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Working Conditions and Health in Central America

By

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EXECUTIVE SUMMARY

This report discusses and presents the outputs of a Cooperative Agreement between The University of Texas School Health Science Center at Houston School of Public Health and the Bureau of International Labor Affairs (ILAB) and the Chief Evaluation Office (CEO) at the Department of Labor. The primary purpose of the Agreement was to fund UTHealth School of Public Health partially and its in-county partners to collect and make publicly available a unique data set to study quantitatively certain issues related to employment, workplace conditions, occupational health, labor rights, and work-related violence in these Central American countries: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama

The first substantive section of the report discusses technical issues about collecting nationally-representative sample data in each of the subject countries. The discussion is meant to allow interested researchers to judge the integrity and rigor of the data.

The next section contains a series of visuals depicting descriptive results in the data. These should be of interest to a general readership. For researchers, they also provide a quick overview of the topics they can explore more deeply. Among the most salient results, we found that eight in 10 workers in Central America reported not being covered by social security protections or that half of the participants did not have a formalized hiring agreement, most of them without written pay stubs. We also found that 67% of workers reported performing repetitive movements at their job, 38.8% reported frequent use of equipment, including instruments, tools, or machines, that can cause injury, 42.8% reported frequently working very quickly, 24.9% reported frequently performing job tasks that require working in an uncomfortable position, and 22% reported frequently having a reduced space for mobility.

Besides, 28.4% of works reported having a poor understanding of their labor rights as well as reporting that it was uncommon to have a union at the worksite (7%) or to have had evaluations, measurements, or controls of the possible health risks at their jobs (15%). A third of participants considered heat at work was annoying or affecting their job performance. Overall, 15% of workers reported feeling unsafe at home, 20% at work, 23% in the neighborhood, and 24% on route to work. Experiences of non-sexual work-related violence were reported by 12% of respondents, and 7% reported having experienced work-related violence of sexual nature.

The report also contains four examples of research analysis to demonstrate data's potential utility to informing policy. From the data analyses described in these examples, these implications are already available:

- Workers in these Central American countries report being well informed of their legal labor right; however, they are often unsure how to make complaints if they feel the rights are violated. Policymakers might consider studying interventions focused on improving the process of filing complaints, and educating the workers to ensure they can access the labor authorities.
- The patterns of responses on work-related violence are surprising and suggest more research is needed to determine whether workers who report fear, victimization, or

witnessing violence are more likely than others to have experienced these, or feel more empowered and able to discuss them.

- Certain geographic, climate-related, and sub-population concentrations of chronic kidney disease identify places and people to target and test with appropriate research methods interventions to detect or prevent illness.
- Central American societies and policymakers may have various reasons for, and goals from, addressing job precariousness. However, the data analyzed here suggest no clear association between worker health and job precariousness. If improved worker health is a policy goal, then other policy levers must be identified and used.

The Cooperative Agreement parties hope that a large community of researchers and policy analysts find these data useful in their work.

Please go to <https://www.dol.gov/agencies/oasp/evaluation/publicusedata> to access the data and supporting documentation. We would be delighted to learn of your results and your feedback on our work. Points of contact are: David.Gimeno@uth.tmc.edu, Kirchmer.Rebecca@dol.gov, and chiefevaluationoffice@dol.gov.

ACKNOWLEDGMENT AND DISCLAIMER

Funding for this project was provided by the United States Department of Labor.

This material does not necessarily reflect the views or policies of the United States Department of Labor, nor does the mention of trade names, commercial products, or organizations imply endorsement by the United States Government.

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KEY DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

Census track: a geographic region defined for census-taking. This unit may vary from country to country and sometimes from census year to census year. In this project, we used the definitions from each Central American country’s most recent census edition. Given the population census in these countries are outdated (i.e., the last available census is from 2011 in Costa Rica, 2007 in El Salvador, 2001 in Honduras, 2002 in Guatemala, 2005 in Nicaragua, and 2010 in Panama), we used the most recent official electoral roll in each country which is more current (i.e., 2017 in Costa Rica and Honduras, 2016 in Nicaragua, 2015 for El Salvador and Guatemala, and 2014 in Panama) and representative of the national population 18 years of age and older by census tract. In all these countries, voter registration is automatic for all citizens 18 and older. See also “Post-Sampling Weights” below.

Central America: for the purpose of this Cooperative Agreement, we are referring to the six Spanish-speaking countries of Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama). The English-speaking country of Belize is not included.

CEO: Chief Evaluation Office, USDOL.

CTESLAC: Spanish acronym for Working Conditions, Employment Conditions, and Health in Latin America and the Caribbean (“Condiciones de Trabajo, Empleo y Salud en Latinoamérica y el Caribe”). It refers to the standard methodological criteria and core questionnaire items developed by the Expert Network on Surveys of Working Conditions and Health in Latin America.

Disability: a person who has a physical or mental impairment that substantially limits one or more major life activity according to the U.S. Americans with Disabilities Act.

ECCTS: Spanish acronym (“Encuesta Centroamericana de Condiciones de Trabajo y Salud”) for the “Central American Survey of Working Conditions and Health.” “I ECCTS” refers to the first survey, conducted in 2011. “II ECCTS” refers to the second survey conducted in 2018 under this Cooperative Agreement.

ECoTES: Spanish abbreviation for “Red Experta en Condiciones de Trabajo, Empleo y Salud” (Expert Network on Working Conditions and Health in Latin America).

Employment conditions: refers to the nature of the contractual agreement between employer and employee, including contract type (i.e., written or verbal), salary, and benefits structure.

Faith-based organization (FBO): a group of people who are united in their work by spiritual or

religious beliefs (e.g., churches, mosques, synagogues, and religious nongovernmental organizations).

Focus group (FG): a qualitative research technique involving guided small-group discussion where people are asked to provide feedback (e.g., perceptions, opinions, beliefs, attitudes) on a topic.

Formal worker: for the purposes of this Cooperative Agreement, a worker, whether employed or self-employed, who is registered or enrolled in her/his country's social security system to be able to receive social protection benefits (e.g., pension). Most formal workers would be found in the formal sector.

Free Trade Zone (aka Foreign Trade Zone; FTZ): an area in which goods can arrive, be assembled, changed, or re-exported without a customs process; intended to free places like airports and seaports from those duties and expedite the movement of goods.

Health: a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity as defined by the World Health Organization in its Preamble to the WHO Constitution adopted by the International Health Conference, New York, 19 June - 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of WHO, no. 2, p. 100) and made effective on 7 April 1948.

ILAB: Bureau of International Labor Affairs, USDOL.

Informal sector: any economic activity that is not being regulated and registered by the corresponding government and, as such, is not tax-accountable.

Informal worker: for the purposes of this Cooperative Agreement, a worker, whether employed or self-employed, who is NOT registered or enrolled in her/his country's social security system to be able to receive social protection benefits (e.g., pension). Informal workers can be found in both the formal and informal sectors.

Insecurity: a self-reported perception of feeling unsafe. May include, but not require, an element of violence.

Mental health: a broad array of activities directly or indirectly related to the mental well-being component included in the World Health Organization's definition of health (see above). It is associated to the promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders.

Post-Sampling Weights: Post-sampling weights obtained from each country's official Labour

Force Surveys and demographic population data publications by age, sex, industry sector were applied to ensure that the sample accurately represented the working population of reference in each country. Country-specific weights were also developed for country-specific analyses.

SALTRA: Spanish acronym for “Salud, Ambiente y Trabajo” (Health, Environment, and Work), a network of academic and research institutions in the six Spanish-speaking countries of Central America, headquartered at the Universidad Nacional (UNA) of Costa Rica. It aims to develop national and regional capacities in Central America to prevent environmental and occupational hazards, particularly in the informal (i.e., undocumented) agriculture and construction sectors. Together with UTSPH and our colleagues at UPF, SALTRA conducted the First Central American Survey of Working Conditions and Health (I ECCTS), founded the Expert Network on Surveys of Working Conditions and Health, and helped conduct the II ECCTS.

Sampling frame: the starting point from which a study sample is drawn. For the II ECCTS, the sampling frame was the most recent official electoral roll (see “Census Track” above) in each of the six Spanish-speaking countries of Central America.

Segment: refers to a census track segment, the smallest geographical unit from which census information is gathered. In contrast to a district or county measured in size, segments are defined by a specific number of households (e.g., 60 in urban areas and 40 in rural areas), allowing populations density comparisons.

Social protections: a system of benefits present in each of the six Spanish-speaking countries of Central America, including access to national health insurance and clinical services, sickness absence, disability, and retirement pension.

Survey of working conditions and health: an interviewer-administered survey completed by workers (or employers) in which information is gathered on self-reported demographics, employment conditions, workplace risk factors, various aspects of health, and preventive resources.

University Pompeu Fabra (UPF): our collaborators at the Center for Research in Occupational Health (CiSAL, by its Spanish acronym) in Barcelona, Spain. Together with UTSPH and our colleagues at SALTRA, UPF conducted the First Central American Survey of Working Conditions and Health (I ECCTS), founded the Expert Network on Surveys of Working Conditions and Health, and conducted the II ECCTS.

USDOL: United States Department of Labor.

The University of Texas Health Science Center at Houston (UTHealth) School of Public Health (UTSPH): the lead institution on this Cooperative Agreement with ILAB. Together with our colleagues at UPF and SALTRA, we conducted the First Central American Survey of Working Conditions and Health (I ECCTS), founded the Expert Network on Surveys of Working Conditions and Health, and conducted the II ECCTS.

Violence: any act related to incidents of force or power inflicted by humans upon each other that can either be physical, psychological (e.g., verbal threats), or sexual (gender-based violence) in nature, including incidences of self-inflicted harm if directly related to work, as well as of a mixed type, like extortion (i.e., coercion via any kind of force; threat of violence, of property damage, or to reputation or of adverse action).

World Health Organization (WHO): a specialized agency of the United Nations which concerns itself with international health.

Worker: for the purposes of this Cooperative Agreement, any person over the age of 17 years who has worked for pay for at least one hour in the previous week (or who would have done so but was temporarily absent).

Workers' rights: a group of legal rights and universal human rights defined in the Universal Declaration of Human Rights, accepted by the United Nations General Assembly as Resolution 217 on 10 December 1948, having to do with labor relations between workers and their employers, usually obtained under labor and employment law. Informal workers, however, are often not covered by legal rights.

Working conditions: the elements of a person's occupation, including job-related functions, responsibilities, tasks, products, environmental conditions, and risk/preventive measures, and conditions that may increase or decrease the chance of an adverse health effect.

Work-related violence (WRV): acts of violence occurring in any of the following locations: in the workplace, while commuting, or outside the workplace. It includes violence committed by any perpetrator whose relationship to the victim is a result of work or related to the place or type of work.

A. INTRODUCTION

A.1. Background and Purpose

In Central America, there is a lack of systematic, reliable and accurate data on the prevalence, nature, and possible effects of working and labor conditions, including the prevalence of work-related and gender-based violence (Iunes 2002; Wesseling 2002). Existing data are generally considered unreliable because of poor quality or scant distribution (Merino-Salazar et al, 2015). To fill some of these gaps, the current study's main aim was to conduct a survey to quantitatively identify the levels of prevalence and the nature of working conditions, health, labor rights (including non-discrimination) and social protection benefits, and work-related violence in Central America. The present document describes the results from a survey conducted under a Cooperative Agreement on working conditions and health in each of the six Spanish-speaking countries in Central America (i.e., Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama) between the USDOL Bureau of International Labor Affairs (ILAB) and The University of Texas Health Science Center at Houston (UTHealth) School of Public Health (UTSPH), and co-sponsored by the USDOL Chief Evaluation Office (CEO).

The survey assessed topics related to general working (e.g., hazardous exposures) and employment conditions (e.g., contract type, labor rights) and health (e.g., general health, mental health, injuries). The survey included two additional modules, one on suspected risk factors of chronic kidney disease and another module on employment discrimination and work-related violence (WRV). In addition, in the results section, we provide several examples of the types of analyses that can be performed with the II ECCTS data to demonstrate the potential utility of data to inform policy (see section C.9. Examples of Research Analysis with the II ECCTS data).

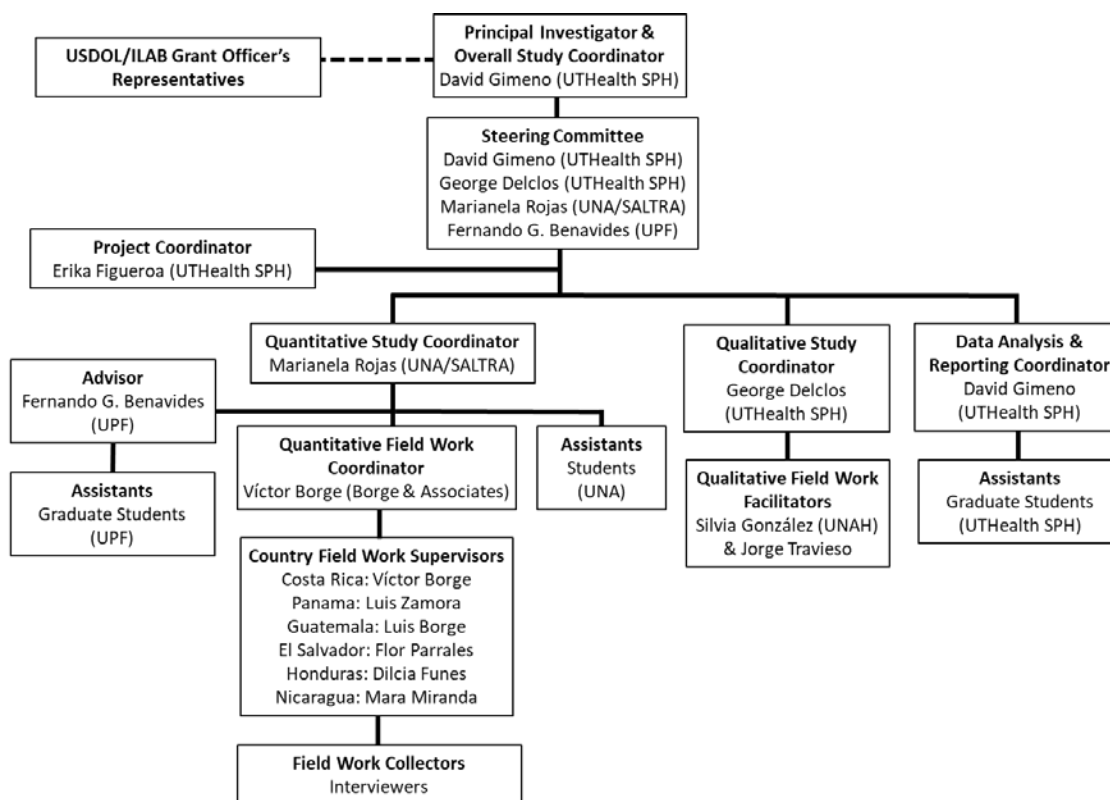
In addition to this survey, we also conducted a series of focus groups (FGs) on working conditions, to gain greater insight from those six Central American countries on labor rights, including discrimination and WRV; this generated complementary qualitative contextual data on related priority topics. We incorporated highlights of the findings from the FGs as text boxes where relevant in the results section. A full report on the FGs is available in Appendix 5.

Throughout this document, we refer to the survey study as the Second Central American

Survey of Working Conditions and Health¹, or II ECCTS by its Spanish acronym, or as the “Quantitative Study.” We refer to the study with focus groups as the FGs study and/or as the “Qualitative Study.”

A.2. Organizational Chart: Roles and Responsibilities

The organizational chart for this Cooperative Agreement is shown in Figure 1, below. The figure includes boxes corresponding to those directly relevant to both the survey (i.e., Quantitative Study) and the focus groups (i.e., Qualitative Study).



Note: USDOL/ILAB = U.S. Department of Labor Bureau of International Labor Affairs; UTHealth SPH = The University of Texas Health Science Center at Houston School of Public Health; UNA = Universidad Nacional, Costa Rica; SALTRA = Health, Work and Environment in Central America; UPF = Universitat Pompeu Fabra; UNAH = Universidad Nacional Autónoma de Honduras.

Figure 1. Organizational Chart of the Study Team under the UTSPH-ILAB/DOL Cooperative Agreement

The project leadership was driven by UTSPH, with ILAB in collaboration. Roles and responsibilities for the activities housed at UTSPH were as follows: (1) **David Gimeno Ruiz de**

¹ The I ECCTS was conducted in 2011 in the same six countries and following the same methodology as the II ECCTS. Comparison between questions available in both the I and the II ECCTS questionnaires would be useful to measure changes between the two survey years.

Porras, PhD, Professor and Principal Investigator, was responsible for the overall direction of the project and ensured the successful completion of the FGs; (2) **George L. Delclos, MD, PhD**, Professor and the main UTSPH Coinvestigator worked together with Drs. Gimeno and Rojas, to oversee the logistics and application of the FGs. Both Dr. Gimeno and Dr. Delclos are faculty members in the UTSPH Department of Epidemiology, Human Genetics, and Environmental Sciences. Within this department, they are located in the Southwest Center for Occupational and Environmental Health (SWCOEH), a CDC/NIOSH-supported Education and Research Center (see www.swcoeh.org). **Erika Figueroa-Solis, MPH** was the Project Coordinator, tasked with keeping all aspects of the project on track. Since the three main collaborating institutions are also academic in nature (UTSPH, UNA, and UPF), we allowed for student participation via the scientific products that will be developed in collaboration with USDOL as part of the objectives of this Agreement.

Marianela Rojas, PhD, the SALTRA coordinator Deputy Rector and faculty member at the Universidad Nacional (UNA) in Costa Rica, was the liaison to each of the SALTRA partners. She helped in identifying pools of potential FGs participants in their respective countries and enlisted their assistance in recruiting a sufficient number of participants for each FG session. Drs. Gimeno, Delclos, and Rojas were members of the Steering Committee, with representation from subcontract awardees and consultants, which helped guide the successful conduct of the FG study. They are also founders of the ECoTES network, an Expert Network on Working Conditions and Health in Latin America, which aims to contribute to the continuous improvement of Latin America's occupational health information systems.

Fernando G. Benavides, MD, PhD, consultant, is professor at the Universitat Pompeu Fabra (UPF) in Barcelona, Spain, is an internationally recognized expert in national working conditions and health surveys, and one of the leaders in the Expert Network on Working Conditions and Health in Latin America. Dr. Benavides directed the First Central American Survey of Working Conditions and Health (Benavides et al. 2014) and is a founding member of the ECoTES Network. He served on the Steering Committee for this Quantitative Study, contributing to the survey questionnaire, advised on developing the survey training and field manuals, the interpretation of results, and the final report. His participation was enabled by a MOU between UThHealth and UPF promoting research collaboration.

UNA employed **Borge and Associates (BA)** (www.borgeya.com), an international survey firm, headquartered in Costa Rica, with offices throughout Central America, to conduct the

fieldwork and with whom we have a history of collaborative work, dating back to the 2011 I ECCTS and the recent August 2016 field testing of the survey instrument. BA will be responsible for collecting and collating the surveys, including data entry/quality assessment, provision of field briefing reports, and preparation of codebooks and initial data files for subsequent analysis.

A.3. Human Subjects Protections Considerations

Both The University of Texas Health Science Center at Houston (UTHealth) Committee for Protection of Human Subjects (the UTHealth institutional review board or IRB; see <https://www.uth.edu/cphs>) and the Ethics Committee of the Universidad Nacional in Costa Rica (or CECUNA, for its Spanish acronym for Comité Ético Científico de la Universidad Nacional) gave their approval for the study protocol (Protocol HSC-SPH-16-0803). All data were deidentified before analysis. A copy of the UTHealth IRB approval letter is in Appendix 6.

B. SURVEY METHODOLOGY AND LOGISTICS

B.1. Overall Considerations

We provide a brief description of the methods and logistics for the field data collection and data collection instrument (i.e., questionnaire) with enough detail to assure the methodology is reproducible and that the techniques can be replicated in other populations and for different topics. While we followed similar procedures for the I and II ECCTS, specific methods and instruments for the II ECCTS were first tested in Honduras in 2016 (Gimeno and Delclos 2016). Three additional documents are included as appendices: (1) the final II ECCTS survey instrument/questionnaire; (2) a Fieldwork Manual, for use in the field, both to guide interviewers as well as for ongoing quality assurance; and (3) a Field Interviewer Training Manual, for use in the pre-fieldwork phase during training sessions of the field supervisors and interviewers.

