statistics (HOPS) hosted by the Secretariat of the Pacific Community (SPC) in 2013 recommended that Pacific island countries review their data collection methods for adult and childhood disability and re-analyse existing census and survey data on disability to obtain richer information, such as on "equalization of opportunities".

The Government of Vanuatu has collected data on disability using different instruments: the 2009 National Population and Housing Census (NPHC); the 2013 Vanuatu Demographic and Health Survey (VDHS); and the 2014 Vanuatu Disability Pilot Survey (VDPS). Administrative data on children with disabilities enrolled in school are also available from Vanuatu's Education Management Information System (VEMIS). Each of these disability data collection instruments has advantages and limitations.

The purpose of this report is to analyse the quality of these data and to provide a snapshot of the extent of disability and its impact on people's lives. How children experience disability in Vanuatu society is of particular interest.

Section 2 begins by reviewing the definition of disability and international standards in identifying children and adults with disabilities through quantitative data instruments. It then assesses the methodology found in the data instruments available in Vanuatu. Section 3 describes the prevalence of disability in the population and examines the differences in disability rates with respect to three socio-demographic characteristics: place of residence, age and gender. It also looks at the different types of functional limitations experienced by persons with disabilities. Section 4 analyzes the gaps in access to basic services and participation between disabled and non-disabled persons. In particular, it examines the relationship between disability and other selected indicators, including school attendance and educational attainment, poverty, economic activity, marital status, attitudes towards domestic violence, and child disciplinary practices. Finally, Section 5 offers recommendations to improve the methodology and scope of future studies in Vanuatu.



This section briefly reviews the social model of disability and how it relates to the definition of disability in both the CRPD and the Vanuatu National Disability Policy and Plan of Action. It then reviews various ways of defining disability in quantitative data instruments and compares best practices to the methodology found in the data instruments available in Vanuatu.

2.1 THE SOCIAL MODEL OF DISABILITY

According to the Social Model of Disability, disability is not simply an impairment, but rather, it results from the interaction of people's impairment and their environment; i.e. people may have an impairment, for example, they cannot move their legs, but it is the barriers in the environment that prevent them from participating in society that determines their disability, such as attending school. Therefore, disability policies should not focus solely on people's impairments, but also on the barriers in the environment that prevent them from participating in society, be it physical, institutional or attitudinal. Hence, when collecting data on disability, it is important to not only gather data on people's impairments or difficulties in carrying out various activities, but also on the barriers in the environment that exclude and marginalize them.

It is important to realize that an impairment is not synonymous with a medical diagnosis. According to this model, for example, in terms of the education of children with a disability, it is more important to focus on what he or she is capable of doing, and not which disability he or she may have. For example, among people with cerebral palsy, some have great difficulty walking or speaking, while others only have minor difficulties. Some may have cognitive delays, whereas others may have none. Information on diagnoses may be important for designing programmes to prevent social disability and to monitor its impact on people's lives and how environmental barriers impede their participation. However, a diagnosis alone does not provide much information on their capacity to undertake various activities. Further information is needed on the nature of people's impairments and on their functional limitations. Equally important is information on the barriers, supports and services found in their environment that either impede or facilitate their participation in society.

Addressing the needs of people with disabilities thus requires several types of interventions. Some may be focused on the individual, for example, rehabilitation services, but others may be focused on the environment, such as providing assistive devices, building accessible structures and services, and raising awareness.

This idea is encapsulated in the CRPD definition of disability, which is also used in the Vanuatu National Disability Policy and Plan of Action: *Persons with disabilities include those who have long-term physical, mental, intellectual, or sensory impairments, which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.*

2.2 QUESTIONS FOR IDENTIFYING DISABILITY IN A CENSUS OR SURVEY CONTEXT

Identifying people with disabilities via survey questions is complicated, but in recent years, international standards have been developed and tested in a wide variety of countries that produce much more useful and reliable data than in the past.

Previously, several methods were used that did not provide good data. For example, simply asking a person if he or she has a disability significantly under-identifies people with disabilities for several reasons (Mont 2007). First, since disability is often associated with shame or stigma, people do not want to admit that they or their family member have a disability. Second, since the word 'disability' often conjures up images of only the most serious impairments, people with mild or moderate impairments are often missed. However, a minor impairment might be associated with a significant disability, depending on the environment. For example, if children with vision impairments that are correctable by glasses drop out of school at much higher rates than other children because glasses or other accommodations are not available, then a minor impairment could be significantly disabling. Finally, surveys often miss the elderly because they often think that they are not disabled, but just old. However, for example, if their mobility is restricted to the extent that it affects what they can do, then they have a disability. The policy interventions for the elderly with disabilities may be different than those for children with disabilities; however, if an individual is not able to walk, regardless of age, then he or she has a disability.

Surveys and censuses should not include questions on medical diagnoses because, as stated above, two people with the same medical diagnosis might have different limitations. Also, any list of diagnoses included on a questionnaire will be incomplete and cumbersome, and respondents might not know their diagnosis. As concerns statistics, knowledge of a diagnosis could be correlated with other factors that increase their interaction with the health care system, such as level of education, place of residence and income. If so, then diagnosis-based information would be biased.

The recommended approach in censuses and surveys is to inquire about the difficulties that the respondent may have when carrying out certain basic activities. This is the approach taken by the UN Statistical Commission's Washington Group (WG) on Disability Statistics, which uses the World Health Organization's (WHO) International Classification of Functioning, Disability and Health as the basis of their questionnaire.

The idea is not to ask about 'disability' per se, or about medical conditions, but rather to identify people who have difficulties with basic activities, which could limit how they participate in society. For example, does the person have difficulty walking? This may be due to impairments such as paralysis, heart conditions and cerebral palsy. But the goal is to identify individuals who have difficulty with such an activity regardless of cause and thus are at risk of not being able to fully participate in their communities.

The WG designed two sets of questions. The short set of six questions designed for use on censuses is considered the minimum number of questions needed to identify the large majority of people with disabilities. A minimal set was needed because space on censuses is so limited. The WG short set is provided in Box 1.

It is important to note that in order to use the WG questions properly, they must be used exactly as written, with the opening statement, followed by the set of six questions with the same response categories as shown in Box 1, as discussed in more detail below. Also, it is very important not to use a screening question such as "Do you have a disability?" to determine who will be asked the WG questions; rather, it is the WG questions that should be used to determine who has a disability. A screening question negates the purpose for which the questions were designed.

The WG questions have a few weaknesses. The clauses 'even when wearing glasses' or 'even when wearing a hearing aid' can cause confusion among some respondents. Also, there are no specific questions on upper body mobility; for example, if people have significant upper body limitations, this will affect self-care. Moreover, the questions do not address psychological issues.

To address these issues, the WG designed an extended set of questions.¹ This questionnaire divides the vision and hearing questions into two questions in order to more sharply clarify the glasses and hearing aid issue; countries with no access to hearing aids can ignore this clause entirely. It also adds a few questions on upper body mobility and psychological issues. While these questions are too numerous for a census or may be added to another survey such as a labour force survey, a household income and expenditure survey or a demographic and health survey, they are highly appropriate for a national disability survey. They would provide richer and more detailed information about the population's functioning.

¹ The questionnaire is available at www.cdc.gov/nchs/washington_group.htm

Box 1. Census Questions on Disability Endorsed by the Washington Group (Short Set)

Introductory phrase: *The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.*

1. Do you have difficulty seeing, even if wearing glasses?

- a. No - no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

2. Do you have difficulty hearing, even if using a hearing aid?

- a. No- no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

3. Do you have difficulty walking or climbing steps?

- a. No- no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

4. Do you have difficulty remembering or concentrating?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

5. Do you have difficulty (with self-care such as) washing all over or dressing?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

6. Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

WG questions do not address the cause of disability, the date of onset, or environmental barriers that may be preventing people with disabilities from participating in their communities. Information on the cause of disability would be useful for designing prevention programmes. Date of onset is an important variable for addressing the impact of disability. For example, the education of individuals who become disabled at the age of 40 will not be affected by their disability; their work behaviour will. Finally, information on barriers is important for designing policies to improve the participation of people with disabilities in the economic and social life of their communities. The WG questions – both the short and extended sets – are only used to identify the current population of disabled people. Thus, they represent the minimal set of questions needed for analysis of disability in the population.

Both sets of WG questions have been rigorously tested in developed and developing countries, and have performed well. The extended set performs better, but if space is limited, then the short set will adequately identify the large majority of people with disabilities. It is the short set of questions that has been recommended by the UN Statistical Commission for use as a basic indicator for disability prevalence, and that serves as a basis for the estimates of disability prevalence in the WHO World Report on Disability.

As the WG documentation explains, it is very important that the response categories in Box 1 are also included. Asking a simple yes/no question causes two problems. First, it is impossible to determine the degree of disability. People with different levels of activity limitations might be affected by their limitations very differently. Second, it is not clear if people with only some difficulty should be included in the population identified as having a disability. People with some difficulty in only one functional domain might experience no participation limitations and therefore should probably not be classified as having a disability.

So why ask about ‘some difficulty’? The reason is to get cleaner data. If people have difficulty walking, for example, they may not know whether their difficulty is severe enough to answer in the affirmative to a yes/no question. If the only response categories are ‘no difficulty’, ‘some difficulty’, and ‘cannot do at all’, then the middle category is too large. This might include a very broad range of people, for example, those who have difficulty walking across a room and those who have difficulty walking a kilometre.

After the data are collected, analysis can be performed to examine respondents with only some difficulty doing an activity to see if they should be included in the population of people with disabilities or not. But without this response category, the data will be problematic, as discussed in more detail in the analysis below.

Finally, it is important to point out that, as the WG notes, the WG questions are not suitable for children, at least, definitely not children under the age of ten, and especially those aged five or under. This is true for several reasons. First, the expectations of what children can do changes significantly year to year. Moreover,

there is natural variation in their development, and even different cultural expectations of what a child is expected to be able to do at a given age. Therefore, their difficulties in performing activities must be compared to children of the same age. Second, there are certain activities such as the ability to play, make friends, and stay focused on completing a task that are highly important for identifying developmental disabilities in children who are not included in the WG questions.

For this reason, UNICEF and the WG jointly developed a special module for identifying disability in children. It has been tested in a number of countries, and UNICEF will shortly be publishing a guide on how to use the questions. This will include an algorithm for using the answers to the questions in determining which children have a disability.²

2.3 VANUATU DISABILITY QUESTIONS

The Government of Vanuatu has collected data on disability using four different data instruments: the 2009 National Population and Housing Census (NPHC), the 2013 Vanuatu Demographic and Health Survey (VDHS), the 2014 Vanuatu Pilot Survey on Disability (VDPS) and the Vanuatu Education Management Information System (VEMIS). Each of these instruments can provide a different aspect of information on children and adults with disabilities that taken together would be very useful in supporting the implementation of the Vanuatu National Disability Policy and Plan of Action.

The census has the advantage of being able to generate accurate data for small areas so that the distribution of people with disabilities across the islands could be better determined, as well as differences in a few basic indicators. The VDHS, being a longer survey, can obtain a broader range of indicators for people with disabilities. However, these instruments neglect the barriers preventing people with disabilities from achieving outcomes similar to their non-disabled peers.

If they are going to school less, why is this so? What barriers do they face? These questions can be answered by a disability survey that also asks questions about environmental barriers. They also lack information on the causes of disability, which is useful for designing programmes for the prevention of impairments leading to disability.

In order to use these data instruments together, it would be best if they all took the same approach to identifying people with disabilities; however, they take different, although related approaches. This section assesses the approaches taken.

It should be stressed that the census and survey data instruments did not use questions designed to identify disability in children. Therefore, information on children – especially those under the age of ten – is unreliable.

² For information on data collection on disability in children, see data.unicef.org/child-disability/overview

2.3.1 National Population and Housing Census

The 2009 NPHC uses the same questions as in Box 1, but it uses different response categories. Instead of the four response categories, 'No difficulty', 'Some difficulty', 'A lot of difficulty', and 'Cannot do', it uses just three possible responses: 'No difficulty', 'Some difficulty', and 'Cannot do'. Hence, the middle category identifies people with a very wide spectrum of activity limitations. It is not possible to separate people with mild conditions from severe conditions. For example, a respondent who might become short of breath after walking half a kilometre will select 'Some difficulty' in walking. Another respondent might have trouble walking across a room, but since he/she can walk a short distance, he/she does not answer 'Cannot do'.

In interpreting data from the Census, there are two options. The first would be only to consider people who 'Cannot do' an activity as having a disability, but this will significantly underestimate disability prevalence. The second is to consider people who have 'Some difficulty' as having a disability, but this might include people with conditions that have no real impact on their ability to participate. As such, estimates of disability prevalence should be seen as an upper bound. On the other hand, since some people who do not really have disabilities are included in the group identified as having a disability, any estimate of the impact of disability derived from the Census should be taken as a lower bound.

2.3.2 Vanuatu Demographic and Health Survey

The Demographic and Health Survey (DHS) programme provides assistance in the design and implementation of surveys that provide data for a wide range of indicators in the areas of population, health and nutrition. The core DHS surveys are often adapted to the particular conditions and concerns of the countries they are fielded in. In 2013, Vanuatu conducted the Vanuatu Disability Health Survey (VDHS), which includes questions on disability.

The 2013 VDHS uses the WG short set of questions as developed, but also uses a yes/no screen to determine who gets asked. However, the screening question is better than a simple yes/no "Do you have a disability?" screen, as in the VDPS. The VDHS screen mirrors the WG questions by asking in a single question: if the person, because of a health condition, has any difficulty hearing, seeing, walking or climbing steps, remembering or concentrating, self-care activities such as washing or dressing, or communicating and understanding or being understood. It does not mention the word 'disability', which is good, but testing on questions shows that when people are asked to respond to a long list, they often get confused. They forget some activities at the beginning of the list, or they feel they have to have difficulty in all the activities listed in order to answer in the affirmative.

An example of this can be found in Zambia (Loeb et al. 2008). In 1991, the Zambia Census contained the question, "Do you have a disability?" and obtained a prevalence rate of 0.9 percent. In 2001, they changed their question to one

that listed a range of areas where a person might have a difficulty (as in the VDHS screening question) and obtained a prevalence rate of 2.7 percent. In 2006, on a survey that asked the WG questions verbatim; i.e. a separate question for each functional domain with no screening question, the prevalence rate was 8.5 percent. Only respondents who stated that they had a lot of difficulty or could not do an activity were considered to have a disability, not people who only had some difficulty.

There is also a difference between the WG and VDHS communication questions; the clause about usual or customary language is not included in the VDHS. The reason that this clause was included in the WG questions was to exclude people who have difficulties communicating with others because of language differences. The objective is not to identify people who cannot speak English, for example, but people who cannot communicate in their mother tongue with other people speaking that same language. In some situations, this can be a significant issue, while in others, where people do not regularly interact with others as the speaker of a minority language, it may be no issue at all. It is not clear what the impact of excluding this clause has in this instance. But compared to the disability screening question, this is a minor issue.

2.3.3 Vanuatu Disability Pilot Survey (VDPS)

The 2014 VDPS was overseen by the Disability Desk Officer of Vanuatu in order to develop a reliable instrument to better monitor the situation of people with disabilities in the country. The survey was developed and implemented together with staff from the National Statistics, taking into account feedback from stakeholders in Vanuatu and the region.

The questionnaires were field-tested in rural and urban locations, with modifications made based on the results. Data were then collected on 2,583 individuals from 431 households in Efate Province – Epule, Eton, Futuna and Ifira. This province was selected because it had a high rate of disability prevalence according to the 2009 NPHC.

As a pilot study, the main aim of the VDPS was to develop and test disability questions, and based on lessons learned from the implementation, to then develop a final instrument that could be used to collect data that were more generally representative of the country. The 2014 VDPS questions on identifying people with a disability can be found in Box 2. The first two questions on lacking limbs or being paralyzed are diagnostic questions on medical conditions. However, these two medical conditions do not complete the list. For example, what if a person has a non-paralyzed limb but because of a condition such as cerebral palsy or muscular dystrophy does not have full use of that limb? The next question combines being able to move all or part of a person's body with the ability to walk. This question could be confusing to a person who has no problems walking but has problems moving a different part of his or her body, such as a neck or fingers. It can also be confusing to a person who has difficulty walking not due to the inability to move a body part, but for another reason such as a serious heart or

inner-ear condition. Finally, some of the questions are redundant. Once a person responds to the question about having difficulty seeing, it would be irrelevant whether he or she is blind. If they are blind, then they will have answered 'Cannot do at all' to the question on vision.

Another problem with the VDPS concerns how it addresses cognitive difficulties. The question in the VDPS only asks about remembering, while the WG question combines remembering with concentrating. When the WG tested a question that only asked about remembering, they found that it captured many people with minor difficulties that were far from a disability. However, when asked a question combining remembering with concentrating, people with trivial memory problems did not respond in the affirmative. Also, concentration is another important cognitive task that is associated with being able to undertake many activities of daily living. As a result of the testing procedure, the WG determined that it was important to put both activities in the same question (see the WG website).

Thus, the VDPS probably both under- and over-identifies various sub-populations of people with disabilities. It is strongly recommended that, instead of these questions, the follow-up to the VDPS use the WG extended question set on functioning. As stated above, these questions have been tested in many different countries and have performed very well. They also map on to the WG short set of questions on disability, so they could easily be used in conjunction with surveys that use this set.

Box 2. VDPS Questions Identifying Disability

Is there any member of the household who ...

- Is lacking part of one or more limbs?
- Is partially or totally paralyzed?
- Is unable to move part or all of his/her body or has problems walking?
- Has difficulty seeing (even when wearing glasses)?
- Cannot see at all (is blind)?
- Has difficulty hearing?
- Cannot hear at all (is deaf)?
- Has difficulty speaking?
- Cannot speak at all (is dumb)?
- Has a cognitive difficulty (difficulty understanding, learning)?
- Has difficulty remembering?

Response categories:

No difficulty, Some difficulty, A lot of difficulty, Cannot do at all.

Note: Responses are recorded for each member of the household.

Another fundamental issue is that the VDPS first asks whether a person in the household has a disability, and only households with reported disabilities are then asked the remaining questions. In essence, then, the VDPS is using the classic question “Do you have a disability?,” which has been shown to significantly under-identify people with disabilities and exclude people with minor or mild disabilities, as well as people who considered themselves to be just old and not disabled.