We selected a random sample of 1500 workers in each country consistent with the minimum methodological criteria agreed in the CTESLAC expert network (see Table 1, below).

Table 1. Methodological criteria for national surveys of working conditions and health: minimum recommendations. CTESLAC, 2016.*

Inclusion criteria	Minimum: persons over the age of 17 years who have worked at least one hour for pay in the week before the survey or who normally would have done so but were temporarily absent from their work
Sample design	Probabilistic multistage sampling
Sample frame	Census
Place of interview	Household of the interviewee
Sampling stages	(1) Random selection of census segments (2) Within each segment, random selection of households (3) Within each household, random selection of one worker
Day and time of interview	Fieldwork conducted on flexible days and hours to avoid selection bias. Should the ‘selected’ interviewee not be available at the first visit, perform at least 3 more visits (4 in total) at different times, including one weekend.
Training of interviewers	Have a manual that includes objectives, clear selection criteria and replacement, quality controls and a glossary.
Coding of open-ended questions	The coding of the open questions requires well-trained coders, especially for occupation (International Standard Classification of Occupations (ISCO)) and economic activity (International Standard Industrial Classification of All Economic Activities (ISIC)). [‡]

* From Benavides et al. 2016. [‡] In the U.S., it is called the North American Industry Classification System (NAICS).

B.2. Study Sample

For the purposes of this Cooperative Agreement, and consistent with the CTESLAC uniform methodological criteria as well as ILO, we defined a worker as “a person over the age of 17 years (with no upper-end age), who has worked at least one hour for pay or payment-in-kind in the week before the survey or who normally would have done so but was temporarily absent from his or her work.” The II ECCTS included both men and women in formal and informal employment and workers in urban and rural areas. As noted earlier, the target geographic region consists of the six Spanish-speaking countries of Central America, in both rural and urban sectors.

In brief, the process involves using a sampling frame conducted via random selection of households to select working people for face-to-face home-based interviews, aiming to secure a representative sample of the national workforce of each country, which will include a mix of both sexes, and formal as well as informal workers. The sampling frame was based on currently available country-level census data, using a random route sampling strategy. Rather than population-based census, we used electoral sampling frames, that is, the official lists of voting centers for the most recent election in each country. These electoral frames also incorporate census

track information. In the countries in the II ECCTS voter registration is automatic for the population age 18 and older (that is, the population does not need not voluntarily register as in the U.S.). In contrast to the electoral census, population censuses in Central America are quite out of date and, thus, those censuses do not reflect the reality of the countries. Nonetheless, to ensure the II ECCTS sample is a valid representation of each country’s working population, sampling weighting procedures were applied (see section B.2.1. Weighting, below). Table 2 shows the last available year for each type of census.

Country	Last available electoral census	Last available population census
Guatemala	2015	2002
El Salvador	2015	2007
Honduras	2017	2001
Nicaragua	2016	2005
Costa Rica	2017	2011
Panama	2014	2010

Within each country, a fixed number of random census segments (n=125) were chosen; in turn, each segment consisted of 12 home-based interviews to complete the corresponding 1,500 interviews set for each country (i.e., 125 x 12 = 1500). An additional second sample of “reserve” census segments was selected in case a replacement was needed. Google Maps ©, which are more updated than the currently available official cartography, were used to identify primary sampling units, dividing the map into area grids. Each grid was assigned a number and then a grid was randomly selected. Within grids, blocks were randomly selected and households were selected for interview. After an eligible person was identified and expressed willingness to participate, the interview was conducted. No incentive or reward was provided for participation in the survey. Once the 12-interview quota in a segment has been reached, the fieldwork team moved to another segment and the process was repeated. Details on sampling, sample size, and subject recruitment are provided in Appendix 2, Fieldwork Manual.

B.2.1. Weighting

Post-sampling weights obtained from each country’s official Labour Force Surveys and demographic population data publications by age, sex, industry sector were applied to ensure that

the sample accurately represented the population of reference in each country. Country-specific weights were also developed for country-specific analyses. When using the data to obtain, for instance, the population prevalence of a parameter of interest, weights were applied to the data. Standard software packages can easily incorporate weights into statistical procedures and produce the desired weighted survey estimates.

B.3. Survey Instrument

B.3.1. Sources of items

Led by the team at UTHealth, the survey instrument's starting point was the CTESLAC common core questionnaire items (Table 3), together with other questions of interest to the Central American Region, developed in collaboration with our colleagues at UPF and SALTRA. The sections on working and employment conditions (sections A, B, and C of the questionnaire) were based on the Spanish Working Conditions Survey (Eurofound 2020b), Eurofound's European Working Conditions Survey (Eurofound 2020a), the International Labour Organization (ILO) Manual of Occupational Injuries Statistics (ILO 2008), and the 12-item General Health Questionnaire (Pilar Sánchez-López & Dresch 2008). The instrument also included a modified work-related violence module developed for DOL-ILAB as part of Purchase Order DOL-OPS-15-P-00239 (Gimeno and Delclos 2016). Finally, 15 items were added at the request of, and in collaboration with, ILAB/USDOL (i.e., items A11, A12, A17, A21, A22, B24, D61, D62, E72, E73, E74, E75, E76, E77, and E78). An additional 13-item module focused on suspected risk factors for chronic kidney disease was developed by a team of experts² to specifically include items on exposure to heat (Tawatsupa et al 2013; Dehghan et al 2013), physical effort and hydration (Dehghan et al, 2013; Neuhouser et al 2009), consumption of anti-inflammatory drugs (Baker & Perazella 2020), and exposure to pesticides and fertilizers (Valcke et al 2017). The final version of the questionnaire, included in the appendix, was composed of 120 items.

² Dr. George Delclos from UTHealth School of Public Health; Dr. Marianela Rojas and Jenny Crowe from UNA/SALTRA, Dr. Berna Van Wendel de Joode from UNA; Dr. Aurora Aragón from the National Autonomous University of Nicaragua at León; Dr. Catherina Wesseling from the Unit of Occupational Medicine, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden, and La Isla Network, Washington, DC; and with feedback from Dr. Tord Kjellstrom, Health and Environment International Trust, New Zealand; Dr. Thomas E. Bernard, College of Public Health, University of South Florida; and, Dr. Rebekah Lucas, from the School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Birmingham, United Kingdom.

B.3.2. Cultural adaptation

All the instruments and fieldwork materials were developed in Spanish and shared with our local partners in each country to ensure the use of consistent and culturally sensitive language. Questionnaire items were pre-tested in each country for timing, clarity, and adaptation of country-specific terms. A single version in Spanish was produced for all six countries with agreed terminology applicable and considered equally understandable in all countries. The question on income was adapted to the local currency in each country. The Spanish version of the questionnaire is provided in the appendixes. English versions of the questionnaire, fieldwork manual, and survey or training plan are provided in the appendixes.

Table 3. Common core questions for national surveys of working conditions and health: minimum recommendations (n=77 items). CTESLAC, 2016.*

Dimension	Subdimensions	Questions
Sociodemographic and occupational characteristics	Demographics	3
	Social	2
	Occupational	2
Employment conditions	Work schedule	3
	Social protections	6
	Contract	5
Working conditions	Safety	3
	Hygiene	5
	Ergonomics	3
	Psychosocial	10
Health	Self-perceived health	1
	Mental health	17
	Occupational injury	1
	Occupational illnesses	1
	Lost work time	1
Preventive activities and resources	Activities	3
	Resources	3
Work-life balance	Family structure	4
	Home chores responsibility	4

* From Benavides et al. 2016.

B.4. Fieldwork Team Training

Training of field supervisors and interviewers, as well as SALTRA colleagues, is central to obtaining accurate, representative results. Training for the field phase of the II ECCTS Survey was done at two levels. First, the Country Fieldwork Managers and Field Supervisors were trained in each country by members of the Steering Committee and Borge & Associates upper management.

Field Supervisors were critical to fulfilling the study's objectives. They were responsible for guaranteeing the quality of the data collected in the field, and were required to check each completed interview. Second, the Country Fieldwork Manager and a member of the UT/UNA/SALTRA research team were responsible for training the Field Interviewers. In each of the six countries, and shortly before the fieldwork is scheduled, we held a day-long training session, attended by the B&A field team, in-country SALTRA collaborators, Dr. Rojas, and the UTSPH investigators (Drs. Gimeno or Delclos). A session for Costa Rica, Honduras and Nicaragua was conducted on February 2, 2018, and a session for Panama, Guatemala and El Salvador was conducted on April 6, 2018.

The training session included topics on interview techniques and survey procedures in addition to topics on the study objectives and characteristics, target population, application of the sampling strategy, violence sensitivity, gender sensitivity, quality assurance, and contingency measures to assure the safety of the field team. The training format included face-to-face didactic sessions, a comprehensive group reading of the field manual and the questionnaire, practical exercises and interview simulations using the data-gathering mobile devices and software, and completion of the different hard copy forms. The session included a review of interview techniques (i.e., introductions, obtaining informed consent, conducting the interview, methods for enhancing response and retention, interview close-out, and data backups.). Further, we conducted readings of the II ECCTS Fieldwork Manual and the questionnaire, including the PDA's correct use for data collection, the completion of the daily incident report. Finally, part of the session was devoted to reminding the team about the importance of professional ethics, attitudes, and behavior, safety and security of the field team, monitoring and quality assurance, and sensitivity training on violence, gender and discrimination issues. All this was to ensure that everyone had a clear understanding of the methodology, format, questions, and concepts related to the questions so that each field team member would attain proficiency and readiness to go to the field.

B.5. Data collection

B.5.1. Fieldwork overview

The fieldwork was carried out between February and June of 2018 with interviews conducted every day of the week from 8 am to 5 pm. Dates and duration of the fieldwork, as well as information on the interview duration in each country are shown in Table 4. Overall, to obtain the

expected number of interviews per country (n=1500), 113 days of fieldwork were needed. In total, 9,032 interviews were completed, with an average duration of 39 minutes per interview.

Table 4. II ECCTS fieldwork summary.

Country	Number of completed surveys	Survey period (in 2018)		Duration of the interviews	
		Start – End dates	Total Days	Average	Maximum
Costa Rica	1503	02/08 – 03/12	33 days	30 min.	1:30 h
Nicaragua	1500	02/10 – 03/11	30 days	50 min.	1:39 h
Honduras	1507	02/10 – 03/20	39 days	36 min.	1:36 h
Panama	1505	04/13 – 05/31	49 days	48 min.	1:37 h
Guatemala	1510	04/14 – 05/26	43 days	42 min.	1:47 h
El Salvador	1507	04/17 – 06/01	46 days	28 min.	1:54 h
Total	9032	02/08 – 06/01	113 days	39 min.	-

B.5.2. Coding of open-ended questions

Responses were entered in the field into hand-held computerized devices allowing instant data capture. Data were transmitted daily to a secure database repository, with backup copies stored in a separate secure location. In the few cases when a paper-based questionnaire was used (i.e., when devices malfunctioned), data were entered at the country fieldwork supervisor’s offices.

There were 28 open-ended questions (i.e., respondents answered in open text format rather than being limited to a set of predetermined options) in addition to nine ‘spontaneous’ open options, typically in response to “other” options in a pre-defined list. The interviewer entered the text provided by the respondent. Questions on occupation and industry were also open-ended and needed to be coded by a group of trained encoders at the survey vendor facilities. The occupation was coded according to the International Standard Classification of Occupations (UNSD 2010), and industry was coded according to the International Standard Industrial Classification of All Economic Activities (UNSD 2002).

B.5.3. Fieldwork outcome indicators

Following the American Association for Public Opinion Research (AAPOR 2016) recommendations for response indicators and rates for in-person surveys, we collected information shown in Table 5. These indicators are based on items regarding whether the dwelling was unoccupied, there was an eligible person or not, the person was eligible but refused to participate, the interview started but was interrupted, and the interview was completed.

Table 5. Survey Fieldwork Outcome Indicators and Rates Based on AAPOR's Standard Definitions (AAPOR 2016).

		Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama	Central America
UD 1	Non-residence (business, commerce, government offices, other organizations)	658	288	329	256	271	57	1859
UD 2	Unoccupied House / No Response / Unable to Determine Household Eligibility	4464	2425	406	2039	507	507	10348
UD 3	Other possibility related to housing: unoccupied	146	49	36	68	138	64	501
UD 4	Dangerous place / activity that does not allow the interview (e.g., drug sales)	13	16	16	4	0	70	119
UD 5	Condominium, neighborhood or building with restricted access, does not give permission to access	60	12	5	1	0	14	92
UD 6	Other possibility related to occupied dwelling	108	1140	228	32	108	638	2254
OC 1	Filter questions not completed, individual's eligibility cannot be determined (no one speaks the language)	22	6	6	25	1	14	74
OC 2	Nobody wanted to be interviewed	770	4	1	537	427	20	1759
OC 3	The only informant is a domestic employee or visitor	151	102	57	85	78	110	583
OC 4	No informants of the corresponding age (18+ age) or who had worked at least 1 hour the previous week	656	526	94	580	234	148	2238
OC 5	Informant is not able to respond (e.g., mental problems, language difficulty, drunk, aggressive, etc.)	41	20	4	31	30	11	137
R 1	Eligible person but not available / present during visit	39	17	23	27	39	36	181
R 2	Eligible person but not able to respond (e.g., mental problems, language difficulty, drunk, aggressive, etc.)	14	12	4	9	57	30	126
R 3	Eligible person but declines interview	555	841	323	946	208	356	3229
R 4	Other possibility related to the eligible person	23	10	9	26	218	33	319
I	Eligible person, interrupted interview	15	69	136	32	9	198	459
O	Other circumstances	305	0	0	39	122	0	466
C	Eligible person, completed interview	1503	1507	1510	1507	1500	1505	9032
Total		9543	7044	3187	6244	3947	3811	33776
	Response Rate = $[C / (C + I) + (R + OC + UD + O)] \times 100$	15.7	21.4	47.4	24.1	38.0	39.5	26.7
	Cooperation Rate = $[C / (C + I) + R] \times 100$	69.9	61.4	75.3	59.2	73.9	69.7	67.7
	Rejection Rate = $[R / (A + I) + (R + NE + VD + O)] \times 100$	6.6	12.5	11.3	16.1	13.2	11.9	11.4
	Contact Rate = $[(A + I + R) / (A + I) + (R + OD + UD + O)] \times 100$	22.5	34.9	62.9	40.8	51.5	56.6	39.5

UD: Unoccupied Dwelling, OD: Occupied Dwelling, but no one is eligible; R: Occupied housing with eligible person but Refuses to cooperate; I: Interview started but Interrupted; C: Interview successfully Completed; O: Other reasons not previously specified

The overall response rate was 26.7% (9032 completed interviews out of 33776 attempts). The ratio of completed surveys to the total number of attempts in Central America was 1:3.7. That is, it took almost four attempts to obtain one completed interview. In Guatemala, Panama, and Nicaragua, this ratio was lower, requiring less than three attempts, but in El Salvador, it took almost five attempts, and in Costa Rica more than six. However, the cooperation rate was 67.7% (averaging the six countries' cooperation rate with the lowest rate of 59.2% in Honduras to the highest rate of 75.3% in Guatemala), indicating that once an eligible contact was established, the interview was completed over two-thirds of the time.

B.5.4. Data quality control

A series of procedures were implemented to guarantee data quality, beginning with the fieldwork's preparatory stages and continued up to the delivery of the final and clean database to the research team. (For more details see Appendix 2. II ECCTS Fieldwork Manual)

Before the fieldwork starts: The crucial factor of this phase is to have a sound fieldwork manual providing the key methodological criteria to, first and foremost, assure the transparency of the different steps to be taken both before and during the fieldwork, and to allow reproducibility of the methods followed to obtain the survey data. This manual is provided in Appendix 2.

During the fieldwork: The basic tasks in this stage are to ensure quality control on the ground, that is, ensure that the manual procedures are followed as designed, addressing and resolving doubts as they appear, from the selection of the sampling units through survey completion (i.e., selection of dwelling, household, and interviewee; introduction to the interviewer and handing out of the Information Sheet, completing the roadmap table and event logs; and conducting the interview).

Post-interview quality control: A 10% random sample of respondents who provided a contact telephone number was called by the survey vendor to confirm the survey had been conducted and to check the reliability of predetermined key information provided by the participant (i.e., residence, sex, and type of work). In case a survey was determined not to have been conducted, that survey would have been canceled. Additional indicators of the performance of the interviewers included examining impossible or out of range values (e.g., age, hours worked per week), the number of "Don't want to respond" or "Non-Applicable" answers, and the start and end times of interviews (i.e., very short or very long interviews, as compared to the average of the duration of

all the interviews). Any of these situations would trigger corrective measures with the interviewer linked to those surveys, including the interviewer's employment termination. We did not encounter any of these situations during the II ECCTS fieldwork.

B.5.5. Data availability

All data files were submitted to the UTSPH team by the vendor adapted for use with standard statistical packages for the analyses. The dataset codebook is available in Appendix 4. The final combined dataset of all six countries is available at the DOL website: <https://www.dol.gov/agencies/oasp/evaluation/publicusedata>

B.5.6. Statistical analysis

All data analyses were performed by the UTSPH team in Texas, who also prepared the database and performed quality control checks. The analyses were performed using Stata statistical software (Stata Corp., College Station, TX) and the database in Stata was submitted to USDOL as per Attachment G(b) of the Cooperative Agreement Terms and Conditions. The primary analyses to be performed were to calculate: (1) Overall descriptive statistics; (2) Prevalence and nature of employment and working conditions, workplace risk factors; (3) Prevalence of self-reported health, health beliefs, and health behaviors; (4) Prevalence of labor rights and social protection benefits; and, (5) Prevalence of work-related violence.

When appropriate, the results are presented by country and for the overall Central American region, and stratified by sex and industry. Additional analyses examining a wide range of associations between employment and working conditions and various health and violence-related outcomes are possible. Additionally, we provide several examples of the types of analyses that can be run with the II ECCTS data. All statistical analyses have been conducted applying post-sampling weights.

C. RESULTS

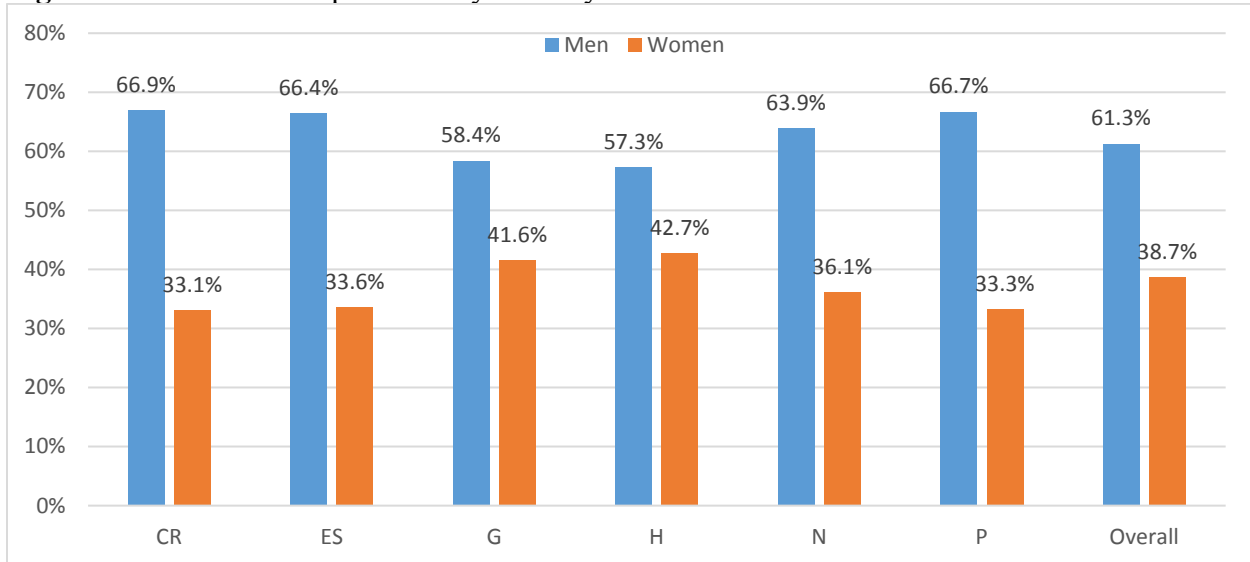
Insights from the Focus Groups

For many of the topics investigated, two main geographic clusters were identified, the “Northern Triangle” (Honduras, Guatemala, and El Salvador) and the nations of southern Central America (Nicaragua, Costa Rica, and Panama). Industry and gender were also identified as key factors for interpreting the data.

C.1. Socio-Demographic and Family Characteristics

Overall, survey respondents were predominately men (61.3%) compared to women (38.7%), with slightly more women participants in Honduras (42.7%) and Guatemala (41.6%) compared to women in other countries (Figure C.1.1). Men dominated the primary industry sector (84.4%) and secondary industry sector (58.9%) compared to women in the primary sector (15.6%) and secondary sector (41.1%) (Figure C.1.2). However, women (58.3%) dominated the tertiary industry sector compared to men (41.7%) (Figure C.1.2.).

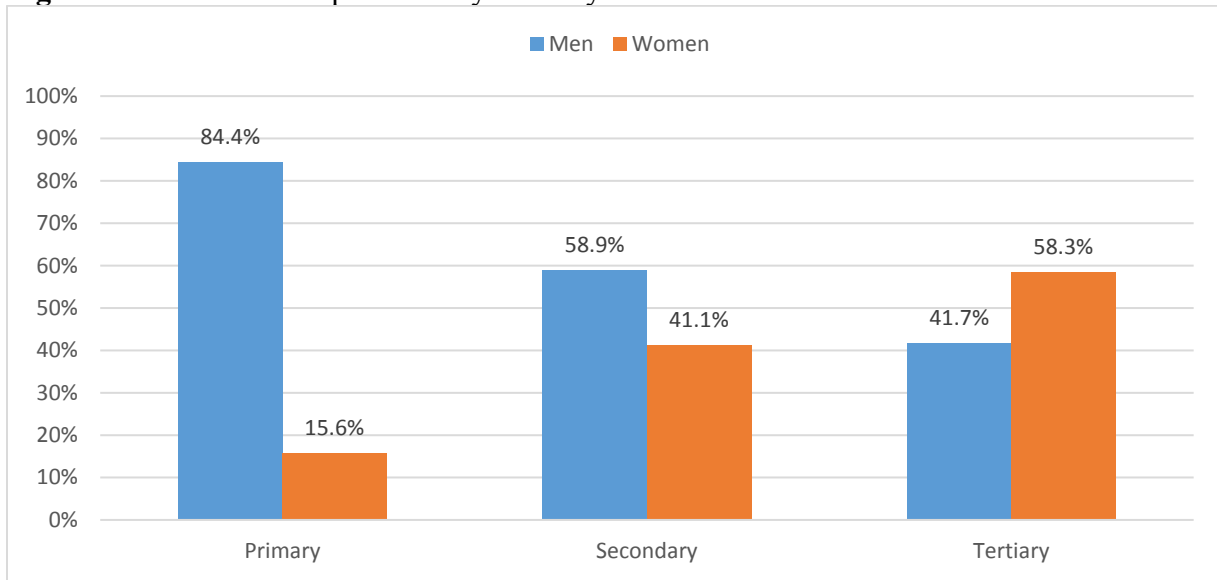
Figure C.1.1. Sex of Respondents by Country and Overall



1 Questions: F79. What is the sex of the person interviewed?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama.

Figure C.1.2. Sex of Respondents by Industry

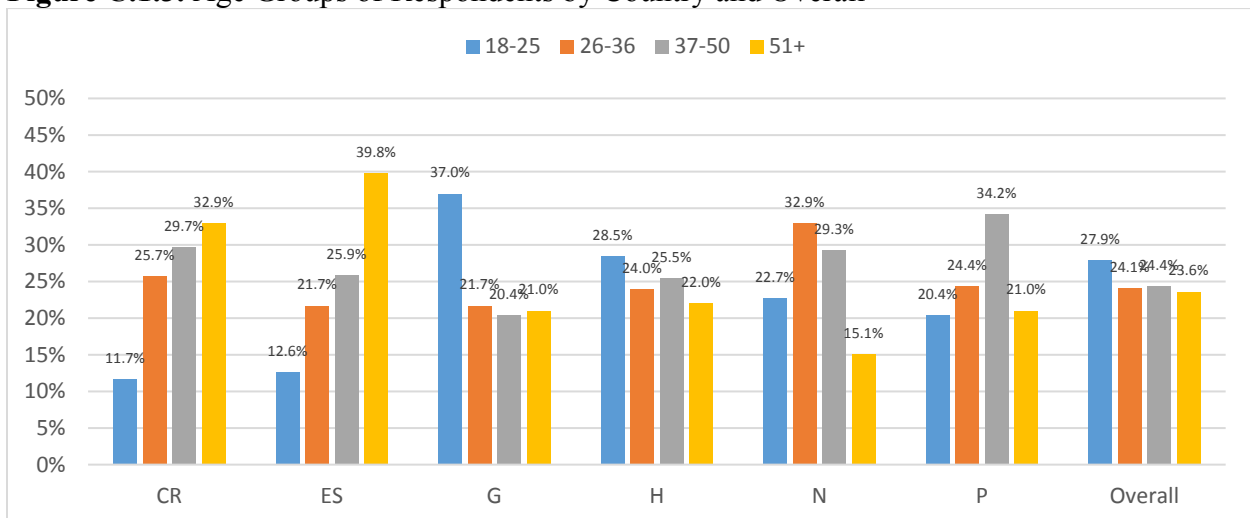


1 Questions: F79. What is the sex of the person interviewed?; B23. In your main job, what is the main economic activity of the company, business, institution or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Age groups of respondents were 18–25 years, 26–36 years, 37–50 years, and 51 years and older and varied between countries (Figure C.1.3.). Guatemala had the youngest respondents with 37% aged 18–25 years, and El Salvador had the oldest respondents with 39.8% aged 51 years and older (Figure C.1.3.). Differences in age by industry and sex were small (Figure C.1.4.).

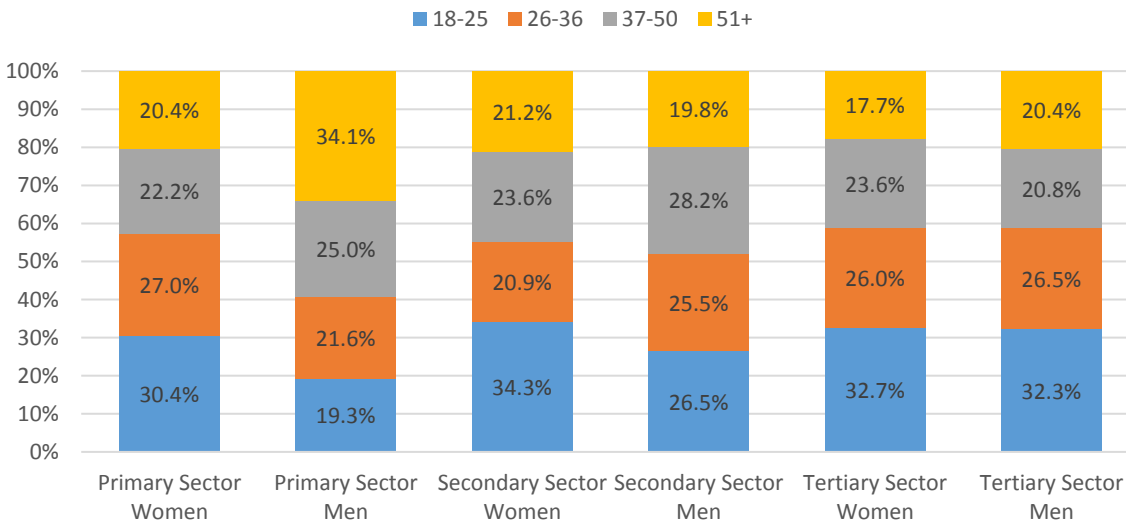
Figure C.1.3. Age Groups of Respondents by Country and Overall



1 Questions: PF1. How old are you in years?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.1.4. Age Groups of Respondents by Industry and Sex



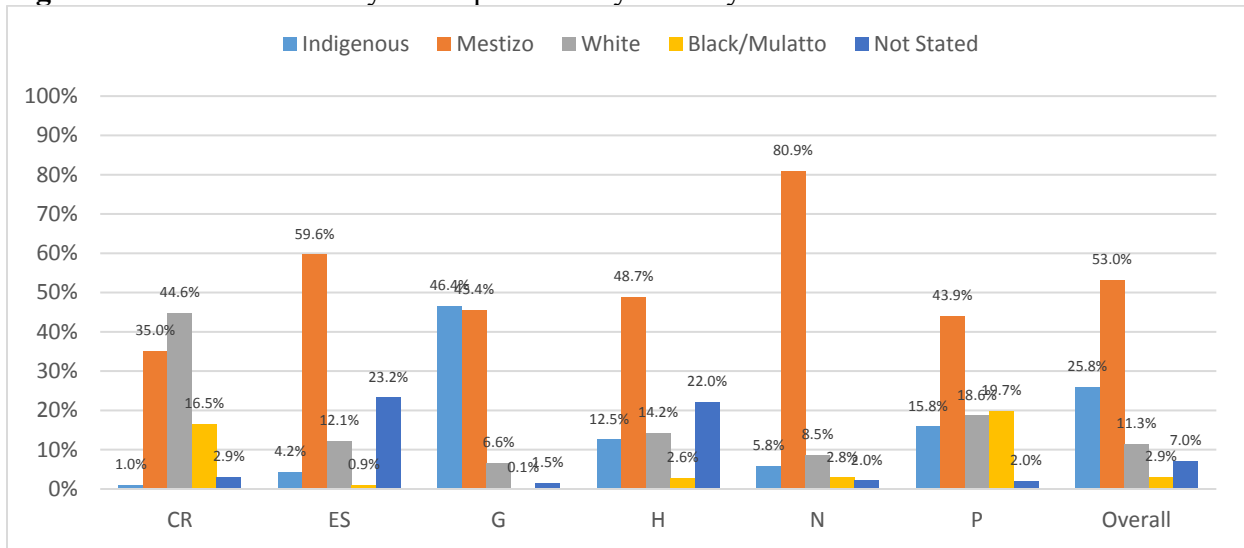
- 1 Questions: PF1. How old are you in years?; B23. In your main job, what is the main economic activity of the company, business, institution or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
- 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, Mestizo (53%) constituted the largest racial group and Black/Mulatto (2.9%) constituted the smallest (Figure C.1.5.). Mestizo represented the largest racial group in all countries except Guatemala and Costa Rica, where Indigenous persons (46.4%) and White persons (44.6%) constituted the greatest proportions, respectively (Figure C.1.5.). The greatest proportion of Black/Mulatto was reportedly in Panama (19.7%) and Costa Rica (16.5%) (Figure C.1.5.). No substantial differences in race were noted between industries by sex (Figure C.1.6.).

Insights from the Focus Groups

In Guatemala, but not in the other countries, discrimination based on being a member of an indigenous minority was described by FG participants. This group was described as “the population most abused by the bosses due to poverty,” as having “unmet basic needs,” and as “not having access to a complete education.” The fact that some indigenous people “do not finish primary school” was viewed by participants as making them susceptible to abuse from others. Participants stated their belief that the Presidential Commission against Discrimination and Racism was a significant advance in protection the indigenous peoples of Guatemala.

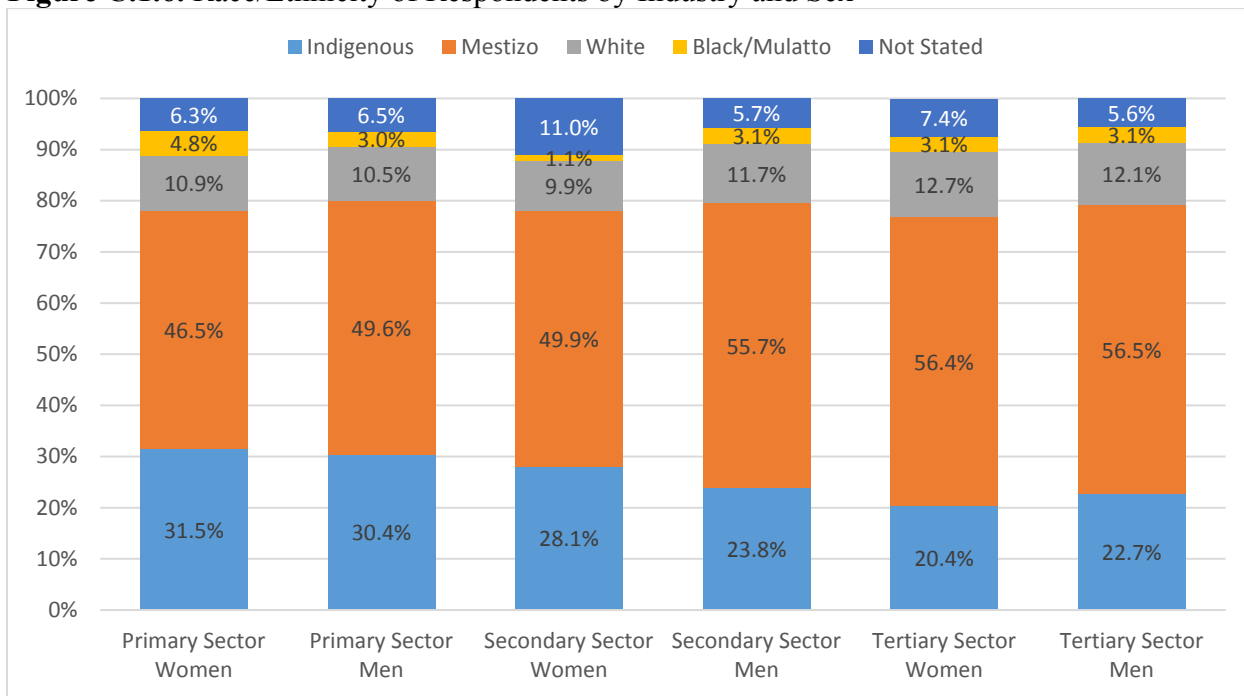
Figure C.1.5. Race/Ethnicity of Respondents by Country and Overall



1 Questions: F83. Which ethnic group do you belong to?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.1.6. Race/Ethnicity of Respondents by Industry and Sex



1 Questions: F83. Which ethnic group do you belong to?; B23. In your main job, what is the main economic activity of the company, business, institution or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

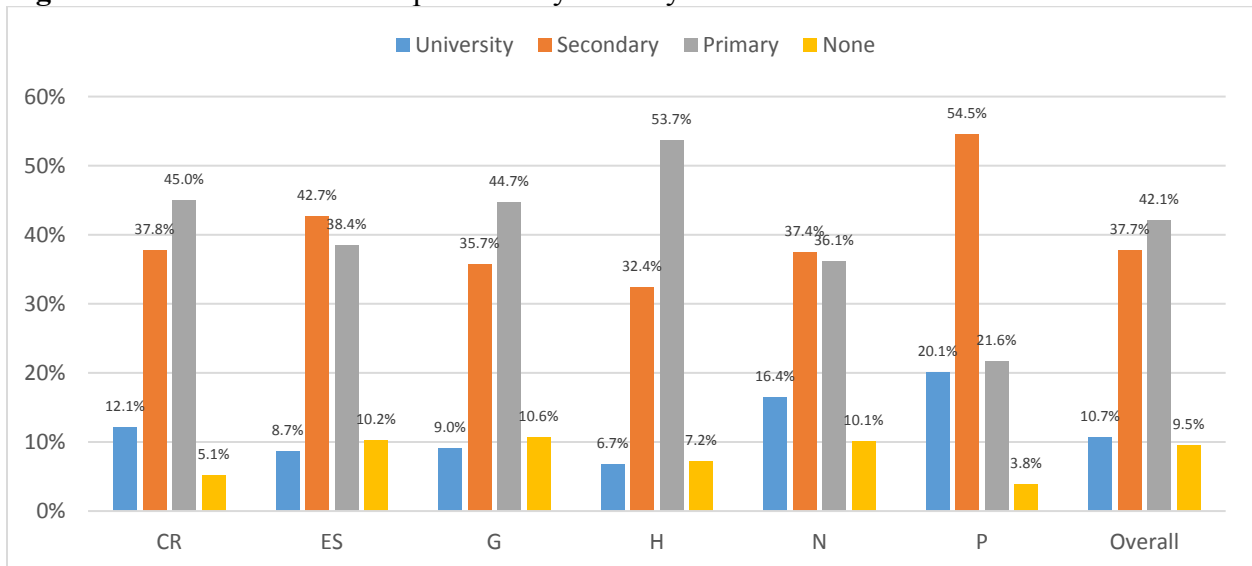
Nearly 10% of respondents reported no formal education (Figure C.1.7.). The greatest proportion of respondents reported primary education (42.1%), followed by secondary education

(37.7%) and university education (10.7%) (Figure C.1.7.). Guatemala, El Salvador, and Nicaragua reported the highest proportion of no education at 10.6%, 10.2%, and 10.1%, respectively (Figure C.1.7.). Panama, Nicaragua, and Costa Rica reported the highest proportion of university education at 20.1%, 16.4%, and 12.1%, respectively (Figure C.1.7.). Men (18.0%) and women (18.9%) with no education worked mostly within the primary sector (Figure C.1.8.). Higher education levels were generally reported in the secondary and tertiary sectors for both men and women (Figure C.1.8.). Women (3.9%) and men (3.7%) in the primary industry sector reported the lowest levels of university education, while those in the tertiary sector reported the highest levels of university education at 19.9% among men and 18.0% among women (Figure C.1.8.).

Insights from the Focus Groups

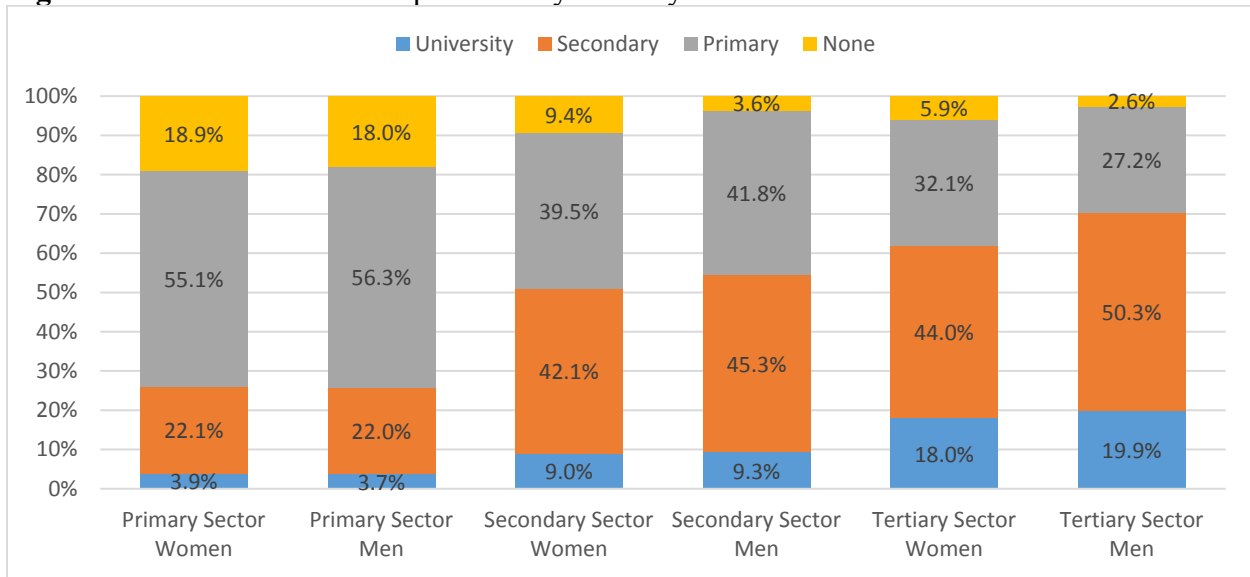
The FG extensively discussed school-related violence in El Salvador. They cited threats to teachers, assaults near schools, and other risks for students. They reported that persons who must travel to get to school often have difficulty attending classes or evaluations because “if they leave the house, there is a risk that they may not return.” The sentiment of the FG participants reflected the perception of a general feeling of widespread insecurity, fear of leaving the house and, among younger students, a barrier to carry out their studies properly.