It would be good practice if all households in the sample were asked the full set of questions. Also, respondents in households without a person with a disability should be asked the other questions such as on education and wealth. The reason for this is that in order to gauge how well people with disabilities are functioning, their outcomes must be compared to those of non-disabled people. The current VDPS report is unable to do this. Although the non-disabled household members in the VDPS are asked the same questions, this is not the right group for making comparisons with the disabled members in order to ascertain the impact of disability. This is because non-disabled people in households with a disabled person are affected by disability. For example, the mother of a child with a disability might be less likely to find employment than a mother without disabled children. A child with a disabled parent might be less likely to go to school than a child without a disabled parent. If people from households both with and without disabilities are included in the sample, it will then be possible to compare people with disabilities to all people with disabilities, and also to examine the impacts of having a disabled household member on non-disabled people.

The methodological issues in the VDPS are not unique. The WG questions have been used by many countries, often incorrectly. The global experience of using the WG questions will be published shortly in a book, which also summarizes the research underlying their development. The WG is also working on training material that can be used to support the implementation of the WG questions. The developers of the VDPS did not receive this training.

One concern is the size of a sample needed to have meaningful results. For instance, using a random sample where all households are asked the full questionnaire, a greater number of households would be needed to generate a large enough sample of disabled people. While it would be better to ask all households the full questionnaire, if there are concerns about cost, the following approach could be taken. The sample should be divided into two groups. To one group, “Do you have a disability” screen will be applied, and to the other, no screen will be applied. From the first group, many people with disabilities will be identified because less time will be spent interviewing households without members with disabilities; it should be kept in mind, however, that this group will include a disproportionately high number of individuals with severe disabilities. From the second group, people with disabilities will be identified that the screen question in the other group will have missed. This will not only provide information from people with more moderate impairments, but also enable a better understanding of the biases in the sub-sample using the ‘Do you have a disability?’ screen. This would provide a sample of non-disabled people from households with and without disability,

which can be examined to understand the impact of disability on people's lives. Indicators must be compared between people with and without disabilities. Note that a weighting scheme would have to be used to combine the two groups.

The VDPS also includes questions about the cause of disability, date of onset, and the barriers to participation. These are very important data fields that will generally only be collected with a national disability survey. It will be very difficult to find space on a more general survey to include them. If scaled up, the VDPS will be able to provide important information on both prevention of disability and on potential policies mitigating the impact of disabilities on people's lives. However, due to the small and unrepresentative nature of the pilot sample, these questions are not analysed in this report.

2.3.4 Vanuatu Education Management Information System (VEMIS)

The VEMIS is an administrative process of collecting, aggregating and reporting school-based data. It includes data collection forms and a system for their distribution and collection, a method of entering these data electronically, and it creates indicators at the school, district and national levels. Data are thus collected on all children each year — not just a sample; however, it does not collect data on children who are not in school. Therefore, while it can be used to monitor the experience of children in school, it cannot address the prevalence of out-of-school children.

Teachers categorize children based on type of disabilities according to a list included on the VEMIS form: Down syndrome, hearing impairment, learning disability, mental disability, physical disability, sight impairment, social and emotional problems, speech impairment, and other disabilities. However, the degree of disability is not indicated.

2.4 OPERATIONAL DEFINITIONS OF DISABILITY

Once the responses for the disability questions are obtained, the next step is to use them to identify who has a disability. In reality, disability is not a binary variable. It is not as if some people have difficulty functioning and others have no difficulty functioning, and thus there is a distinct line between the two groups (Mont and Loeb 2010). Instead, the distribution of functioning is rather smooth, with a wide range of difficulties. Do we want to consider people with only some difficulty in one domain as having a disability? Or do we only want to consider people with a lot of difficulty or who cannot do a particular activity as having a disability? What about people with some difficulty in every domain but without a lot of difficulty in any particular one? The combination of minor impairments across domains might be very limiting.

The data can help decide where to draw the line. A good practice is to have a range of definitions that capture people with mild, moderate, or severe functional limitations, and examine their outcomes (education, employment, poverty, etc.). If

people with only some difficulty in a single domain do not have any differences in outcomes, then their functional difficulties do not reach a level that has an impact on their life. Good practice is to investigate the entire range of functioning to get a fuller picture of functional limitations in the population and to determine where exactly these limitations start being associated with negative outcomes.

Therefore, this study at first defined three levels of functional limitations, from the mildest level of difficulties to the most significant.

- **D1:** This is the group that has some difficulty in one functional domain, but no difficulties in any other domain.
- **D2:** This is the group that has some difficulty in more than one functional domain, but does not have a lot of difficulty in any one domain.
- **D3:** This is the group that has a lot of difficulty or cannot do an activity in at least one functional domain.

In previous studies, D3 is always associated with disability. Some studies also include D2 or both D1 and D2. In the Vanuatu 2009 National Census, some 0.8 percent were in D3, 4.3 percent in D2, and 6.9 percent in D1 for a total of 12 percent.

In analysing the data on disability in Vanuatu, it was determined that people in the first category, D1, did not have significantly different outcomes from people reporting no difficulties: i.e. these difficulties did not seem to be limiting their participation at school and work, or other outcomes. Therefore, for the rest of this report, only people in D2 and D3 are considered to have a disability. Henceforth, people in category D2 will be referred to as having mild or moderate disabilities, while people in category D3 will be referred to as having severe disabilities. People in category D1 are not considered to have a disability.

3

Disability Prevalence



This section describes the prevalence of mild, moderate and severe disability in the population and examines the differences in disability rates with respect to three socio-demographic characteristics: place of residence, age and gender. It also looks at the different types of functional limitations experienced by persons with disabilities.

3.1 DISABILITY PREVALENCE RATES

Disability prevalence rates based on the 2009 Vanuatu Census are reported in Table 1. Around five percent of the population had a disability, the majority of whom had mild or moderate disabilities. Due to the nature of the questions on disability in the NPHC and the VDHS, it is not possible to report on the prevalence of disability in (young) children from those sources. According to the VEMIS, however, between 7 and 8 percent of primary school children have a disability. If assuming that children with disabilities are less likely to attend school, as has been found in many studies in other countries, then the overall rate of childhood disability is most likely higher.

The rate of severe disability is similar for women and men, but mild and moderate disabilities are more prevalent among women. However, it must be kept in mind that the Census does not have four response categories (i.e. "No difficulty", "Some difficulty", "A lot of difficulty", and "Cannot do"). It excludes the "A lot of difficulty" category. Thus, in this instance, "Severe" only corresponds to people who cannot do an activity. People who have a lot of difficulty seeing, hearing, walking, etc. are probably responding as having "Some difficulty". Accordingly, they are included in the Mild and Moderate category if they have difficulties in more than one domain, and can even be excluded if they have a lot of difficulty in only one domain. If people with some difficulty in just one domain are included, then the total prevalence rate is 12 percent, which includes people with a lot of difficulty in one area that are excluded from Table 1, but also people with only a little difficulty in one area who probably should be excluded. Thus, according to the Census, the national prevalence rate of disability is between 5 and 12 percent.

Table 1 also shows that the rate of disability according to the Census is higher in rural areas (5.9 percent) than in urban areas (2.6 percent). This difference in disability rate is derived from differences in the rates of mild and moderate disabilities and not severe disabilities. However, as stated above, the definition of severe disability used in the Census must be kept in mind.

The prevalence rates from the VDHS are shown in Table 2. With the VDHS, however, the disability can be identified using four response categories. The rates of disability are lower than in the Census, but this is probably due to VDHS using a screening question. The rates of severe disability in the VDHS, however, are higher than in the Census. This is probably because it classifies people with both a lot of difficulty and who cannot do an activity as having a severe disability. In the Census, since there is no 'A lot of difficulty' category, only people who could not do an activity are categorized as having a severe disability. Unlike in the Census, here there are no major differences between males and females.

The prevalence rates in Table 2 are significantly lower than the global prevalence rate of around 15 percent according to the WHO/World Bank World Report on Disability, but, again, this may be due to the use of a complicated screening question.

Table 1. Percentage of the population with a disability, by gender and region (census data)

Disability rate (%)	Urban			Rural			National		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mild and moderate	1.8	2.2	2.0	4.6	5.5	5.1	3.9	4.7	4.3
Severe	0.6	0.7	0.6	0.8	0.8	0.8	0.8	0.8	0.8
Any disability	2.4	2.9	2.6	5.5	6.4	5.9	4.7	5.5	5.1

Note: With Census data, 'Severe' refers only to people who cannot do an activity. People with 'A lot of difficulty' are included in the Mild and Moderate category.