Figure C.1.7. Education of Respondents by Country and Overall



1 Questions: F80. What is the last year or grade level or level of education that you passed or completed?
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.1.8. Education of Respondents by Industry and Sex



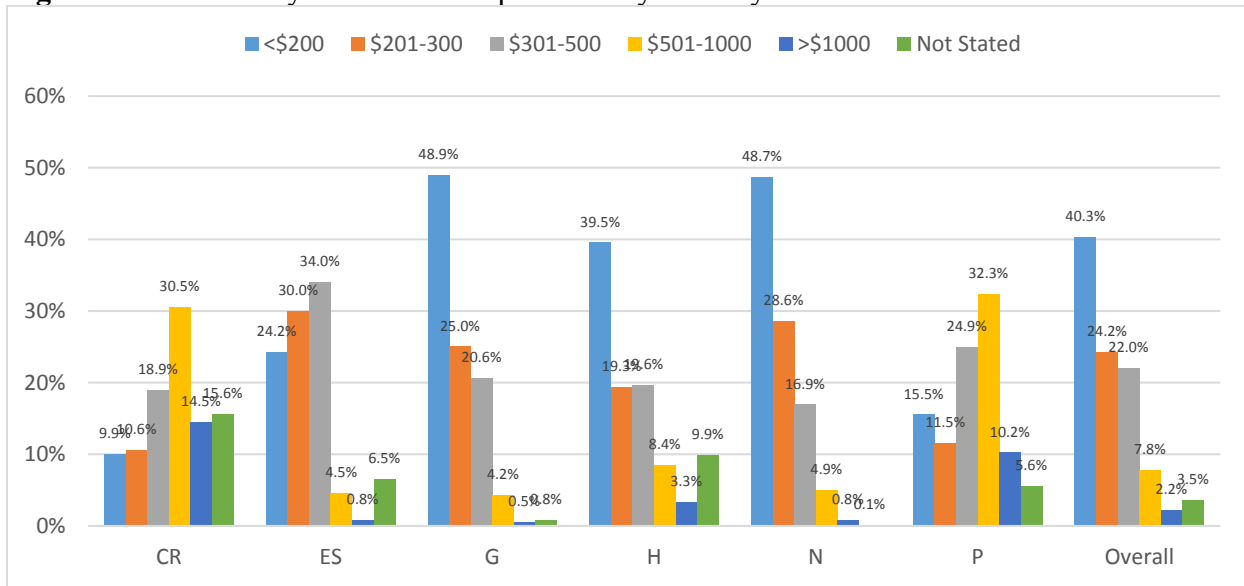
1 Questions: F80. What is the last year or grade level or level of education that you passed or completed?; B23. In your main job, what is the main economic activity of the company, business, institution or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Monthly incomes were generally low (Figure C.1.9.). Overall, monthly income was categorized in US dollars into less than \$200 (40.3%); \$201 – 300 (24.2%); \$301 – 500 (22%); \$501-1000 (7.8%); and greater than \$1,000 (2.2%) (Figure C.1.9.). The greatest proportion of respondents reporting monthly incomes of less than \$200 US dollars per month were in Guatemala (48.9%) and Nicaragua (48.7%) (Figure C.1.9.). Monthly incomes were greatest in Costa Rica and Panama, with incomes greater than \$1,000 constituting 14.5% and 10.2% of incomes, respectively (Figure C.1.9.).

Men typically earned more than women (Figure C.1.10.). Those working in the primary sector were generally paid the least, with 68.8% of women and 53.4% of men earning less than \$200 per month (Figure C.1.10.). Secondary and tertiary sector women earned less than similarly-situated men, while men in both industries were similarly paid (Figure C.1.10.).

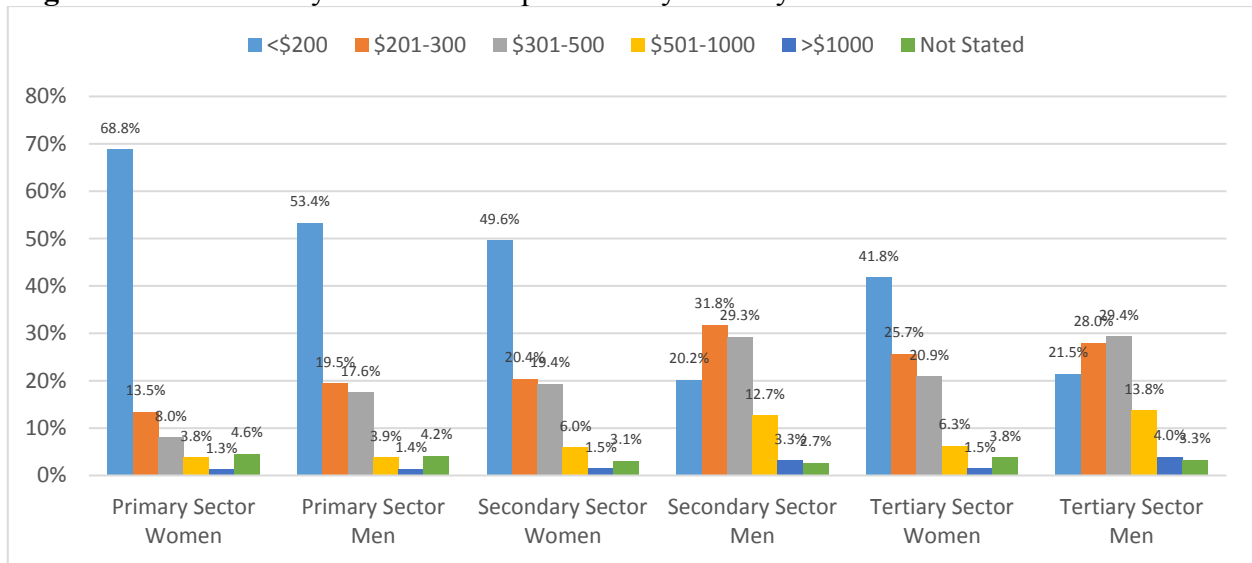
Figure C.1.9. Monthly Income of Respondents by Country and Overall



1 Questions: F87. What has been your average monthly income over the last three months?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.1.10. Monthly Income of Respondents by Industry and Sex



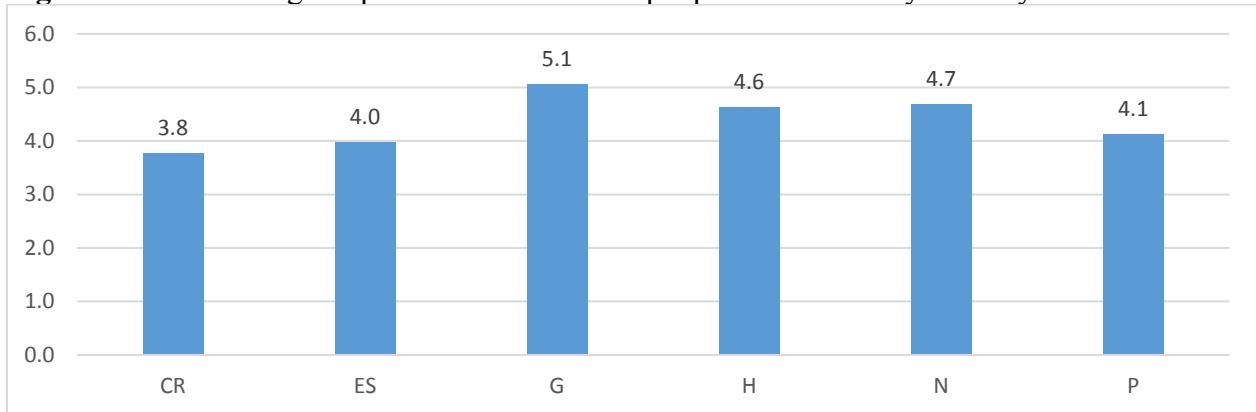
1 Questions: F87. 1 What has been your average monthly income over the last three months?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

The average number of people per household among respondents ranged from 3.8 to 5.1 persons, with the fewest number living in each household reported in Costa Rica (3.8) and the greatest number reported in Guatemala (5.1) (Figure C.1.11.). Women employed in each industry

sector consistently reported greater average numbers of people living in their households, ranging from 4.6 to 5.2 people per household, compared to men employed in each industry, ranging from 4.4 - 4.7 people per household (Figure C.1.12.).

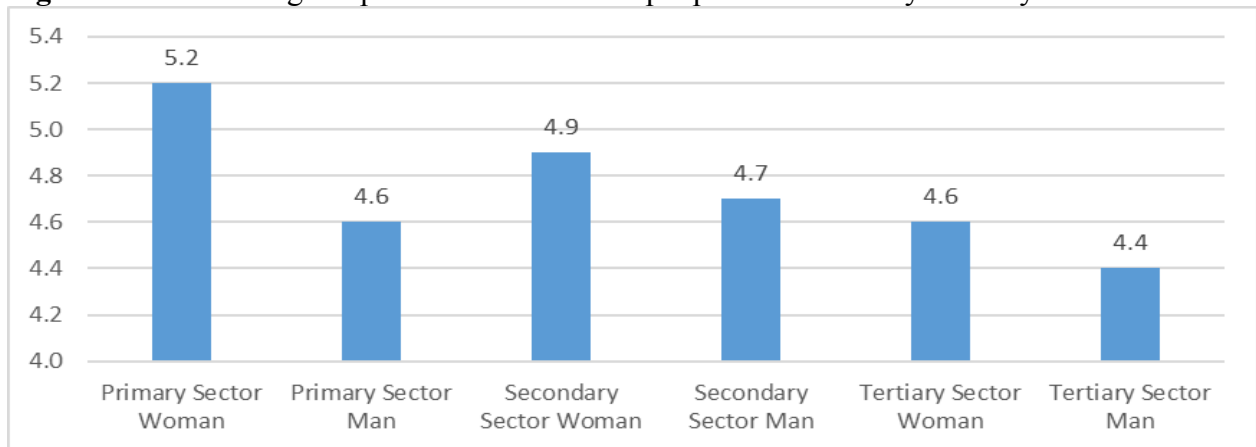
Figure C.1.11. Average Reported Number of People per Household by Country



1 Questions: F89. Now we will talk about your home environment. Please tell me, including yourself, how many people make up your family or household?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

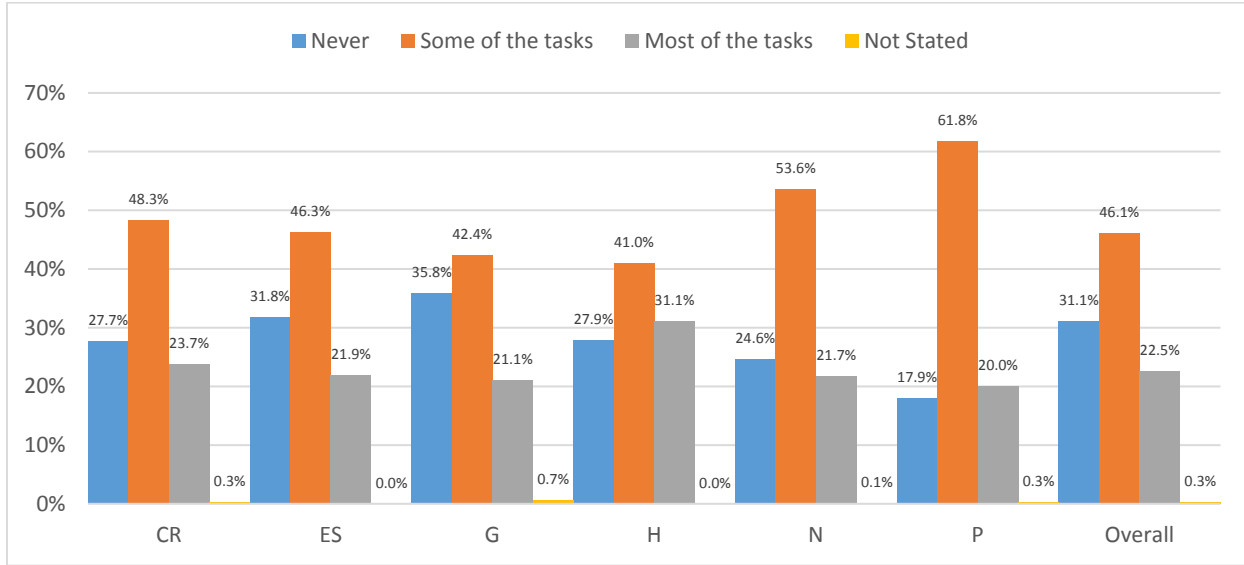
Figure C.1.12. Average Reported Number of People per Household by Industry and Sex



1 Questions: F89. Now we will talk about your home environment. Please tell me, including yourself, how many people make up your family or household?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

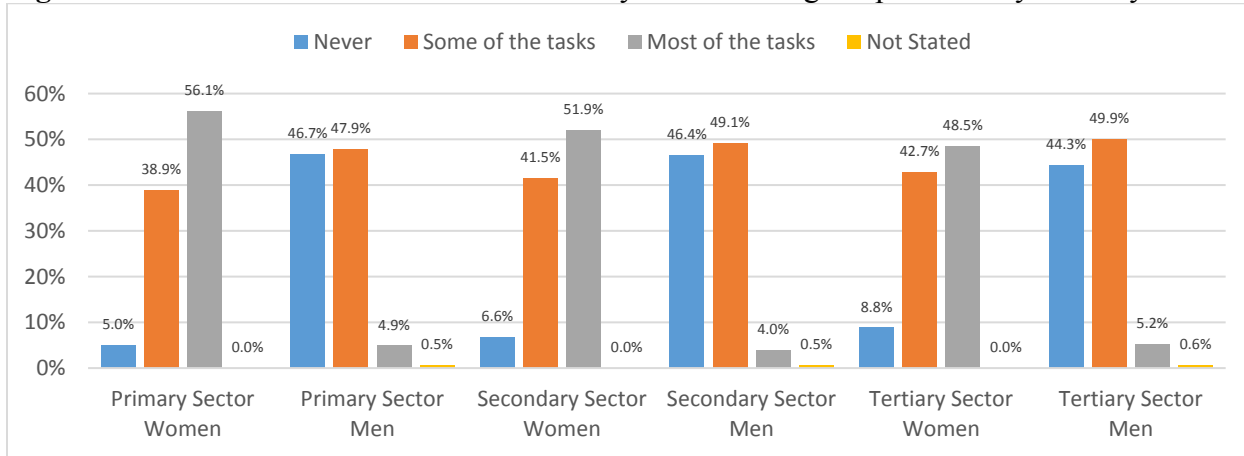
Figure C.1.13. Performance of Domestic/Family Work Among Respondents by Country and Overall



1 Questions: F94. Which part of the domestic and family work do you do?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.1.14. Performance of Domestic/Family Work Among Respondents by Industry and Sex



1 Questions: F94. Which part of the domestic and family work do you do?; B23. In your main job, what is the main economic activity of the company, business, institution or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

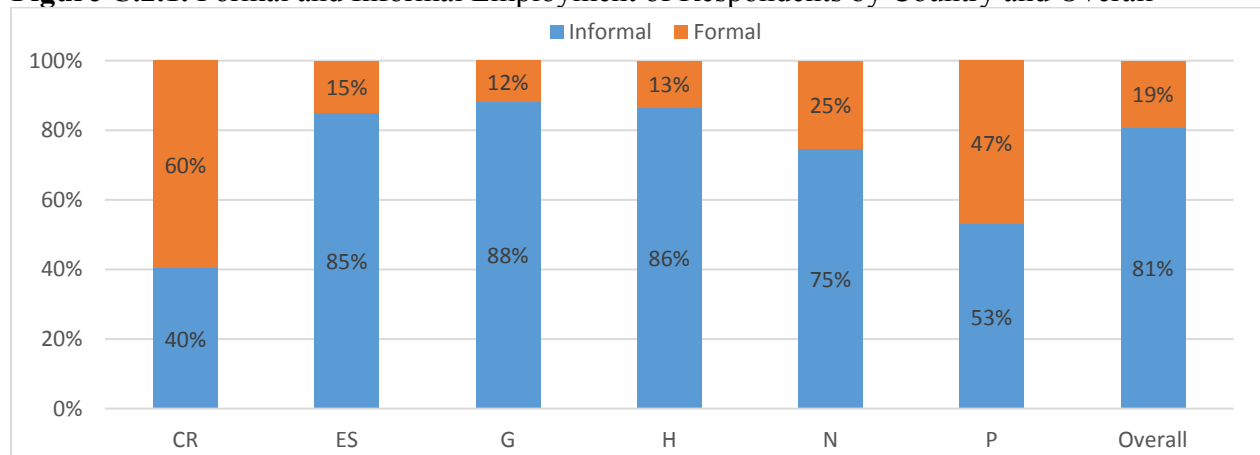
Overall, domestic tasks' performance was reportedly comparable for respondents in all countries (Figure C.1.13.). However, when comparing the performance of domestic and family work between women and men by industry, 44.3–46.7% of men by industry reported never performing domestic tasks compared to only 5– 8.8% of women reporting the same (Figure

C.1.14.). Similarly, 48.5– 56.1 of women by industry reported performing most of the domestic tasks, while only 4.0.–5.2% of men reported the same (Figure C.1.14.).

C.2. Employment Conditions

Overall, 81% of Central American respondents were informally employed, with the greatest percentage of informal employment arrangements being found in Guatemala (88%), Honduras (86%), El Salvador (85%), and Nicaragua (75%) and the lowest in Panama (53%) and Costa Rica (40%) (Figure C.2.1.). Informal employment arrangements were greatest in the primary sector (90%) and nearly equal in the secondary (77%) and tertiary (76%) sectors (Figure C.2.2.). In general, informal employment arrangements were more common among women in primary (91%), secondary (82%), and tertiary (80%) sectors than among men in the same sectors at 89%, 74%, and 70%, respectively (Figure C.2.3.).

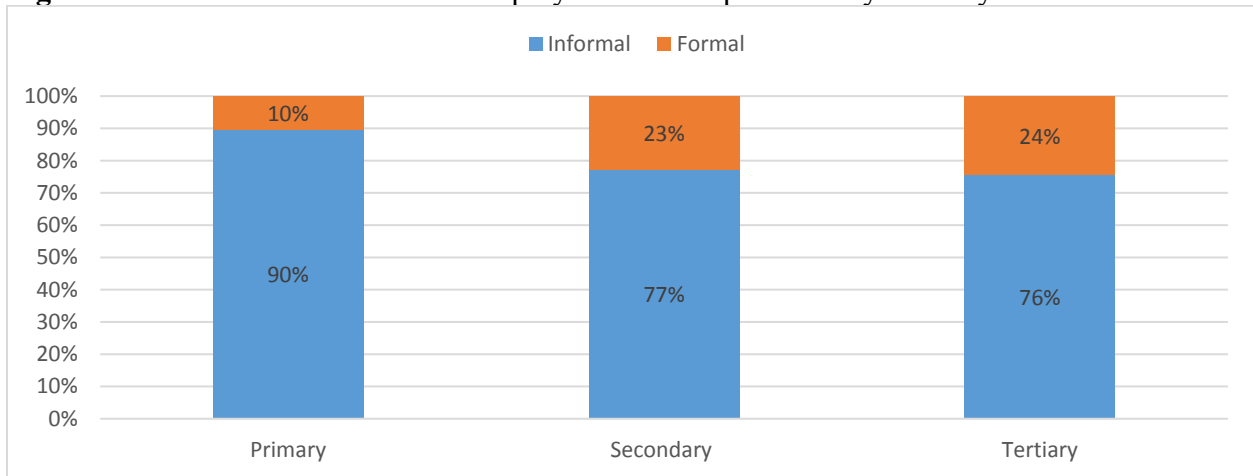
Figure C.2.1. Formal and Informal Employment of Respondents by Country and Overall



1 Questions: A5. Are you currently contributing, affiliated, registered or have a discount on some retirement, unemployment or disability insurance or social security or insurance system?