Source: VNSO 2009 Population and Housing Census

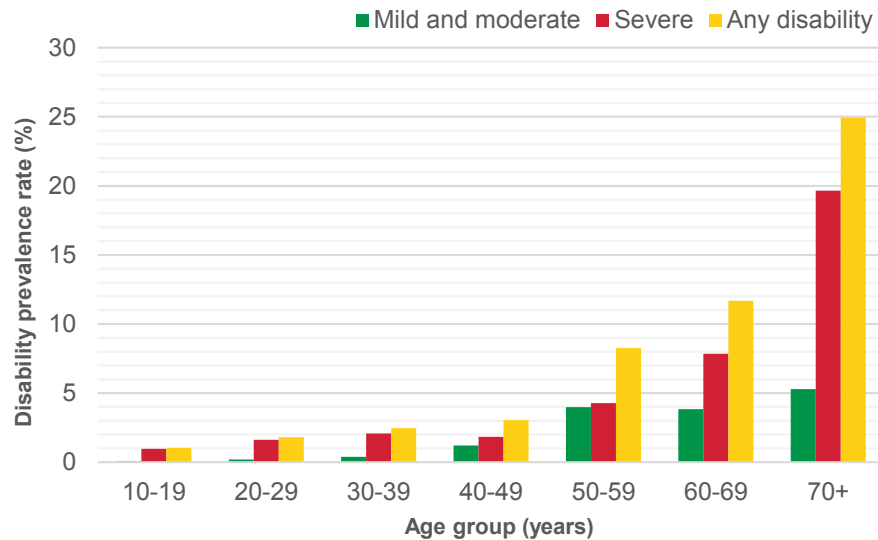
Table 2. Percentage of people with a disability, by gender and degree of disability (survey data)

	Disability Rate (%)		
	Mild and moderate	Severe	Any disability
Male	1.0	2.6	3.6
Female	0.9	2.3	3.2
All	0.9	2.4	3.3

Source: VDHS 2013.

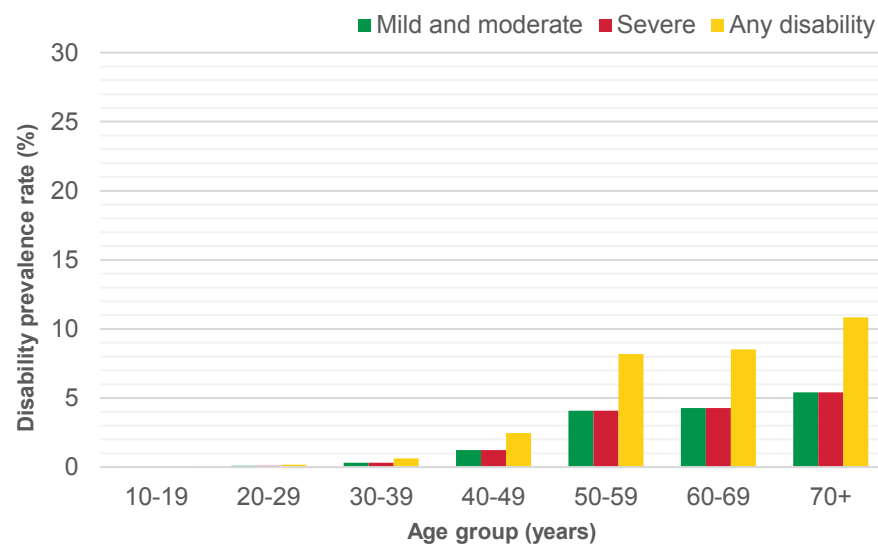
Figures 1a and 1b show the prevalence rate in the DHS by ages for men and women. In both Figures, there is a steep gradient, showing that disability is highly correlated by age. This finding is very consistent with studies of disability worldwide (WHO/World Bank 2011). The age category for people under ten is excluded because the questions were ill-suited for children. There is a notable

Figure 1a. Percentage of men with disabilities, by degree of disability and age



Source: VDHS 2013.

Figure 1b. Percentage of women with disabilities, by degree of disability and age



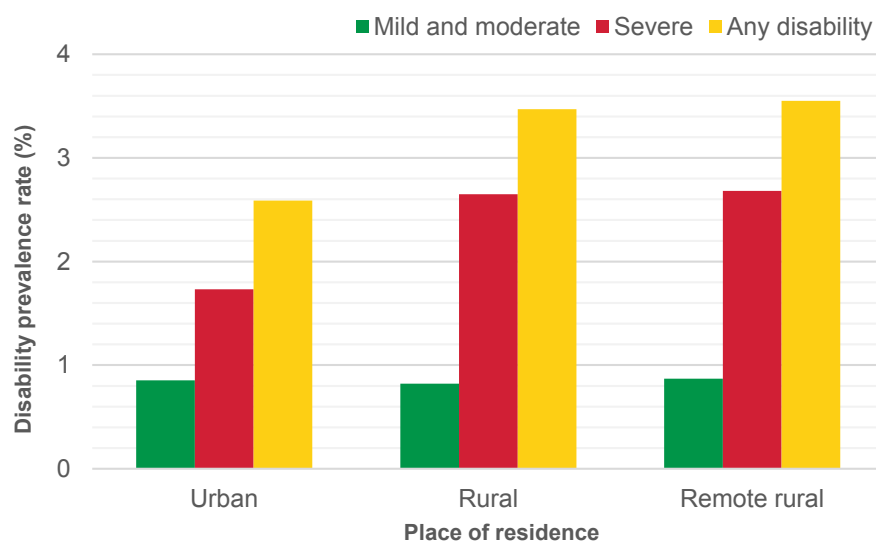
Source: VDHS 2013.

gender difference at the upper end of the age distribution. Men over 70 years of age are about twice as likely to have a disability. It is not known whether this is a result of a higher incidence of disability among men of that age group, a higher survival rate of men with disabilities compared to women, or differences in reporting.

It should be noted that the higher prevalence of severe disabilities compared to mild and moderate disabilities is highly unusual. But once again, this probably results from the fact that single yes/no screening questions of the type used in this survey generally miss many people with mild and moderate disabilities.

Figure 2 provides information on rural and urban localities, where it can be observed that the prevalence of disabilities of all severity levels is higher in rural areas than in urban areas. A breakdown by province was not available because the VDHS was not designed to be representative on a provincial level; however, Table 3 shows the prevalence rates by province based on the Census. Since the method for identifying people with disabilities in the two instruments is different, it is not appropriate to compare the prevalence rates by area in the VDHS and the Census; however, the relative prevalence rates across areas within the tables depicts the pattern of disability in the country. For example, there is a great difference in the ratio of mild and moderate to severe disabilities because the Census question almost certainly classifies people who would have been identified as having a severe disability by the VDHS in the mild and moderate category, while the VDHS screening question leads to an underestimation of people in this category. Overall, Malampa and Torba seem to have the highest rates of disability and Tafea, the lowest. The VDHS sample was not constructed in a manner that allows for estimates by province.

Figure 2. Percentage of population with disabilities, by degree of disability and area of residence



Source: VDHS 2013.

Table 3. Percentage with disability, by gender, province and degree of disability

Province	Male		Female	
	Mild and moderate	Severe	Mild and moderate	Severe
Torba	9.75	0.66	10.32	0.91
Sanma	7.81	0.60	7.76	0.73
Penama	8.29	0.79	8.81	0.70
Malampa	10.47	0.85	9.49	0.78
Shefa	8.48	0.53	9.38	0.71
Tafea	7.20	0.96	6.82	0.68

Source: Vanuatu Census 2009.

A final caveat must be raised in regard to interpreting these data. As stated above, the WG disability questions were only asked of people who responded positively to the screening question; however, 4,265 people in the sample were never asked. In general, the first few people in the household listing were asked the disability question, but the further down the list of reported household members, the more missing values are found. This might be because the interviewer did not like asking the question – maybe it was too long, or the interviewer felt uncomfortable, or the respondents just said nobody here has these problems because they were annoyed or embarrassed. Instead of dismissing these observations, which would have particularly reduced the sample size for household measures, the decision was made to consider that the non-respondents did not have any difficulties in functioning. The assumption is that since the screening question was asked to at least several people in each household, a respondent would have known that the questionnaire was looking for this information. Clearly, however, this probably increased the amount of under-identification.

3.2 TYPES OF DISABILITIES

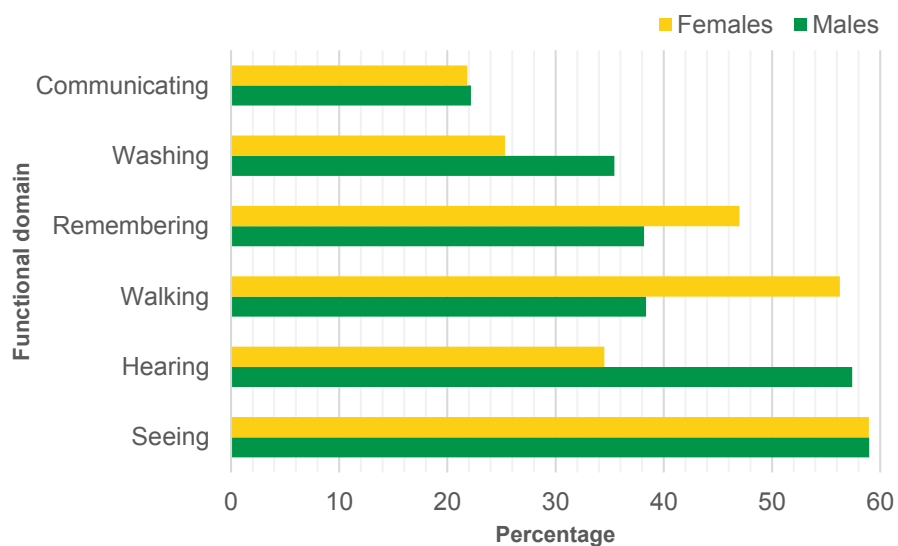
The prevalence numbers in the previous section provide a breakdown by degree, but there may also be a variance by type of disability. While the breakdown by degree presented above may be skewed because of the methodological approach, this probably has less of an impact on the type of disabilities within the degree categories.