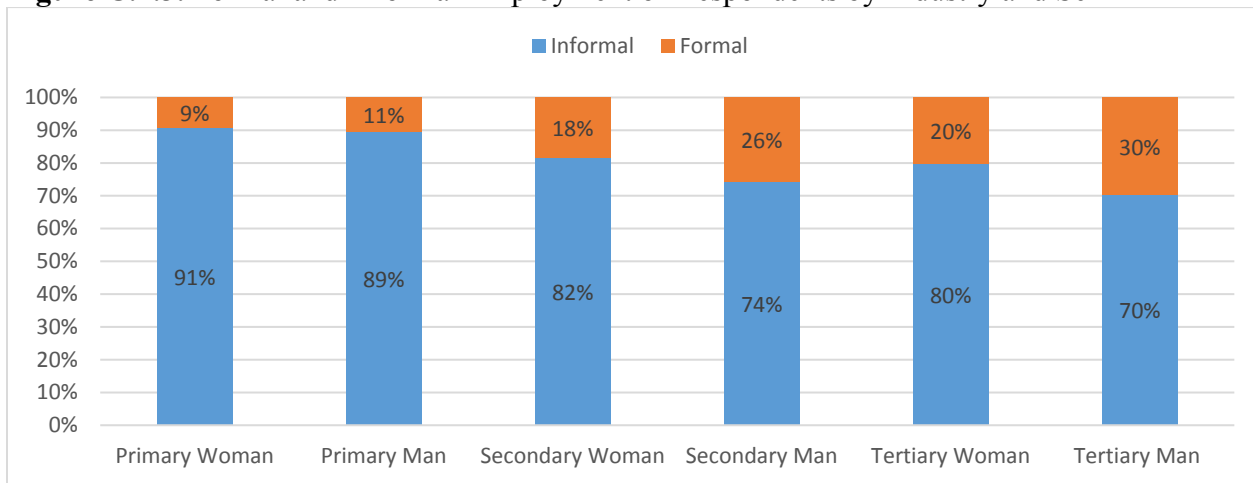
2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.2.2. Formal and Informal Employment of Respondents by Industry



1 Questions: A5. Are you currently contributing, affiliated, registered or have a discount on some retirement, unemployment or disability insurance or social security or insurance system?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

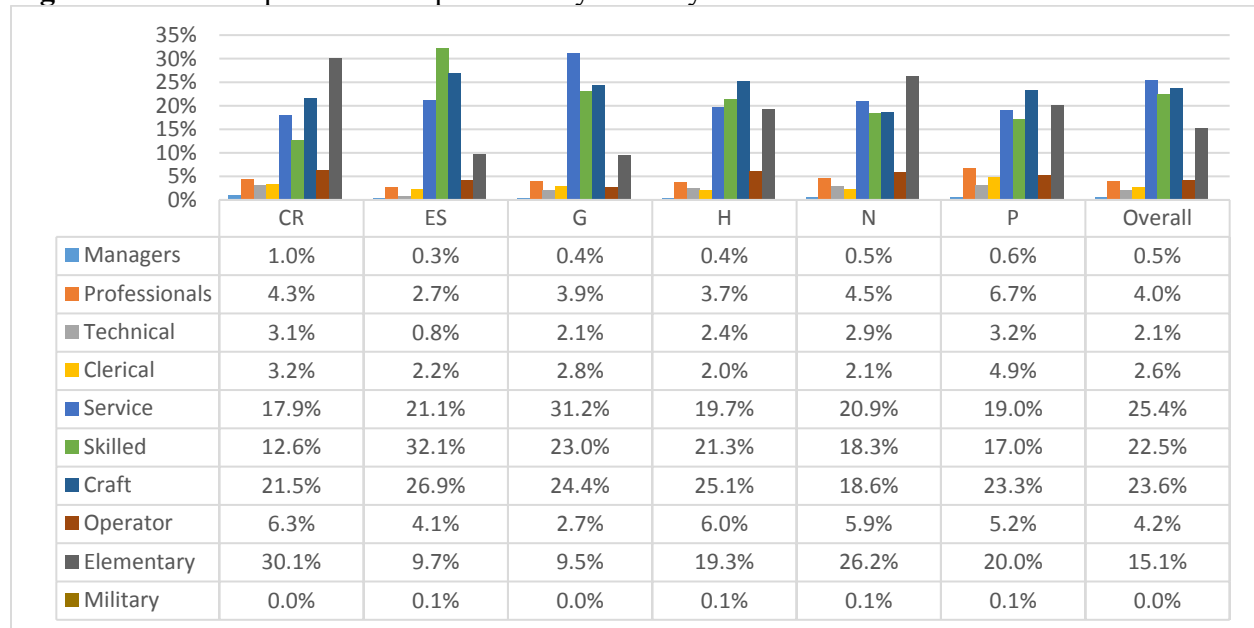
Figure C.2.3. Formal and Informal Employment of Respondents by Industry and Sex



1 Questions: A5. Are you currently contributing, affiliated, registered or have a discount on some retirement, unemployment or disability insurance or social security or insurance system?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed? 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, services (25.4%), craftsmen (23.6%), and skilled workers (22.5%) constituted more than 71% of the respondents' occupations and were largely represented in all countries (Figure C.2.4.). Military members (<0.1%) and managers (0.5%) were rarely represented (Figure C.2.4.). Primary and secondary sector managers were made up only of men (Figure C.2.5.).

Figure C.2.4. Occupation of Respondents by Country and Overall



1 Questions: A2. What occupation, trade, job tasks, or duties do you usually perform in your MAIN job? That is, the job you have devoted more time during the last 30 days. Please describe what you do.

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

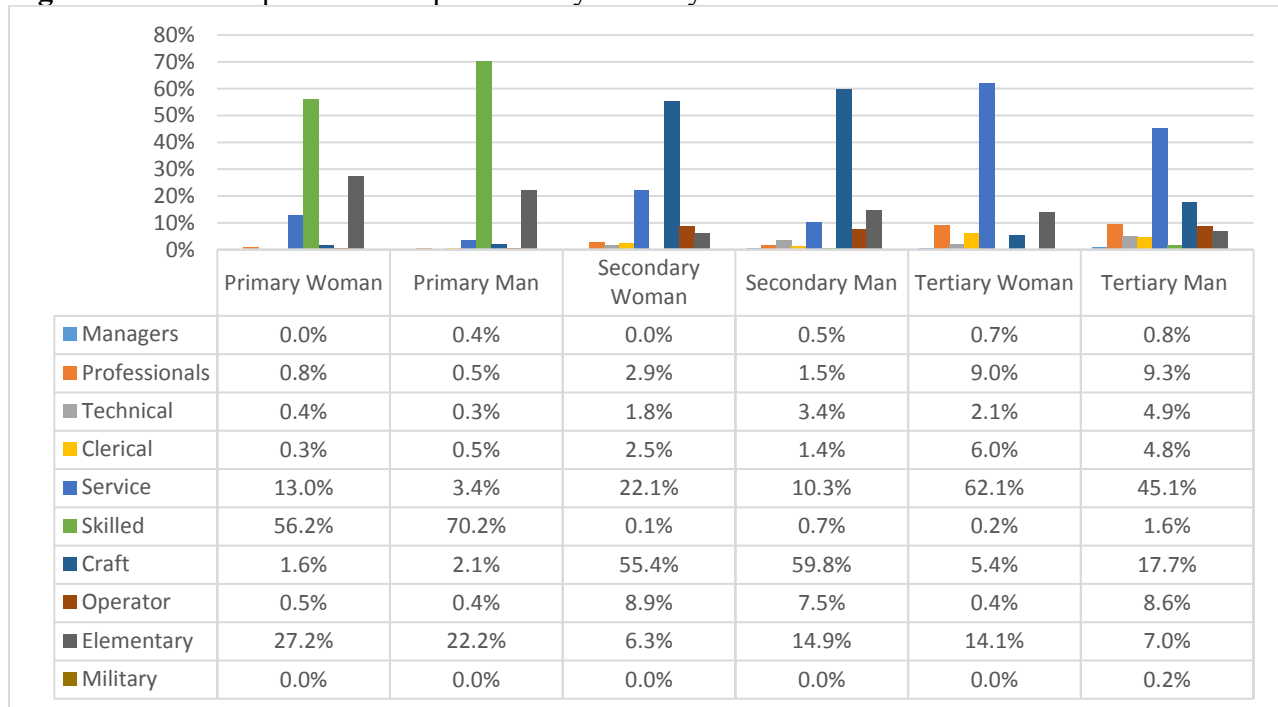
Self-employed workers (i.e., who work for themselves) constituted the greatest proportion of employment type across countries, ranging from 27.4% self-employed in Honduras to 56.3% self-employed in El Salvador (Figure C.2.6.). Nearly 36% of respondents were employees, ranging from 28.5% in El Salvador to 52.3% in Costa Rica (Figure C.2.6.). Twenty-five percent of respondents were employers (i.e., who employ others), ranging from 10.4% in El Salvador to 35% in Guatemala (Figure C.2.6.). Family workers and cooperatives made up only a little proportion of employment type (Figure C.2.6.).

Employers were similarly represented across industries, while self-employment (46.8%) predominated in the primary sector, and employees dominated the tertiary (44%) and secondary (40.9%) sectors (Figure C.2.7.). Among men and women, employees dominated the employment type in the secondary and tertiary sectors (Figure C.2.8.). In the primary sector, men (48.4%) and women (38.0%) were mainly self-employed (Figure C.2.8.).

Insights from the Focus Groups

For all the FG participants, the expression “job insecurity” (inseguridad laboral) refers to the guarantee of employment (i.e., job instability). In Honduras, men pointed to job insecurity as their primary concern. On the one hand, they associated job security with a guaranteed salary, but they also valued labor benefits, particularly access to social protections (e.g., social security, health insurance).

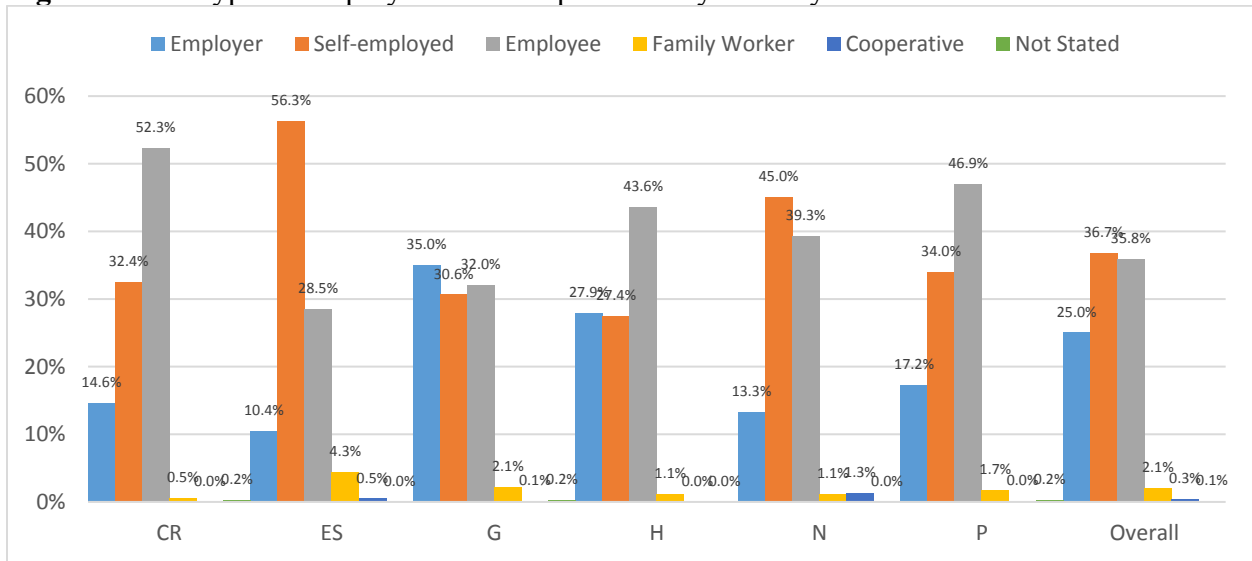
Figure C.2.5. Occupation of Respondents by Industry and Sex



1 Questions: A2. What occupation, trade, job tasks, or duties do you usually perform in your MAIN job? That is, the job you have devoted more time during the last 30 days. Please describe what you do.; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

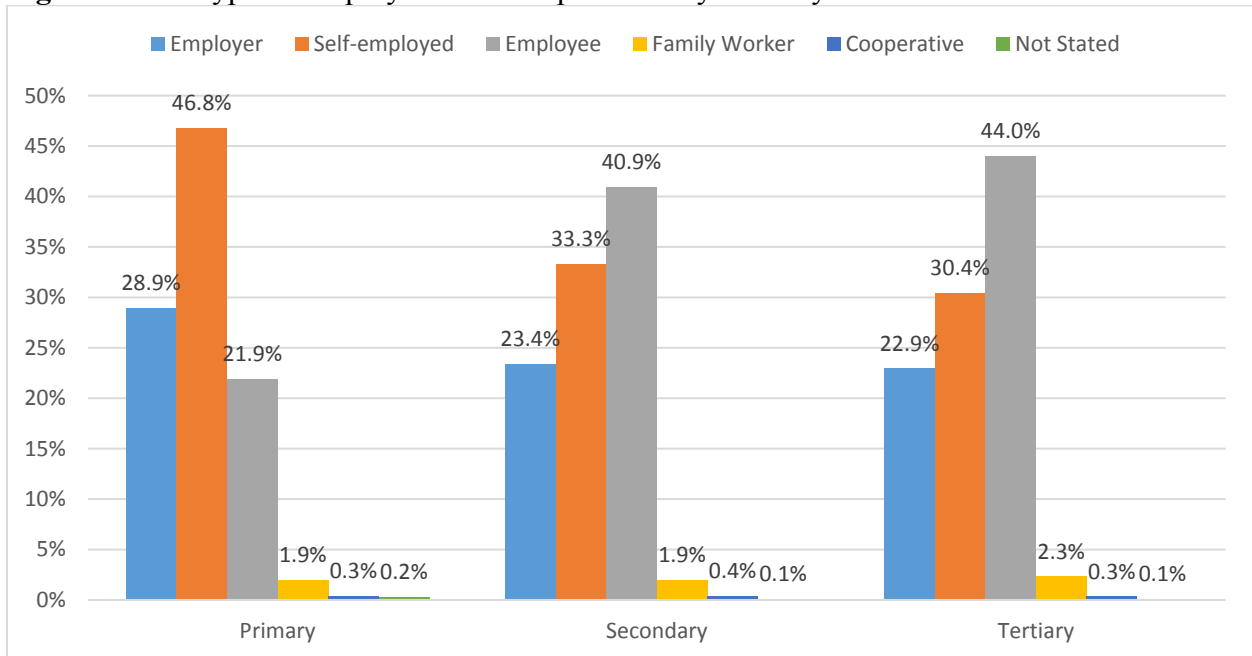
Figure C.2.6. Type of Employment of Respondents by Country and Overall



1 Questions: A6. In your main job, are you...?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

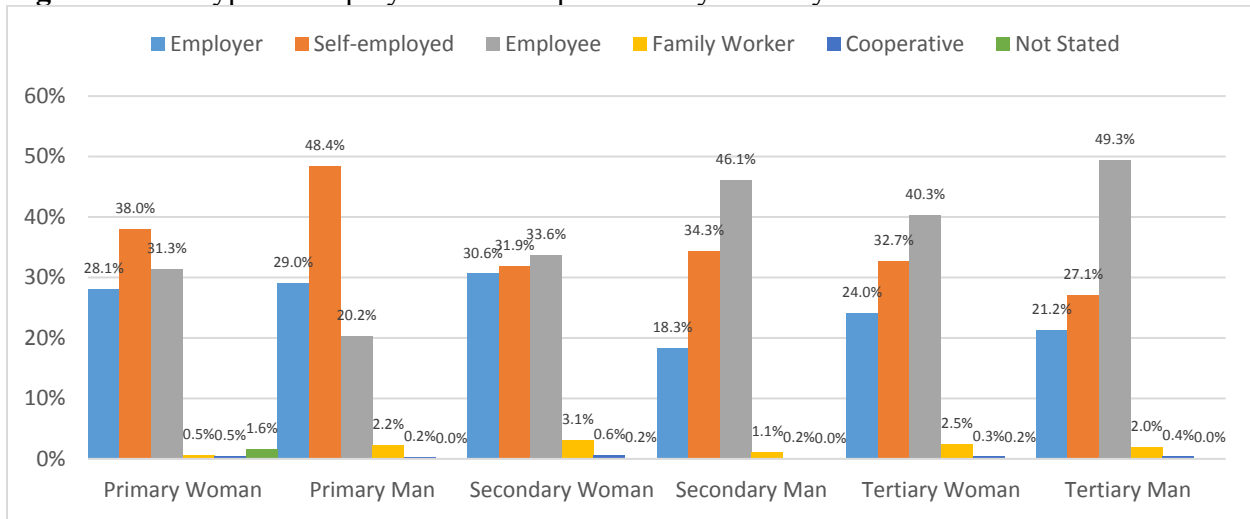
Figure C.2.7. Type of Employment of Respondents by Industry



1 Questions: A6. In your main job, are you...?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.2.8. Type of Employment of Respondents by Industry and Sex



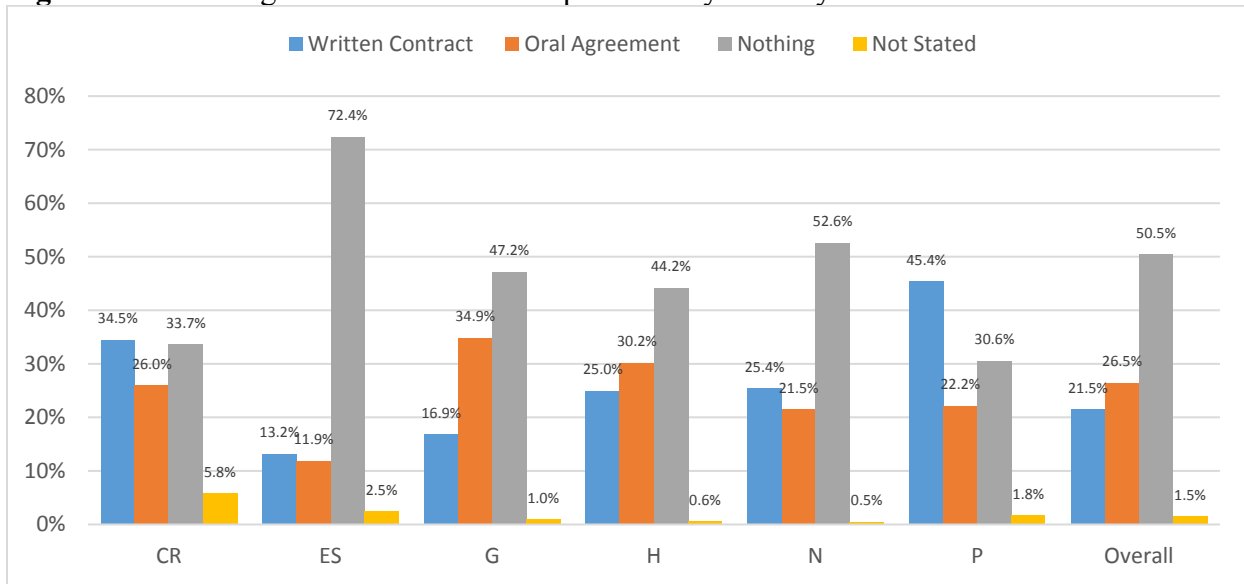
1 Questions: A6. In your main job, are you...?; B23. In your main job, what is the main economic activity of the company, business, institution or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Among most respondents (50.5%), there was no formalized hiring agreement, but 26.5% and 21.5% of respondents were hired by oral agreement and written agreement, respectively (Figure C.2.9). The greatest proportion of respondents were hired by a written agreement in Panama (45.4%), while those hired in El Salvador (72.4%) had no hiring agreement (Figure C.2.9). No hiring agreement was offered to 69.1% of primary sector workers, but written contracts were offered to 28.5% and 26.8% of secondary and tertiary sector workers, respectively (Figure C.2.10).

Women were hired under oral agreements (34.1%) and written agreements (10.7%) in the primary sector more than men (19.0%, 6.9%) (Figure C.2.11). In contrast, men were offered written agreements (28.4, 32.9%) in the secondary and tertiary sectors more than women (24.2%, 25.2%) (Figure C.2.11).