Figure 3 shows the percentage of people having some difficulty in a functional domain among people who have been identified as having a disability (i.e. having 'a lot of difficulty' or 'cannot do' one functional domain, or alternatively, have 'some difficulty' in multiple domains). Since people can have difficulties in multiple domains, the percentages add up to over 100. More than half of both women and men with disabilities have at least some difficulty seeing. For men, hearing is the next major area of difficulty, whereas for women it is walking.

Figure 4 shows a similar chart, but only for people who have severe disabilities. It should be noted, however, that not all the difficulties reported in Figure 4 are necessarily severe. People could have a lot of difficulty in one functional domain, but only some difficulty in others. The major differences between Figures 3 and 4 are in the domains of vision and hearing, which indicates that people with mild and moderate disabilities have higher rates of difficulty in these domains than people with severe disabilities.

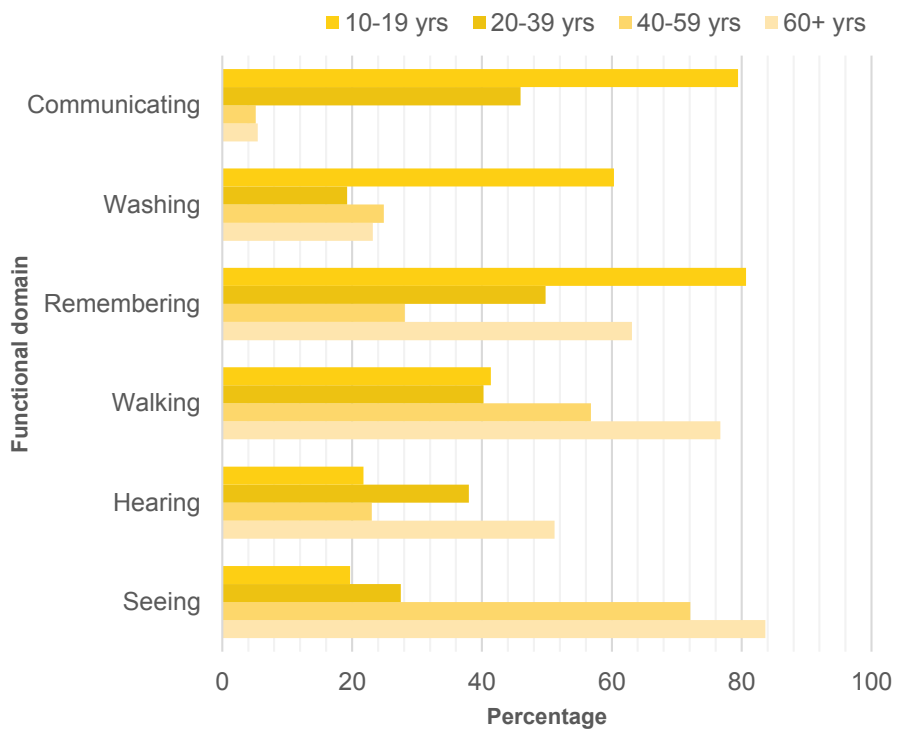
The breakdown of type of disability is also influenced by age. In Figure 5, it can be observed that, for women, there is a steep gradient with respect to vision, and to a slightly lesser extent with walking. However, cognitive issues are different; cognitive problems represent a larger share of reported difficulties among young women than among older women. The same results basically hold true for men, as seen in Figure 6.

Figure 3. Percentage of people with a disability who have at least some difficulty in a functional domain, by gender



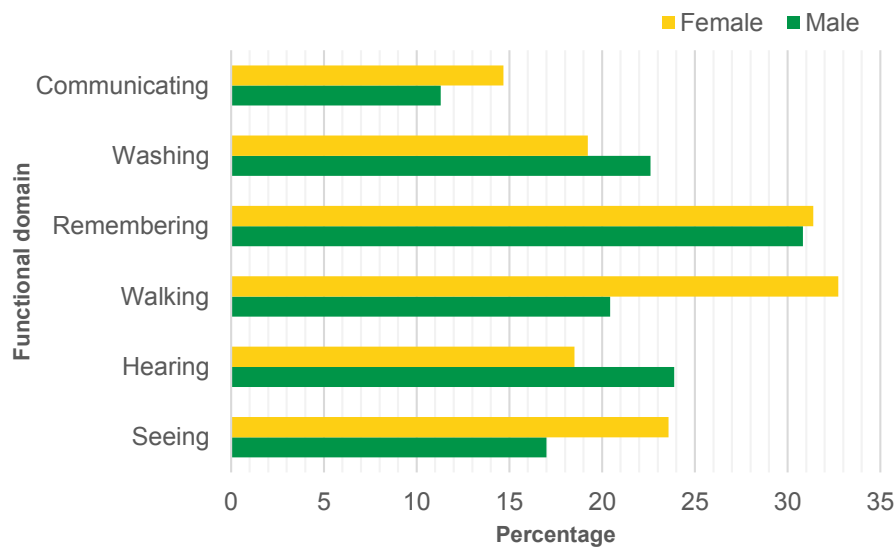
Source: VDHS 2013.

Figure 5. Percentage of women with any disability who have at least some difficulty in a functional domain, by age



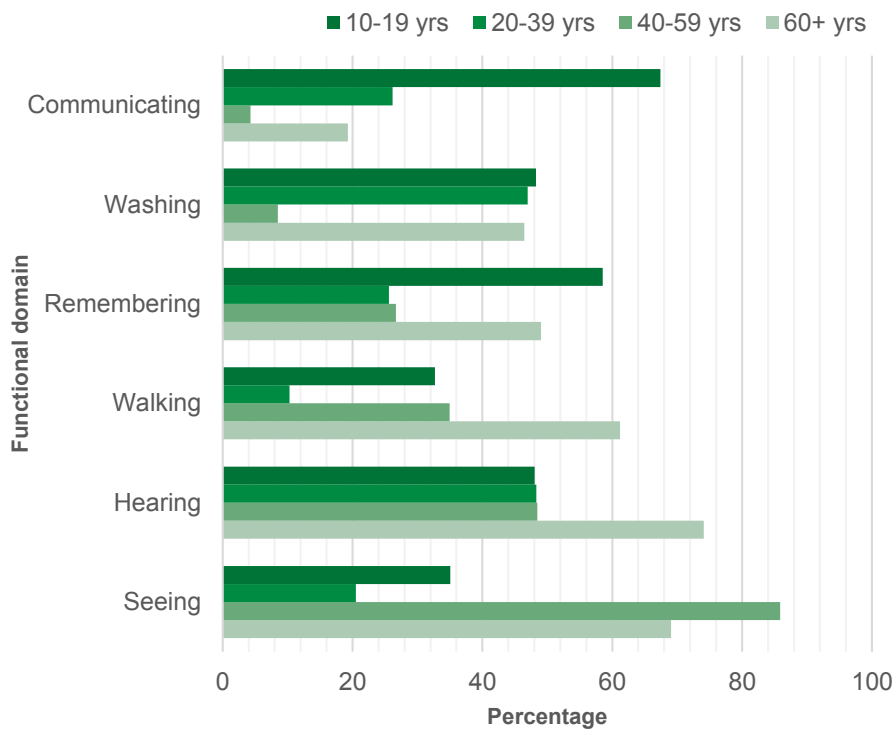
Source: VDHS 2013.

Figure 4. Percentage of people with a severe disability who have at least some difficulty in a functional domain, by gender



Source: VDHS 2013.

Figure 6. Percentage of men with any disability who have at least some difficulty in a functional domain, by age



Source: VDHS 2013.

Factors Associated with Disability

4



After establishing prevalence rates, the next step in the analysis is to examine the correlation between disability and various outcome measures, such as education and standard of living. In some instances, the causality behind correlations is clear. For example, if young children with disabilities are attending school less, then it is probably the result of their disability and the barriers they face. However, for other outcomes such as poverty, the causality could take either direction. Being poor can put someone at greater risk of acquiring a disability for reasons such as malnutrition, poor health care and unsafe living and working conditions. On the other hand, having a disability might undermine a person's ability to secure adequate living standards because of barriers to employment and the extra costs associated with living with a disability. Interpretations of the relationships between disability and various factors should be made with this in mind. Data on the causes of disability and date of onset would help to unravel these two-way connections. These data will be available if the VDPS is scaled up. Nevertheless, without panel data, it is hard to reach a definitive conclusion.

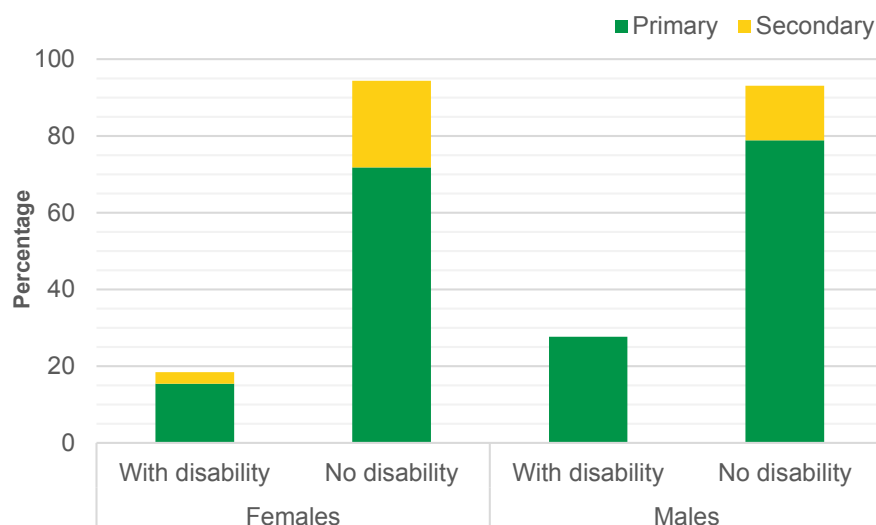
This section examines the relationship between disability and selected indicators available in Vanuatu's data sets, including school attendance and educational attainment, poverty, employment, marital status, attitudes towards domestic violence, and child disciplinary practices. Due to data limitations, it was not possible to look at the association with health variables such as child immunization or nutrition.