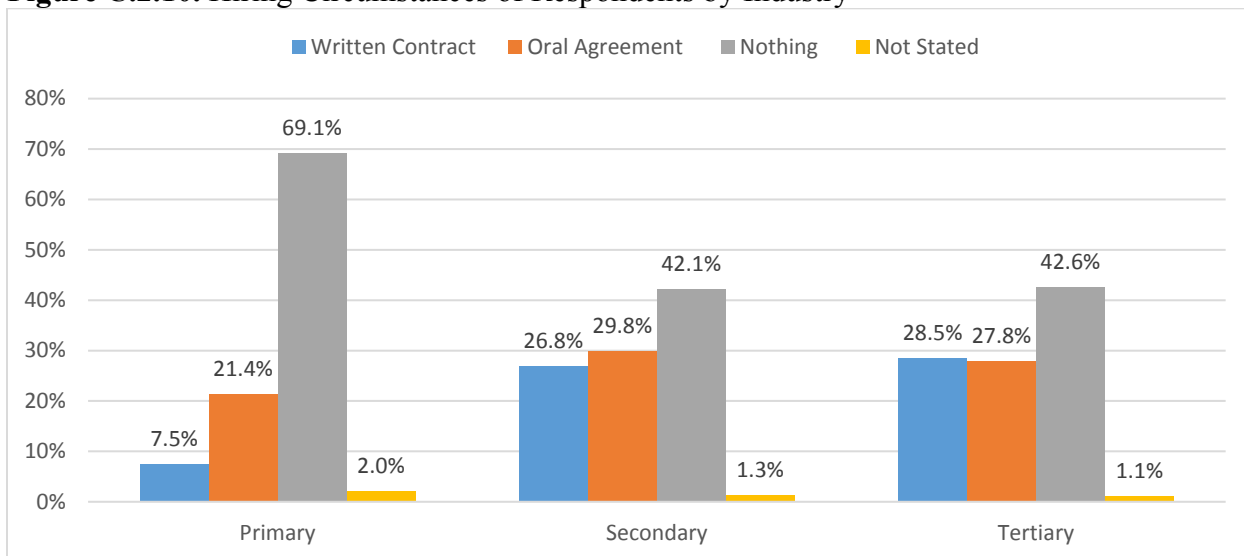
Figure C.2.9. Hiring Circumstances of Respondents by Country and Overall



1 Questions: A10. In your main job, how were you hired?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

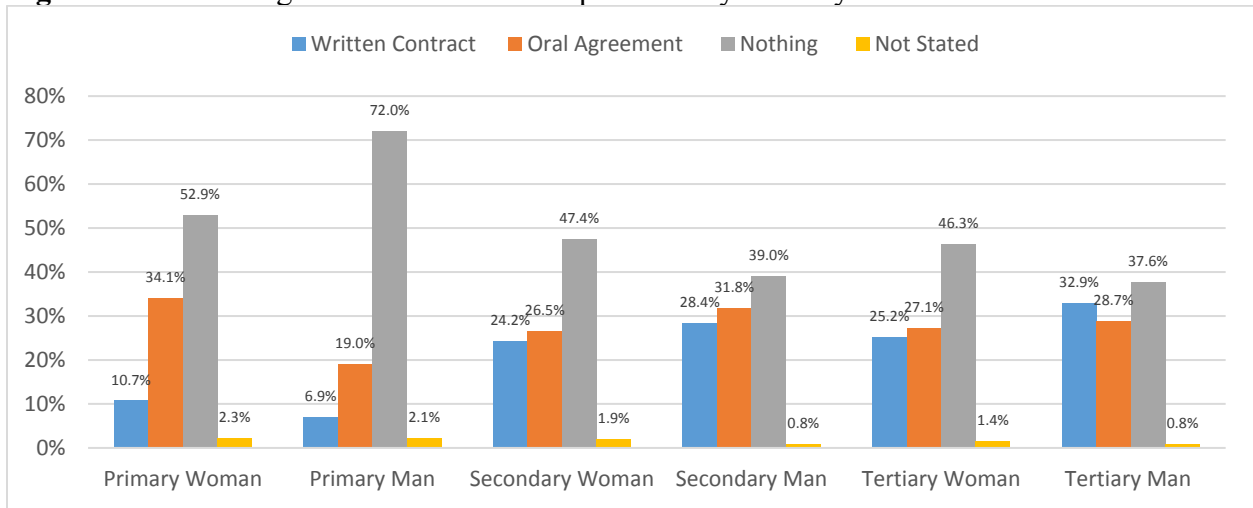
Figure C.2.10. Hiring Circumstances of Respondents by Industry



1 Questions: A10. In your main job, how were you hired?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.2.11. Hiring Circumstances of Respondents by Industry and Sex

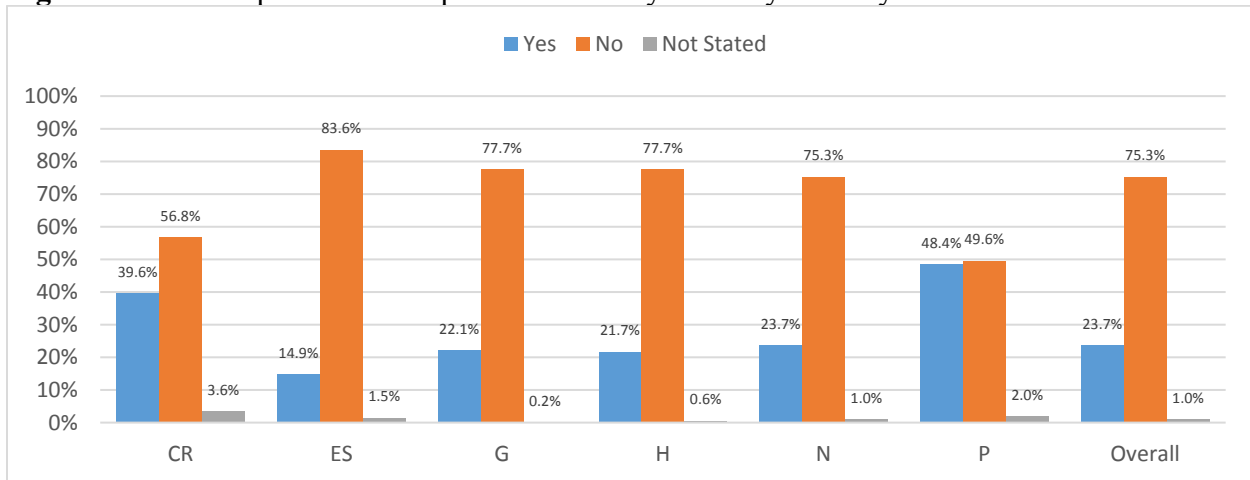


1 Questions: A10. In your main job, how were you hired?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

More than three-fourths of respondents reportedly did not receive written pay stubs with wages or salaries (Figure C.2.12.). Of those in the primary sector, 86.2% reported not receiving written pay stubs in contrast to the secondary (70.9%) and tertiary (70.1%) sectors (Figure C.2.13.). In the primary sector, women (21.2%) were more likely to receive written pay stubs compared to men (10.8%), while men in the secondary (30.7%) and tertiary (35.3%) sectors were more likely to receive pay stubs than women (24.7%, 24.4%) (Figure C.2.14.).

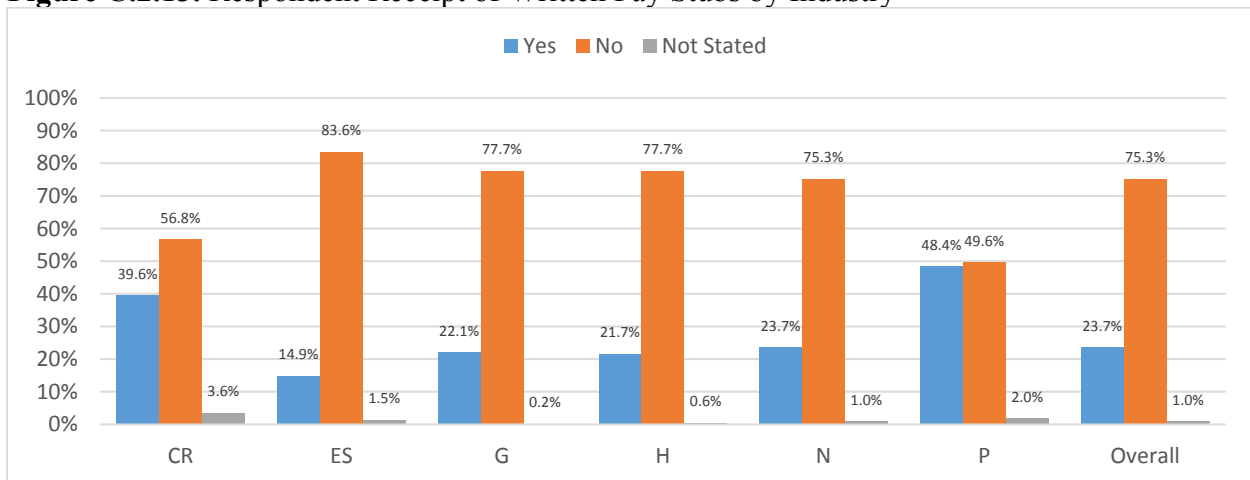
Figure C.2.12. Respondent Receipt of Written Pay Stubs by Country and Overall



1 Questions: A12. Do you receive written pay stubs with your wage or salary indicating how the pay is calculated, that is, including ALL the following: hourly salary, hours worked, taxes, Social Security payments or other deductions?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

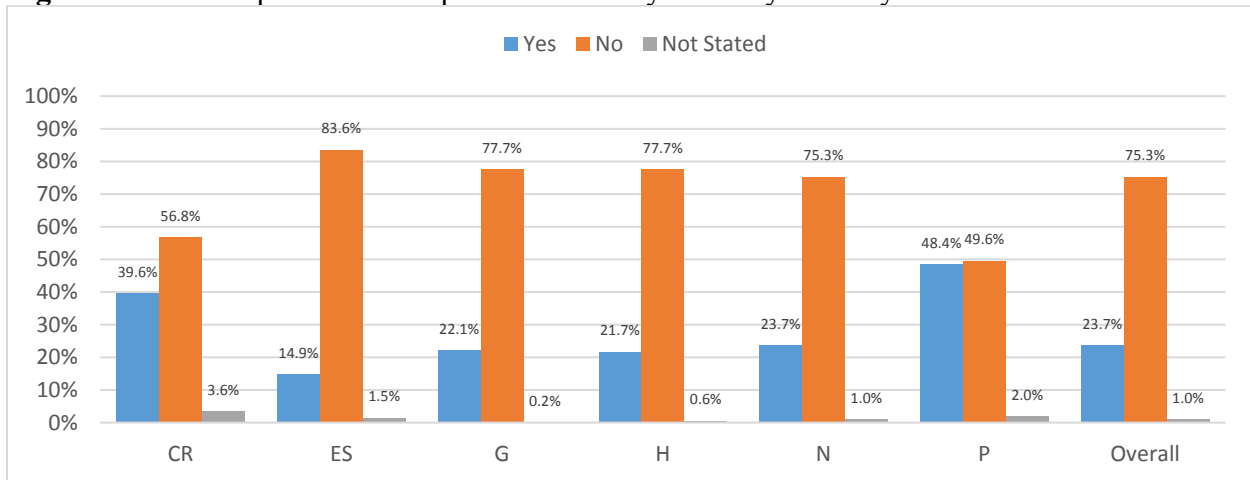
Figure C.2.13. Respondent Receipt of Written Pay Stubs by Industry



1 Questions: A12. Do you receive written pay stubs with your wage or salary indicating how the pay is calculated, that is, including ALL the following: hourly salary, hours worked, taxes, Social Security payments or other deductions?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.2.14. Respondent Receipt of Written Pay Stubs by Industry and Sex

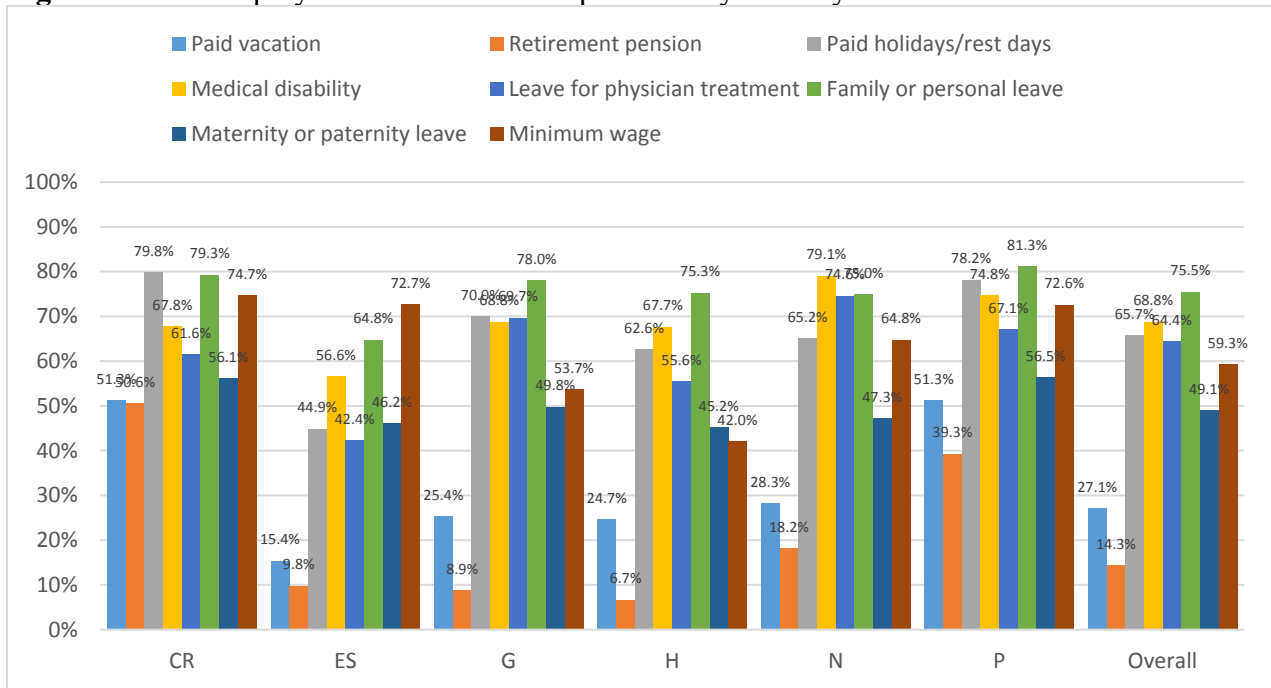


1 Questions: A12. Do you receive written pay stubs with your wage or salary indicating how the pay is calculated, that is, including ALL the following: hourly salary, hours worked, taxes, Social Security payments or other deductions?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Employment benefits as mandated by law were varied by country (Figure C.2.15.). Family or personal leave (75.5%) and paid holidays or rest days (65.7%) were widely offered overall (Figure C.2.15.). However, paid vacation (27.1%) and retirement pension (14.3%) were not common employment benefits (Figure C.2.15.). Costa Rica and Panama had the greatest proportion of paid vacation (51.3%) and retirement pension (50.6%, 39.3%) (Figure C.2.15.).

Differences were reported concerning employment benefits per industry, with the primary sector consistently offering the lowest proportion of benefits (paid vacation 15.1%, retirement pension 9.5%, paid holidays/rest days 64.6%, medical disability 67.3%, leave for physician treatment 60.0%, family or personal leave 74.5%, maternity or paternity leave 44.7%, and minimum wage 50.4%) and the tertiary sector usually offering the greatest proportion (paid vacation 34.9%, retirement pension 17.6%, paid holidays/rest days 66.3%, medical disability 70.9%, leave for physician treatment 69.1%, family or personal leave 76.9%, maternity or paternity leave 52.7%, and minimum wage 62.2%), except for the proportion of respondents declaring earning a minimum wage, which was slightly greater in the secondary sector (64.8%) than the tertiary sector (62.2%) (Figure C.2.16.). Employment benefit differences were also observed between men and women and varied with regarding both benefits and industry (Figure C.2.17.).

Figure C.2.15. Employment Benefits of Respondents by Country and Overall



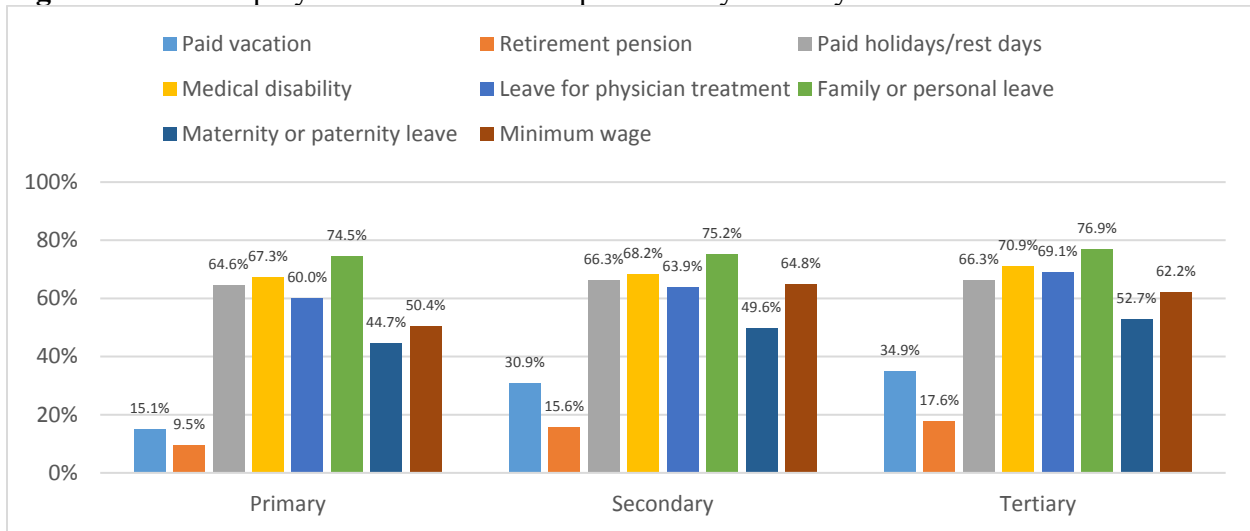
1 Questions: A14. In your main job, can you do the following without problems?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Insights from the Focus Groups

Despite being considered by the male FG participants as a guarantor of labor rights and provider of employment, the Honduran government was the subject of much criticism. Workers felt that, while laws establish workers' rights, the government failed to enforce them. They described their challenges in dealing with the Ministry of Labor, such as: (a) bureaucratic hurdles, resulting in a long time to solve a problem and involving economic costs; (b) interacting with personnel who lacked training because they were hired more for political reasons; (c) corruption, with ministry employees accepting bribes from employers to make resolutions that favored the company; and (d) deterrents to litigation, since going through the Ministry involved costs and risks. One participant noted, "The worker is the one that loses because he can even end up in jail" for raising concerns.

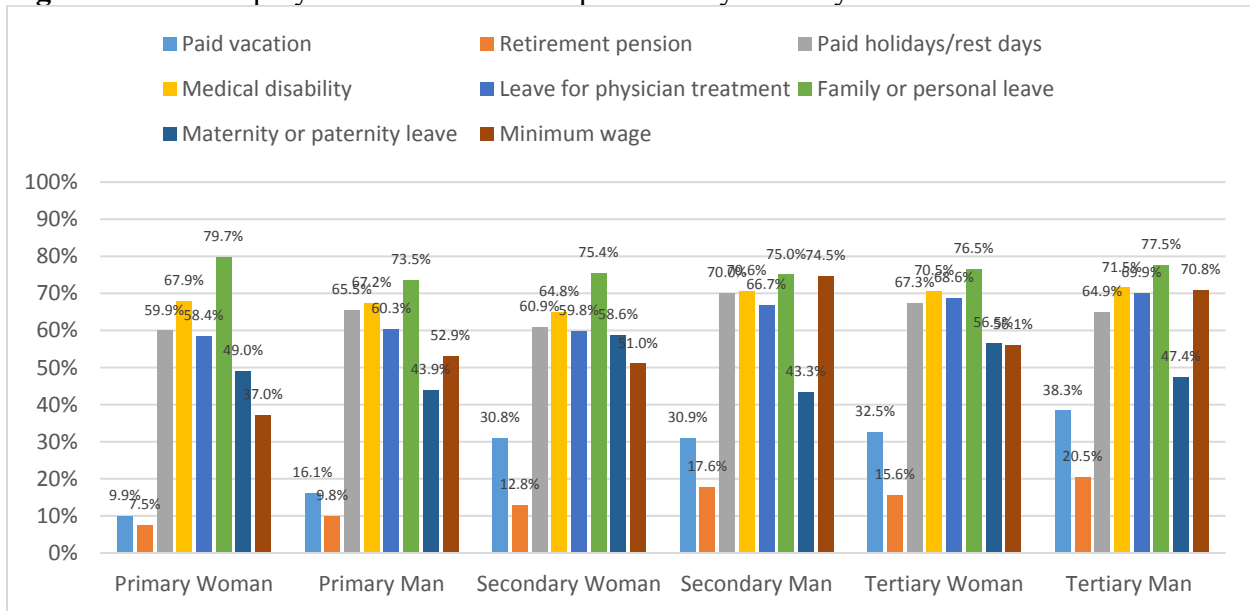
Figure C.2.16. Employment Benefits of Respondents by Industry



1 Questions: A14. In your main job, can you do the following without problems?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Weekly work hours were divided into tertiles of less than 40 hours, 40 to 48 hours, and greater than 48 hours. Nicaragua (42.3%) reported the greatest proportion of respondents working less than 40 hours, while Costa Rica (33.3%) reported the greatest proportion of respondents working more than 48 work hours (Figure C.2.18.). In general, respondents in the primary sector (32.6%) reportedly worked less than 40 hours in the greatest proportion, while respondents in the tertiary sector (32.9%) worked more than 48 hours in the greatest proportion (Figure C.2.19.). Work hour differences were noted between men and women and varied regarding both hours and industry (Figure C.2.20.).

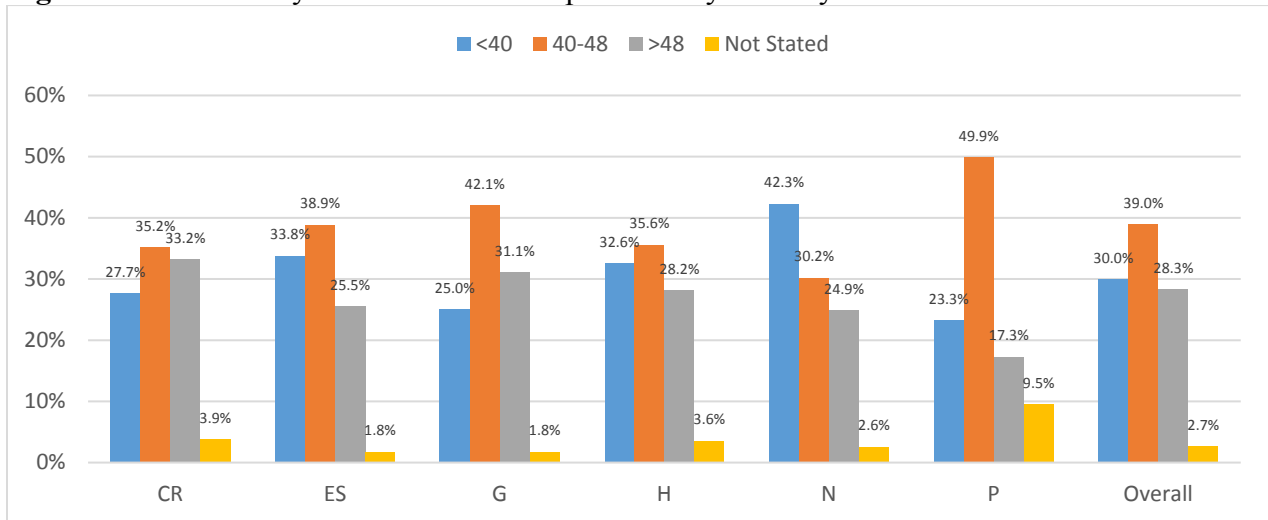
Figure C.2.17. Employment Benefits of Respondents by Industry and Sex



1 Questions: A14. In your main job, can you do the following without problems?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

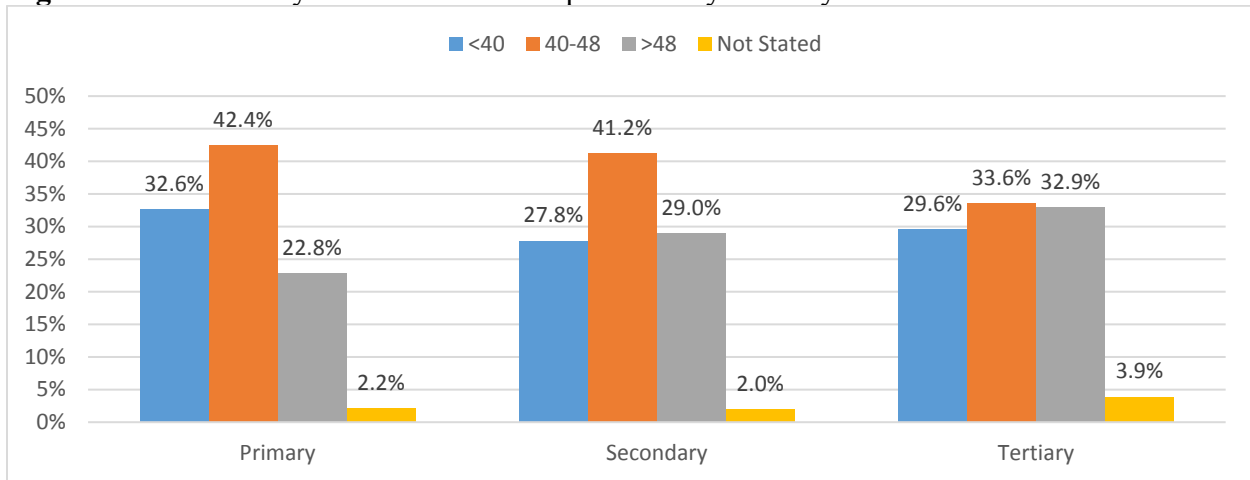
Figure C.2.18. Weekly Work Hours of Respondents by Country and Overall



1 Questions: A15. In your main job, on average, how many hours do you work per week?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

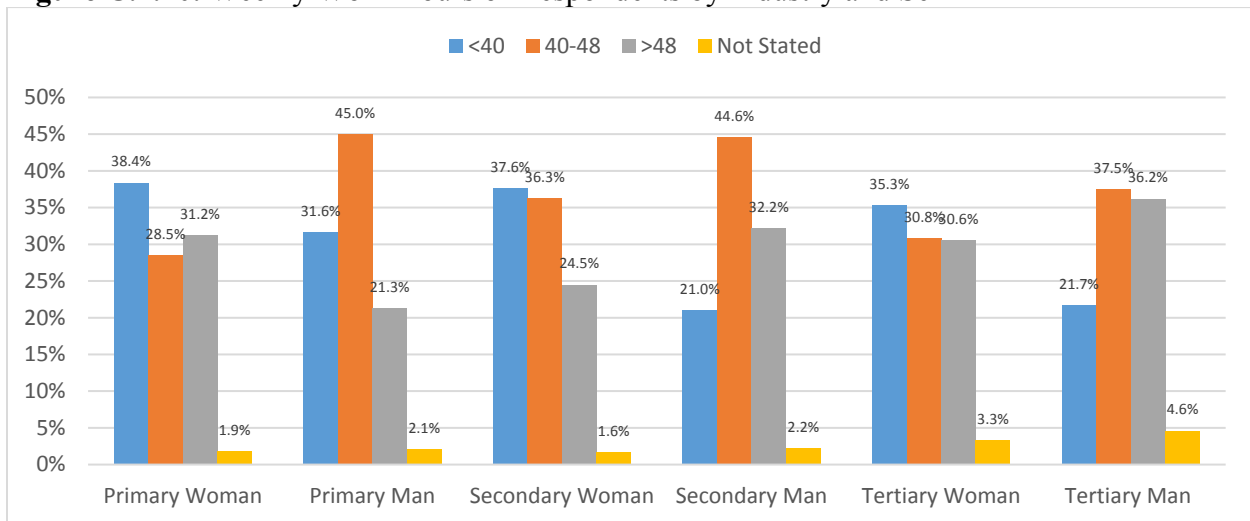
Figure C.2.19. Weekly Work Hours of Respondents by Industry



1 Questions: A15. In your main job, on average, how many hours do you work per week?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.2.20. Weekly Work Hours of Respondents by Industry and Sex



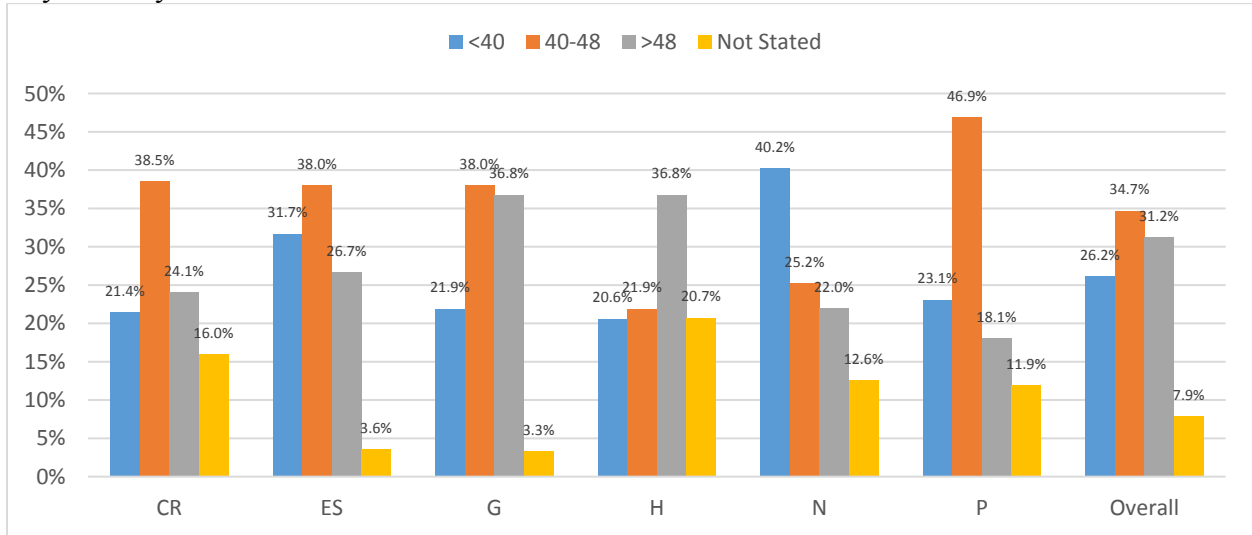
1 Questions: A15. In your main job, on average, how many hours do you work per week?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 65.9% of respondents responded they needed to work 40 hours or more per week to earn their minimum monthly wage, with 31.2% having to work more than 48 hours per week to earn their minimum monthly wage (Figure C.2.21.). Similarly, 40 or more hours of work per week

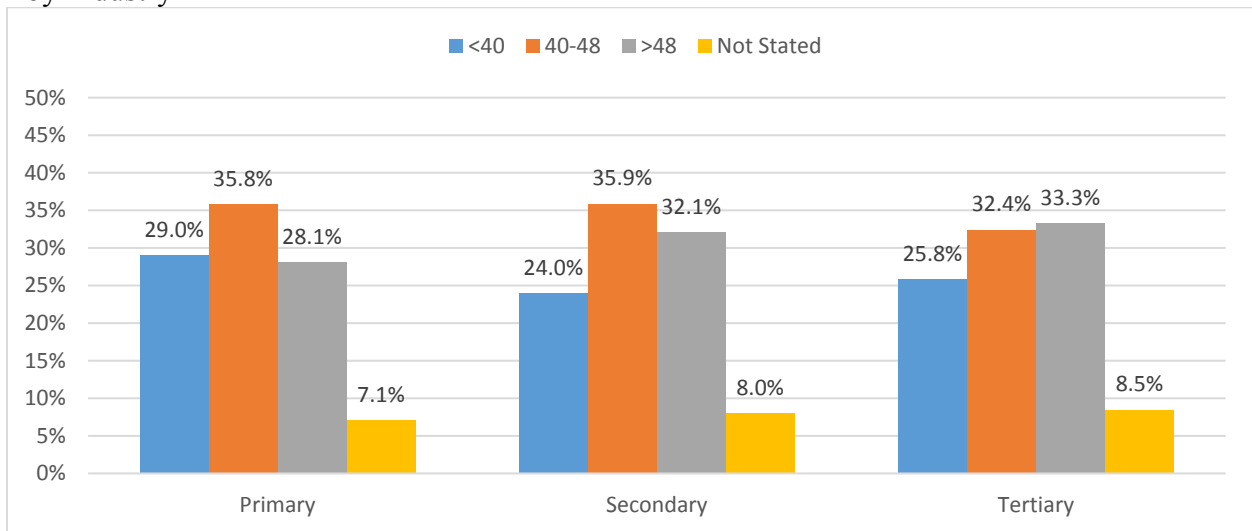
also represented the greatest proportion of hours required to earn a minimum monthly wage in all industry sectors and by sex (Figure C.2.21., Figure C.2.22.).

Figure C.2.21. Weekly Hours Required to Earn Minimum Monthly Wage Among Respondents by Country and Overall



1 Questions: A17. In your main job, how many hours do you have to work to earn your minimum monthly wage?
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

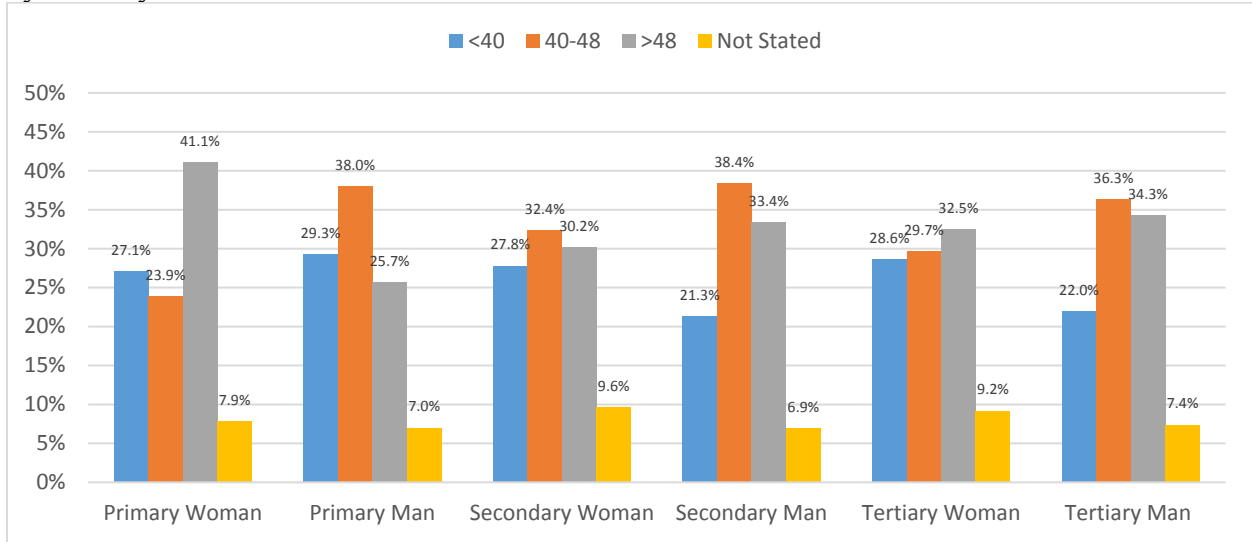
Figure C.2.22. Weekly Hours Required to Earn Minimum Monthly Wage Among Respondents by Industry



1 Questions: A17. In your main job, how many hours do you have to work to earn your minimum monthly wage?;
 B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.2.23. Weekly Hours Required to Earn Minimum Monthly Wage Among Respondents by Industry and Sex

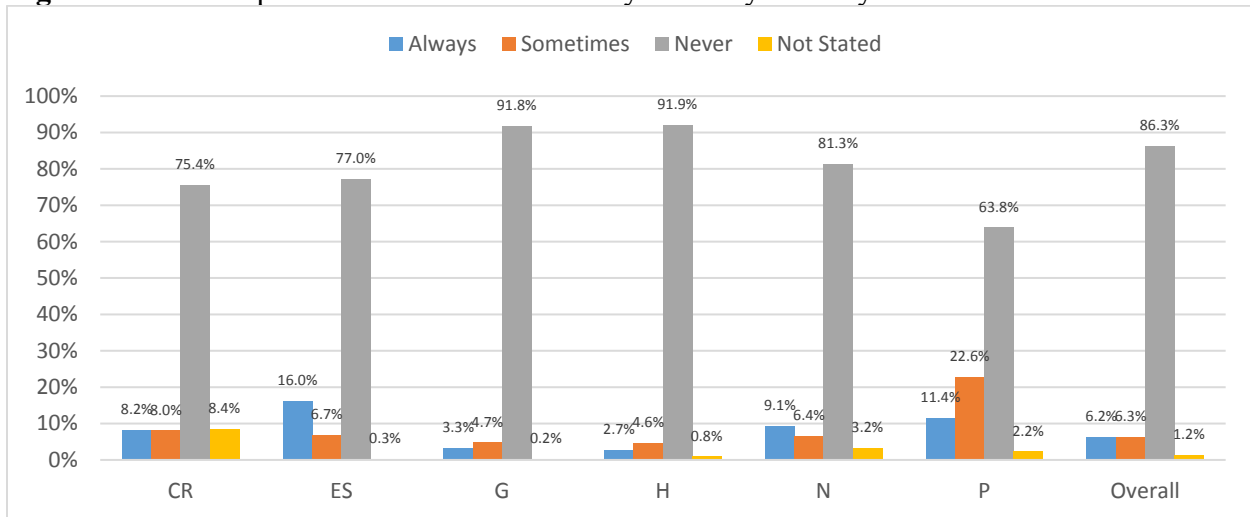


1 Questions: A17. In your main job, how many hours do you have to work to earn your minimum monthly wage?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, approximately 12.5% of respondents reported having been forced to work overtime under menacing situations, such as reportedly being physically prevented from leaving the workplace or threatened with losing his or her job or not being paid (Figure C.2.24.). The greatest proportion of forced overtime was reported in Panama (34%) (Figure C.2.24.). All industries reported somewhat similar proportions of forced overtime (primary 14.2%, secondary 12.3%, and tertiary 11.4%) (Figure C.2.25.). Men in the primary (15.0%), secondary (14.4%), and tertiary (12.3%) sectors reported a greater proportion of forced overtime than women in the same sectors (9.8%, 8.9%, 10.7%), respectively (Figure C.2.26.).