4.1 EDUCATION

Figures 7, 8, 9 and 10 show the percentage of people whose highest grade level obtained was in primary or secondary school by gender and disability status, for the age groups 10-19 year olds, 20-39 year olds, 40-59 year olds, and 60+ year olds, respectively. For both males and females, there is a large gap among those aged 10 to 19, but a much lower gap — and even at times a gap reversal — for older age groups. This shows that children with disabilities are significantly less likely to attend school than their non-disabled peers: among 10-19 year olds, the gap in

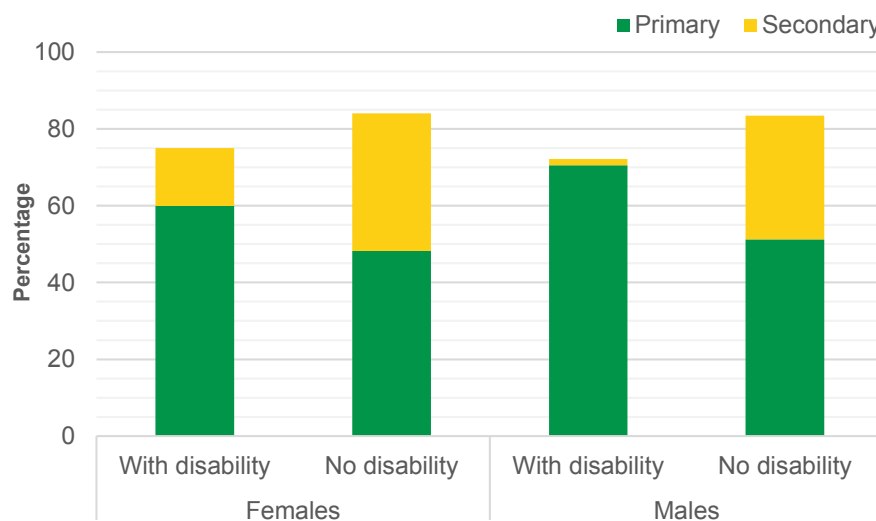
primary school attainment is 57 percentage points (from 72 to 15 percent) for girls compared to 51 percentage points (from 79 to 28 percent) for boys. Likewise, having a disability is also correlated with not having attended secondary school. Comparisons among the older age groups are probably not relevant because the majority of people become disabled after they have passed the school age and/or

Figure 7. Percentage of 10-19 year olds whose highest grade level obtained (at the time of the survey) was in primary/secondary school, by gender and disability status



Source: VDHS 2013.

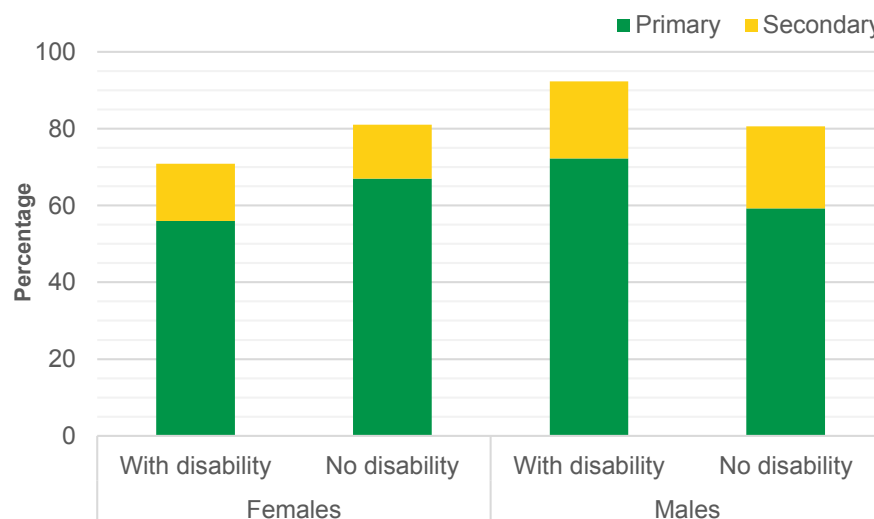
Figure 8. Percentage of 20-39 year olds whose highest grade level obtained was in primary/secondary school, by gender and disability status



Source: VDHS 2013.

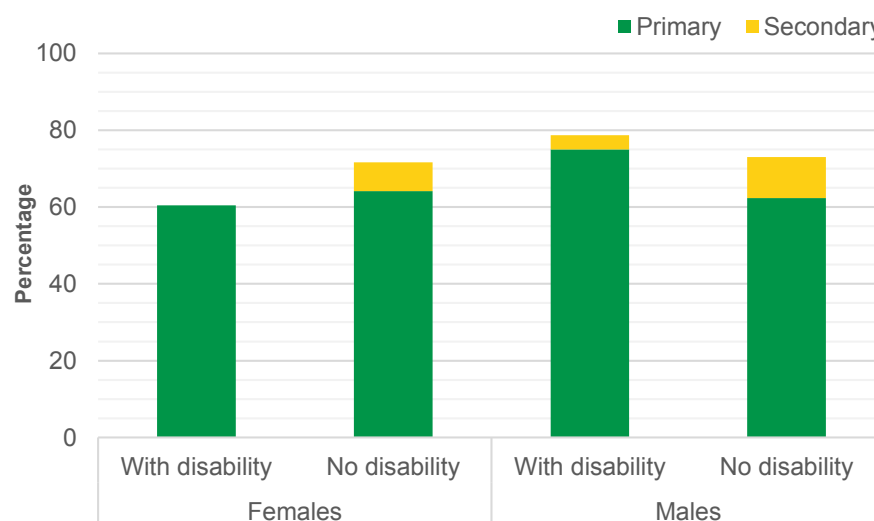
there might be better awareness, identification and reporting of disability among older people. In interviews, officials from the Ministry of Education strongly believed that children with disabilities were excluded from school, stating that parents were often ashamed of sending them out into the public, or believed that the schools were incapable of effectively responding to their needs. This

Figure 9. Percentage of 40-59 year olds whose highest grade level obtained was in primary/secondary school, by gender and disability status



Source: VDHS 2013.

Figure 10. Percentage of 60+ year olds whose highest grade level obtained was in primary/secondary school, by gender and disability status



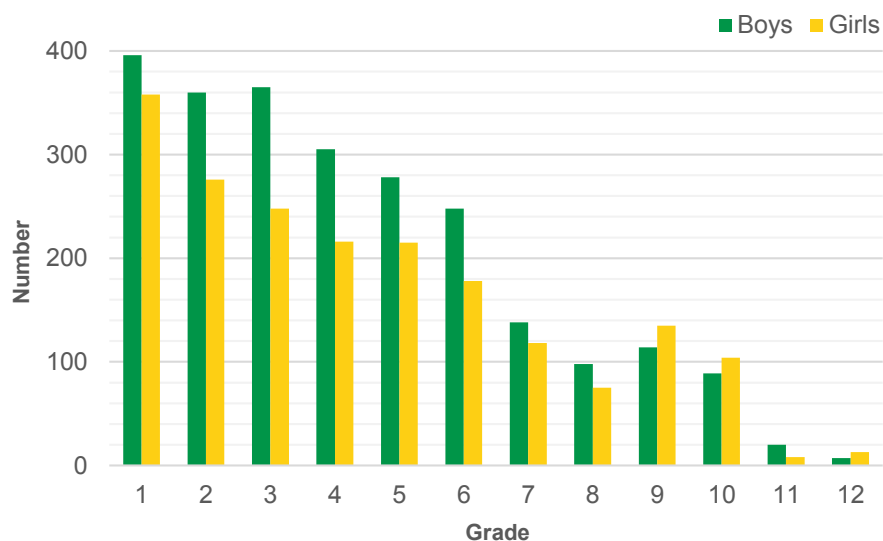
Source: VDHS 2013.

statement applies more to children with mental disabilities or hearing and seeing problems than to those with physical disabilities. But there were also barriers associated with physical disabilities. For example, children typically have to walk a few kilometres to reach their primary school, and the schools do not have easily accessible toilets. Ministry of Education officials perceived barriers for attending secondary school to be even greater. Secondary schools are at times on different islands from where the children live. Further, children with cognitive delays encountered more problems at the secondary level where the curriculum is more advanced. This can be seen in Figure 11, which is based on data from the VEMIS from 2014. As the grade level rises, the number of children with disabilities falls off sharply.

The data behind Figure 11 comes from an annual school census, where the Ministry sends a data collection form to each school. Teachers fill in a variety of information about their students, including identifying which children have a disability. The types of disability included on this form are shown in Table 4, together with the number of children thus identified for each of the last four years. Interestingly, the number of children with disabilities attending school seems to have sharply dropped between 2008 and 2009 and again between 2013 and 2014.

The categories in the VEMIS allow for the disaggregation of children by type of disability, which is an advantage over the Education Management Information System (EMIS) of many countries. However, the degree of disability is not indicated. For example, is a child with a 'sight impairment' blind or does he or she have more minor difficulties? It also has a category for multiple disability, which, although likely to indicate which children have the highest support needs, conceals exactly what these needs are. Clearly, the extent to which teachers could accurately record the level of disability is probably limited, although a bifurcation between

Figure 11: Number of children with disabilities, by gender and grade



Source: VEMIS, 2014

'can't do' and 'having difficulty' is probably workable. However, this would only be worthwhile if the actions taken by the school system would differ depending upon the degree of disability. Long EMIS forms are often seen as a burden on teachers, and only data with recognized usefulness should be collected.

Table 5 shows the percentage of children by gender in primary or secondary school who have been identified by teachers as having a disability. For boys, the percentage of children who have a disability drops from 8.1 percent in primary school to 4.8 percent in secondary school, whereas for girls, it drops from 7.0 to 4.6 percent. It should be noted that the overall disability rate is significantly higher than that identified by the VDHS. Again, this calls into question the results for children when using adult disability questions, especially since these data only

Table 4. Number of children attending school by disability, by gender and by year

	2011	2012	2013	2014
Boys				
Down syndrome	23	18	33	27
Hearing impairment	232	225	294	290
Learning disability	1,282	1,271	1,425	892
Mental disability	96	114	102	132
Multiple disabilities	48	43	50	63
Other disability	28	32	46	67
Physical disability	100	90	95	92
Sight impairment	131	156	155	158
Social and emotional problems	200	116	102	138
Speech impairment	119	107	118	175
Total	2,259	2,172	2,420	2,034
Girls				
Down syndrome	9	13	21	50
Hearing impairment	201	194	228	205
Learning disability	994	1,037	1,148	568
Mental disability	70	66	76	85
Multiple disabilities	31	30	42	49
Other disability	23	25	21	43
Physical disability	57	73	49	76
Sight impairment	124	128	148	133
Social and emotional problems	132	110	116	150
Speech impairment	57	90	98	89
Total	1,698	1,766	1,947	1,448

Source: VEMIS.

relate to children who are in school, and presumably disability rates are higher for children who do not attend school.

The distribution of children by types of disability for children with disabilities enrolled in school in grades one and six was examined to determine if there was evidence that children with certain types of disabilities were more likely to drop out; no significant differences were found. Also, the percentage of disabilities enrolled in school over time is relatively stable. The number in 2006 was very low followed by a huge spike in 2007, but this was most likely due to the introduction of a new methodology. Figure 12 shows the trend in enrolment of children with disabilities starting from 2008.

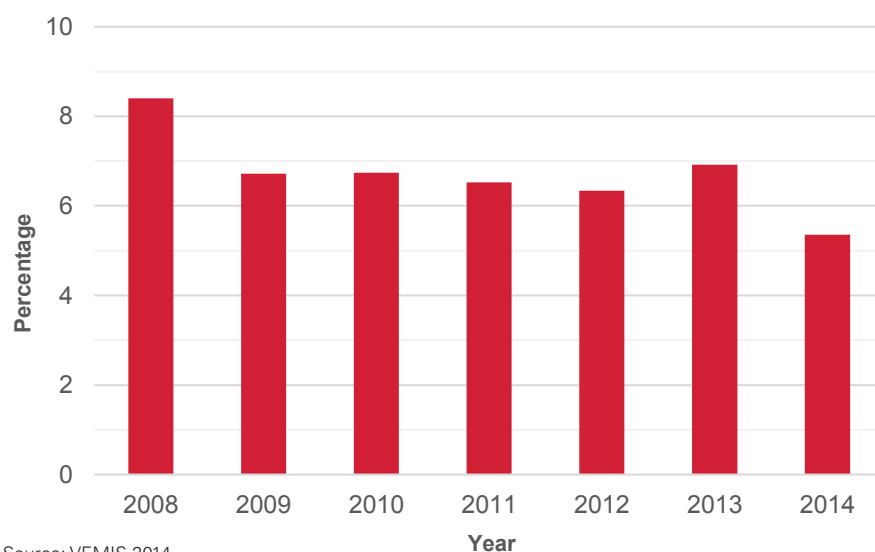
Attendance does not tell the whole story because the fact that children with disabilities may be in school does not indicate that their educational, health and development needs are being met to the same extent as children without disabilities. This obviously depends on the type of disability. Children with physical difficulties tend to have more difficulty getting to school, but children with significant vision, hearing, or cognitive difficulties can have more difficulties in the classroom.

Table 5. Percentage of children in school with a disability, by gender

	Primary school (%)	Secondary school (%)
Boys	8.1	4.8
Girls	7.0	4.6

Source: VEMIS 2014.

Figure 12. Percentage of children in school with a disability



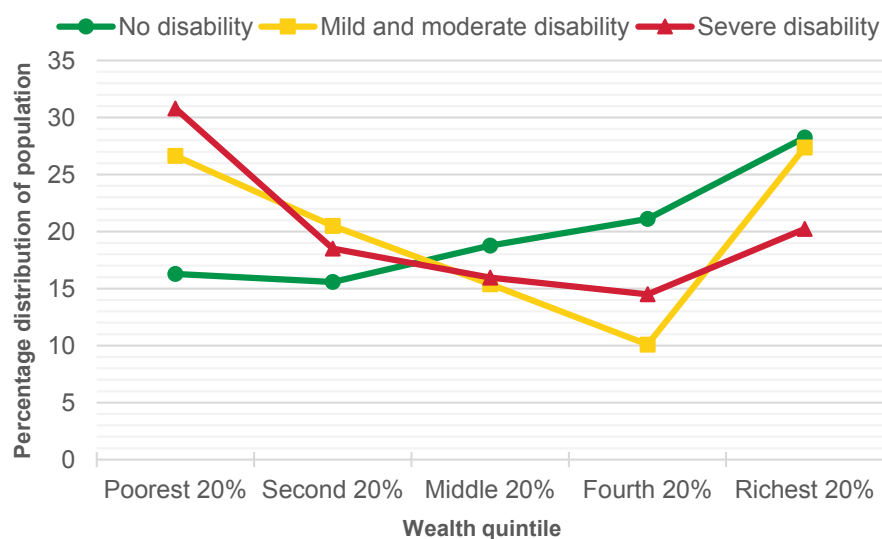
Source: VEMIS 2014.

4.2 POVERTY

People with disabilities are over-represented among the poorest wealth quintile, as shown in Figure 13. Over 30 percent of people with severe disabilities and nearly 30 percent of those with mild and moderate disabilities are among the country's poorest. Disability rates could be lower for higher wealth quintiles for a few reasons. First, disability could be caused by conditions associated with being poor, as mentioned above. Second, having a disability can inhibit one's ability to obtain wealth – either due to the reduced ability to generate income or because of the extra costs of living with a disability (e.g. medical care, assistive devices, extra transportation costs, etc.) prevent households from acquiring assets. Third, households with more wealth may also have better access to health care or other services that lessen the degree of disability, even if it does not eliminate its presence. For example, were it not for the services and/or living situations that they were able to afford, some of the people classified as having mild and moderate disabilities in the richer quintiles might have been classified as having had more severe disabilities.

Another reason for higher disability rates among people in the poorest quintiles may relate to family formation. Table 6 shows that households with members with severe disabilities are less likely to be married and start their own families. Again, cause and effect cannot be disentangled. Are people with severe disabilities less likely to marry, or does being married lessen the presence or degree of disability? Irrespectively, marriage is usually associated with higher incomes.

Figure 13. Distribution of the population by wealth quintile, by degree of disability



Source: VDHS 2013.

Interestingly, there is a spike upwards in the highest quintile, especially for those with mild and moderate disabilities. This could be the result of a higher survival rate of rich people with disabilities compared to their poorer counterparts, but it could also be a reporting bias. Studies show that people with more wealth and education are more likely to report mild difficulties (Metz and Scott 2008). In addition, more educated people are more likely to correctly interpret the complicated screening question on the VDHS, which could indicate that the spike in the highest quintile for people with mild and moderate disabilities is not a genuine result. This needs further examination.

The association of wealth with age, disability and gender (Table 7) is complex. If wealth were not associated with any of these characteristics, then 40 percent of all the groups in Table 7 would be in the bottom two wealth quintiles. The first column shows, however, that people without disabilities are under-represented among the bottom of the wealth distribution. Regardless of age or gender, the percentage of people without disabilities in the bottom two quintiles is less than 40 percent. Due to the very small number of children identified with disabilities, however, the age category of 10 to 19 is excluded, since there were not enough observations with non-missing values for wealth quintiles to produce meaningful results.

For men, having a disability is always associated with a greater likelihood of being in the bottom two wealth quintiles. This association, however, is reduced with age, possibly because becoming disabled during one’s prime working years has a greater impact on household wealth than becoming disabled when elderly, at

Table 6. Percentage of people who never married, by degree of disability

No disability	Mild and moderate disability	Severe disability
18.4	19.9	29.1

Source: VDHS, 2013.

Table 7. Percentage in bottom two wealth quintiles, by gender, age and disability

Age group	No Disability	Mild and Moderate	Severe Disability
Women			
20-39 yrs	30.4	60.8	50.1
40-59 yrs	31.2	26.9	54.0
60+ yrs	36.1	57.8	24.0
Men			
20-39 yrs	27.8	68.1	73.8
40-59 yrs	28.2	54.4	61.3
60+ yrs	31.2	55.1	49.8

Source: VDHS, 2013.

a time when presumably earnings are less in any case, and the disabled elderly might be living with children who are in their prime labour productive years. Wealth is a household characteristic.

There are some anomalous results with respect to women. Women with disabilities aged 20-39 are more likely to be in the bottom two wealth quintiles, whereas this is less so for men. However, middle-aged women with mild and moderate disabilities, and elderly women with severe disabilities are actually less likely to be in those quintiles. The underlying reasons are a combination of the effects of age of onset, family formation, survival rates, and the role of women in income generation. Although data here are capable of determining the cause, further research is needed. Clearly, there are gender differences in the relation between age, disability and poverty.

Another question is whether the correlation between wealth and disability depends on the type of disability. For example, are people with physical disabilities more or less inclined to be poor than people with mental disabilities? The sample of people with disabilities, was not large enough to examine this. Disaggregating by type of disability and age, which is necessary since types of disability depend on age, left too few observations in each category to generate meaningful results.

4.3 ECONOMIC ACTIVITY

One reason inhibiting the accumulation of wealth is that there are barriers to work. People with disabilities may be unable to work for a variety of reasons such as inaccessible work sites, inaccessible transportation, discrimination or low self-esteem, lack of education and training, or lack of accommodations in the work place. Indeed, studies from around the world fairly consistently show a gap in employment between people with and without disabilities (WHO/World Bank 2011).

Analysis of the economic activity questions in the VDHS is relatively limited because of the large number of missing values. Since many people were not asked these questions during the survey, analysis by sub-populations could be misleading. However, Table 8 does reveal an important finding that is also consistent with studies of disability and employment in developing countries: i.e. that people with disabilities are more likely to be either self-employed or to work in the family business. Indeed, the rate of employment among people

Table 8. Work status by disability, adults aged 20 to 59 years

Work status (%)	Disabled	Not Disabled	Total
Not working	11.0	12.5	12.4
Self-employed or working in the family business	74.8	57.6	58.6
Employed outside the home	14.2	29.9	29.0

Source: VDHS, 2013.

who were asked about employment was basically the same for people with and without disabilities. However, people with disabilities were much less likely to be employed outside the home. This shows that despite the willingness and capability of people with disabilities to undertake productive activities, there are barriers preventing them from obtaining employment.

4.4 DOMESTIC VIOLENCE

Studies from around the world show that children with disabilities are more likely to be physically and sexually abused than their non-disabled peers (Stalker and McArthur, 2010). The stress of raising children with disabilities without appropriate supports and negative attitudes towards people with disabilities contribute to these outcomes.

Table 9 compares the use of disciplinary methods between households with disabled children in Vanuatu and those without. This is only a general overview that examines this phenomenon because of the approximate measure of childhood disability used in this survey and because the questions concern discipline in general and are not specific to children with disabilities. Comparisons are made between parents of children with disabilities and parents without children with disabilities. The possibly different disciplinary behaviour of some parents towards their disabled and non-disabled children could not be examined, but may be hypothesized.

The results are based on responses to a series of questions on actions taken to discipline their children, such as taking away privileges, explaining wrong behaviour, shaking, shouting, spanking, hitting with an object, slapping and beating, among others. These results were combined to identify parents who had various methods of disciplining their children (Table 9). Parents with children with disabilities were slightly more likely to use physical punishment, but much less likely to use severe physical punishment. However, they were also more likely to use psychological aggression. Overall, therefore, the data suggest that children with disabilities were more likely to experience violent disciplinary actions than their non-disabled peers.

Table 10 shows husbands' attitudes about domestic violence, broken down by whether their wife has a disability or not. Overall, the husbands of women with disabilities were less inclined to justify violence against their wives for the reasons specified in the survey. Husbands could agree with more than one justification; hence overall, 60.3 percent of husbands without disabled wives cited at least one justification for domestic violence compared to 46.4 percent of husbands with disabled wives. Since this finding differs from studies in other countries, further investigation is needed to determine if the finding is accurate, or merely skewed by certain methodological issues and/or data limitations.

Table 10 does not reveal whether husbands are more likely to leave their wives if they have a disability. One possibility is that husbands who react most negatively to women with a disability are less inclined to stay.

Table 9. Child disciplining methods used in households with/without disabled children

	No children with a disability (%)	With a child with a disability (%)
Only non-violent discipline	10.2	11.4
Psychological aggression	66.4	87.4
Physical punishment	60.4	65.7
Severe physical punishment	30.7	18.5
Any violent discipline method	71.8	87.4

Note: The nonviolent disciplinary practices are: 1) explaining why a behaviour is wrong, 2) taking away privileges or not allowing the child to leave the house, and 3) giving him/her something else to do. Psychological aggression refers to the action of shouting, yelling or screaming at a child, as well as calling a child offensive names, such as 'dumb' or 'lazy'. Physical (or corporal) punishment is an action intended to cause physical pain or discomfort, but not injuries. Physical punishment is defined as shaking the child, hitting or slapping him/her on the hand/arm/leg, hitting him/her on the bottom or elsewhere on the body with a hard object, spanking or hitting him/her on the bottom with a bare hand, hitting or slapping him/her on the face, head or ears, and beating him/her over and over as hard as possible. Source: VDHS 2013.

Table 10. Percentage of men who consider a husband to be justified in hitting or beating his wife under certain circumstances, by disability status of respondent's wife

	Wife without a disability (%)	Wife with a disability (%)
Wife goes out without telling him	38.0	24.3
Wife neglects children	49.7	39.0
Wife argues with him	29.8	20.1
Wife refuses sex	22.0	20.6
Wife burns food	24.2	16.5
Any reason	60.3	46.4

Source: VDHS 2013.



5

Conclusions

Vanuatu undertook extensive effort to learn more about its children and adults with disabilities as part of its demonstrated commitment to improving the lives of people with disabilities in line with the Convention on the Rights of Persons with Disabilities, and the National Disability Policy and Action Plan. Obtaining better information on both the prevalence of disability and its impact on people's lives is important for planning policy and for establishing a benchmark with which to measure the effectiveness of implementing the policies.

While a great deal of valuable data were collected, this report points to some methodological problems that should be addressed in future data collection activities. The nature of the disability questions in the Census probably leads to a significant undercounting of people with severe disabilities and an over-counting of those with mild and moderate disabilities by including in the latter group people with severe disabilities and people who should probably not be considered as having a disability. The results from the Vanuatu Demographic and Health Survey most likely undercount people with minor and moderate disabilities because of the use of a screening question, based on past experience in other countries. This tendency to undercount would be expected to be even greater with the scaling up of the Vanuatu Disability Pilot Survey because of its use of even more limiting screening questions. Since all three instruments use adult questions that are not appropriate for children, analysis of children under the age of 10 is not possible, and the analysis for children age 10-19 is should be treated with caution.

Therefore, the first recommendation is that future censuses and surveys should use the Washington Group (WG) short set of questions to identify adults with disabilities. The new module on child functioning and disability developed by UNICEF and WG is too lengthy for a census, but should be included in any survey attempting to identify children with disabilities.

If the Vanuatu Disability Pilot survey is scaled up, then the WG Extended Question Set on Functioning should be used to identify adults with disabilities. Being a dedicated survey on disability, it would be appropriate to include this longer set

of questions that addresses some of the limitations of the WG short set. The UNICEF/WG module should be used to identify children with disabilities.

Given the methodological caveat, some important results emerged from analysing the data:

- Disability is strongly correlated with age, and to a lesser extent, with living in a rural area.
- Seeing and hearing are the functional domains most problematic for men whereas it is seeing and walking for women.
- Sight impairments are more prominent among older people, whereas younger people with disabilities are more likely to report cognitive difficulties.
- Children with disabilities are much less likely to attend primary school than their non-disabled peers, and to an even greater extent with regard to secondary school.
- People with disabilities are more likely to be in the lowest and next-to-lowest household wealth quintile.
- While people with disabilities are equally likely to take part in productive activities as non-disabled people, they are less likely to be employed outside the home.
- Parents of children with disabilities are more likely to use the disciplinary practice of psychological aggression and less likely to use severe physical punishment than parents without children with disabilities.
- The husbands of women with disabilities are less inclined to justify wife-beating under certain circumstances. Since this finding differs from studies of domestic violence in other countries, further investigation is needed to determine if the finding is accurate, or merely skewed by certain methodological issues.

While the census and VDHS provides a snapshot of the different outcomes that children and adults with disabilities experience, they do not offer any insight into the nature of the environmental barriers that might lead to those differences. Why do children with disabilities go to school less? Is it primarily a transportation issue, or is because schools and teachers are unable to meet their needs? Why do people with disabilities work more within the home? Is it because of discrimination or lack of access and accommodation in the workplace? Answers to these questions will help target policies towards the key barriers producing negative outcomes. For this reason, it is recommended that the Vanuatu Disability Pilot Survey be scaled up, with a particular emphasis on uncovering those barriers.

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Data collection on disability in children: <http://data.unicef.org/child-disability>



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