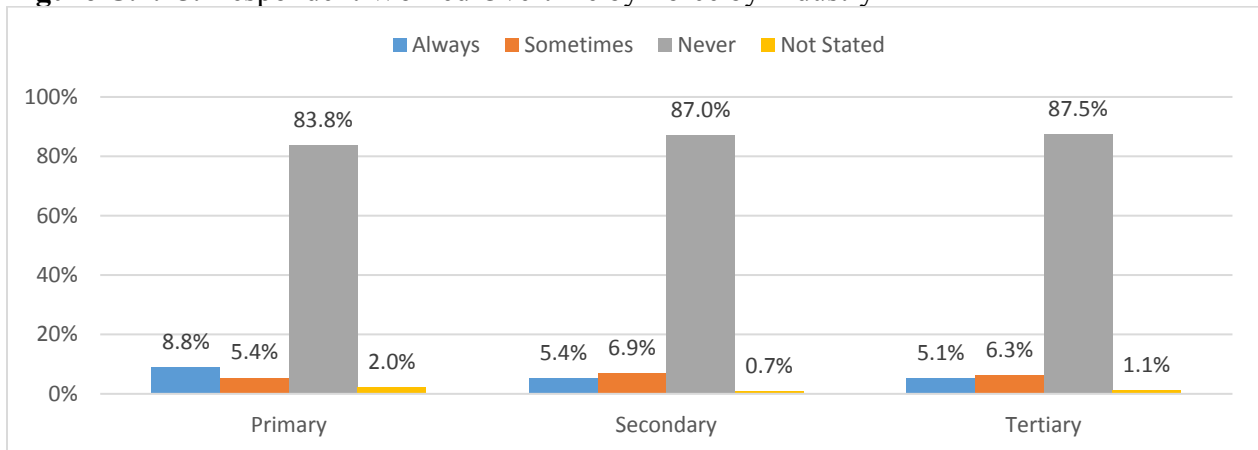
Figure C.2.24. Respondent Worked Overtime by Force by Country and Overall



1 Questions: A22. Of those times you worked overtime, were you forced to work overtime under menacing situations such as being physically prevented from leaving the workplace, or threatened with losing your job or not getting paid?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

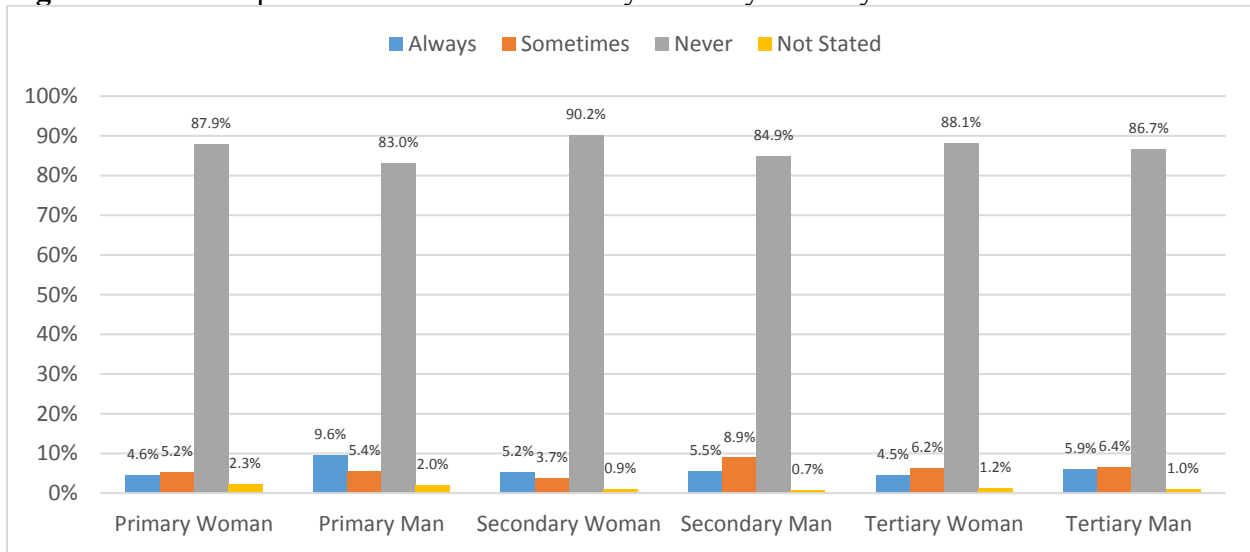
Figure C.2.25. Respondent Worked Overtime by Force by Industry



1 Questions: A22. Of those times you worked overtime, were you forced to work overtime under menacing situations such as being physically prevented from leaving the workplace, or threatened with losing your job or not getting paid?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.2.26. Respondent Worked Overtime by Force by Industry and Sex



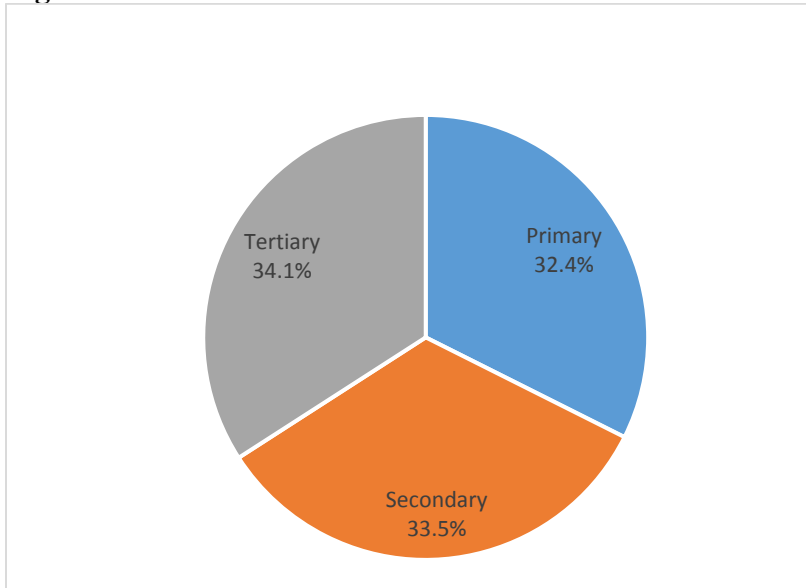
1 Questions: A22. Of those times you worked overtime, were you forced to work overtime under menacing situations such as being physically prevented from leaving the workplace, or threatened with losing your job or not getting paid?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

C.3. Location of Work Characteristics

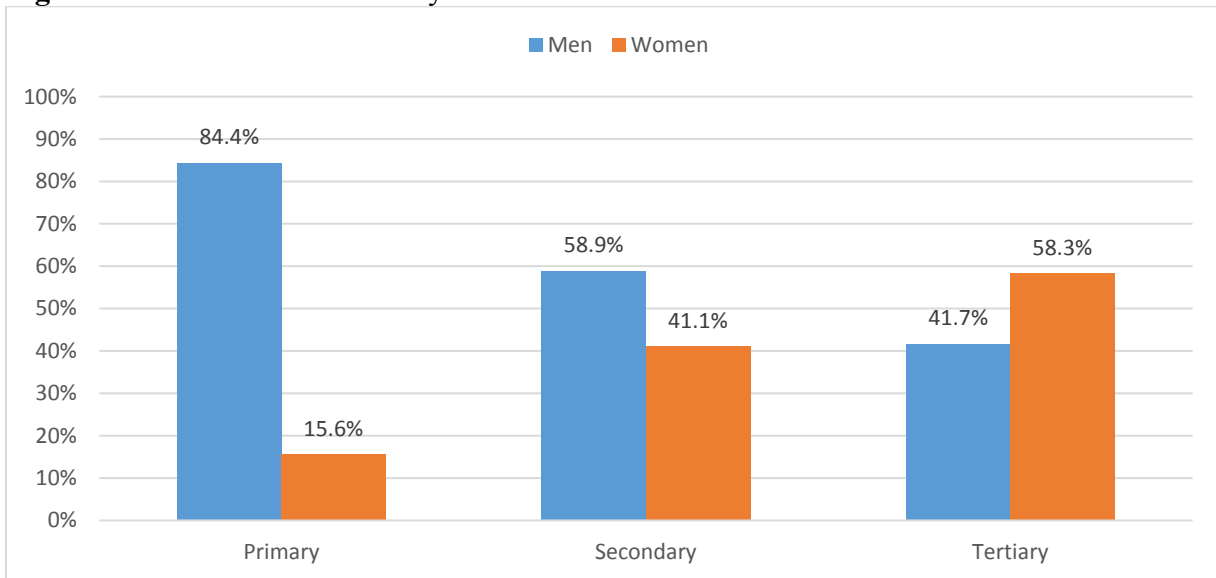
Respondents reported working in the primary (32.4%), secondary (33.5%), and tertiary sectors (34.1%) (Figure C.3.1.). Women represented 15.6% of the primary sector, 41.1% of the secondary sector, and 58.3% of the tertiary sector, while respective figures for men were: 84.4%, 58.9%, and 41.7% (Figure C.3.2.). Approximately 11% of all respondents reported producing products for export (Figure C.3.3.).

Figure C.3.1. Industrial Sector Overall



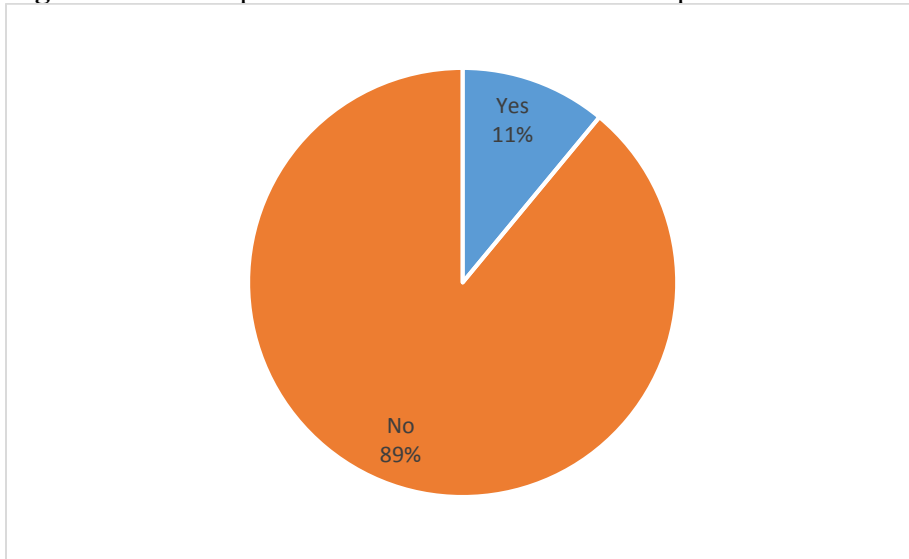
1 Questions: B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

Figure C.3.2. Industrial Sector by Sex



1 Questions: B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

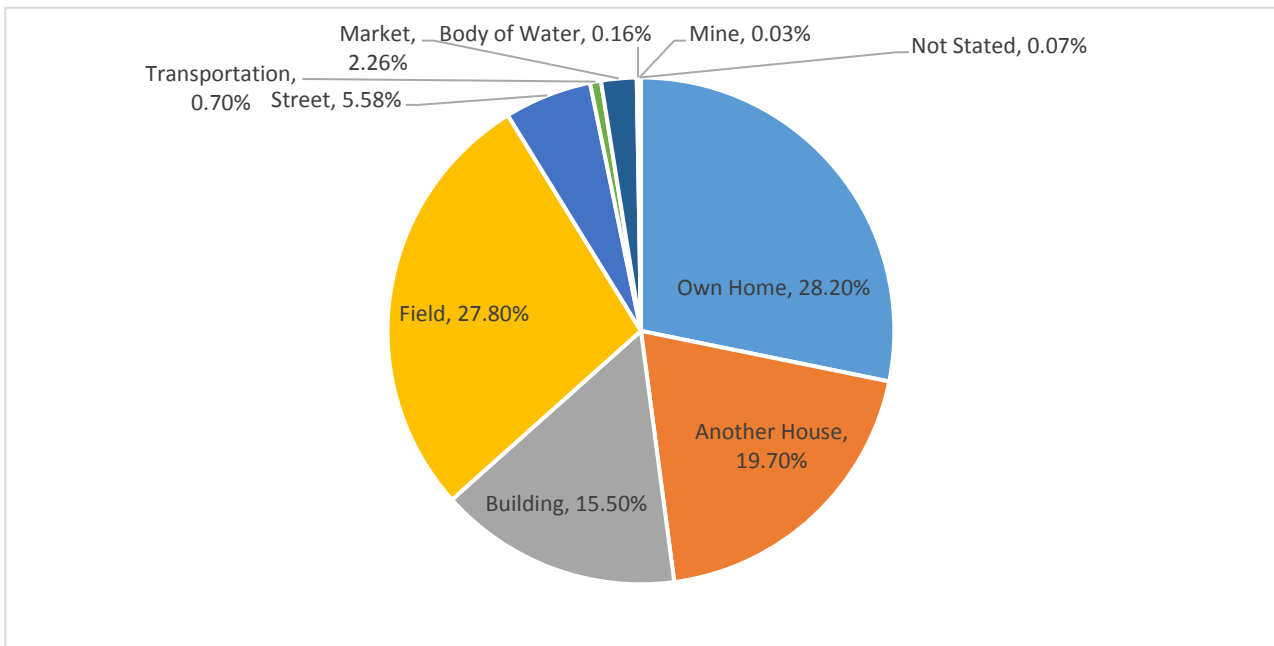
Figure C.3.3. Respondent Produces Products for Export



1 Questions: B24. Does your company, business or organization produce products for export?

Their own home (28.2%) was the primary work location for respondents. Field (27.8%), another house (19.7%), building (15.5%), street (5.58%), market (2.26%), transportation (0.7%), body of water (.16%), and mine (0.03%) were the rest of the job locations mentioned in the interview (Figure C.3.4.).

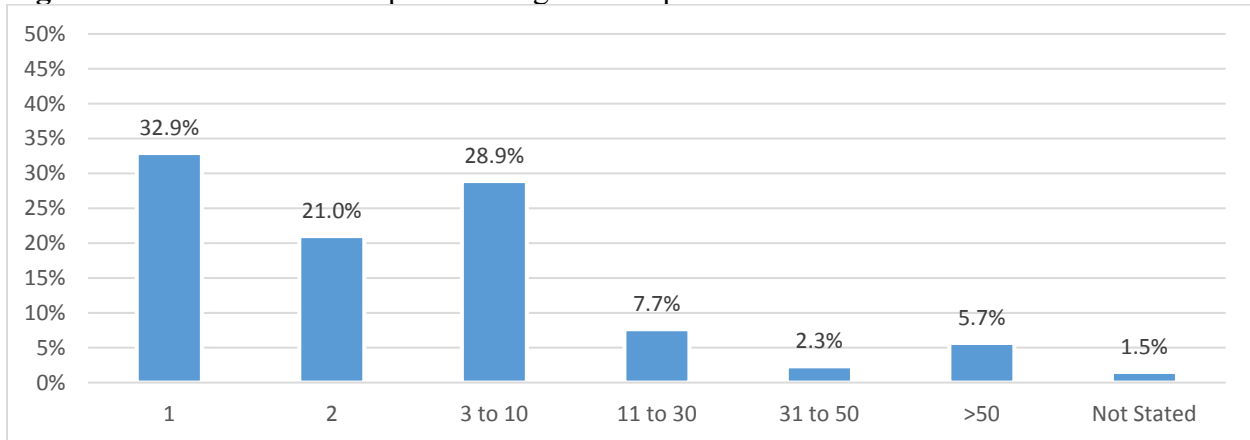
Figure C.3.4. Respondent Primary Work Location



1 Questions: B27. Where is your main job located?

One person (32.9%) working in the workplace constituted the greatest proportion of number of workers, followed by 3 to 10 persons (28.9%), 2 persons (21%), 11 to 30 persons (7.7%), greater than 50 persons (5.7%), and 31 to 50 persons (2.3%) (Figure C.3.5.).

Figure C.3.5. Number of People Working in Workplace

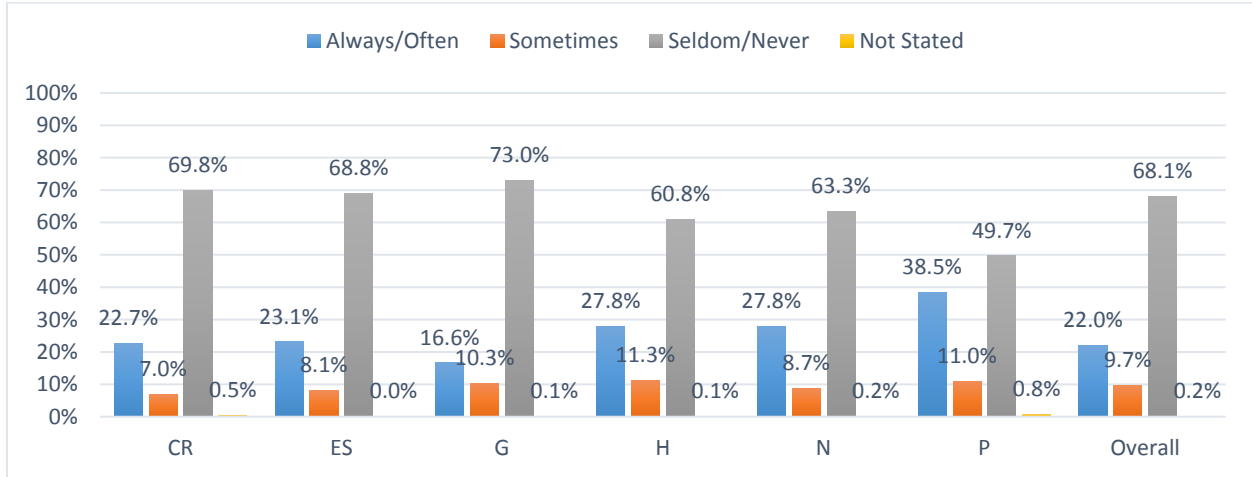


1 Questions: B25. Including yourself, how many people usually work in your own workplace or work center?

C.4. Working Conditions

Concerning safety, approximately 22% of respondents reported frequently having a reduced space for mobility and handling of work implements, and the space reductions predominated in Panama (38.5%) (Figure C.4.1.). The frequent work space challenges dominated the secondary (25.2% reporting “always”) sector but existed across all industries (Figure C.4.2.). Differences in space constraints were generally reported between men and women across industries, with only a small difference between them in the tertiary sector (Figure C.4.3.).

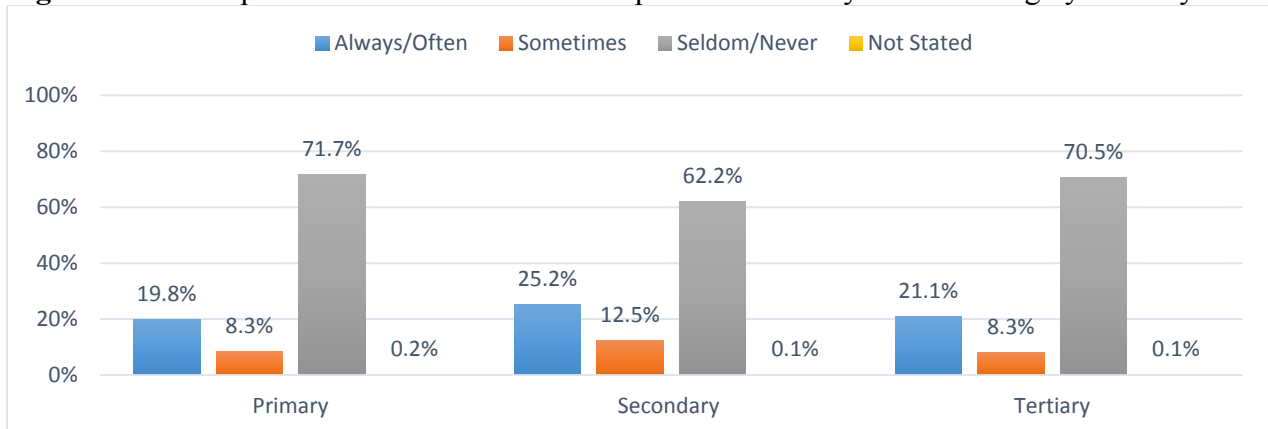
Figure C.4.1. Respondent with Reduced Work Space for Mobility and Handling by Country and Overall



1 Questions: C30. At your workplace, taking as a reference a usual day of work, how often are you exposed to the following situations? C. Have reduced space to have mobility and handle all work tools properly

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

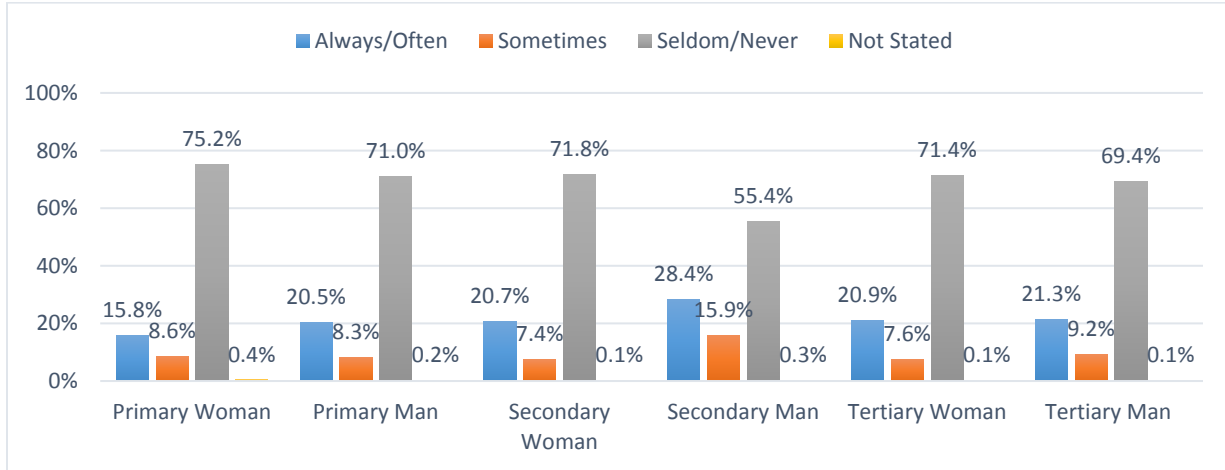
Figure C.4.2. Respondent with Reduced Work Space for Mobility and Handling by Industry



1 Questions: C30. At your workplace, taking as a reference a usual day of work, how often are you exposed to the following situations? C. Have reduced space to have mobility and handle all work tools properly; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.3. Respondent with Reduced Work Space for Mobility and Handling by Industry and Sex

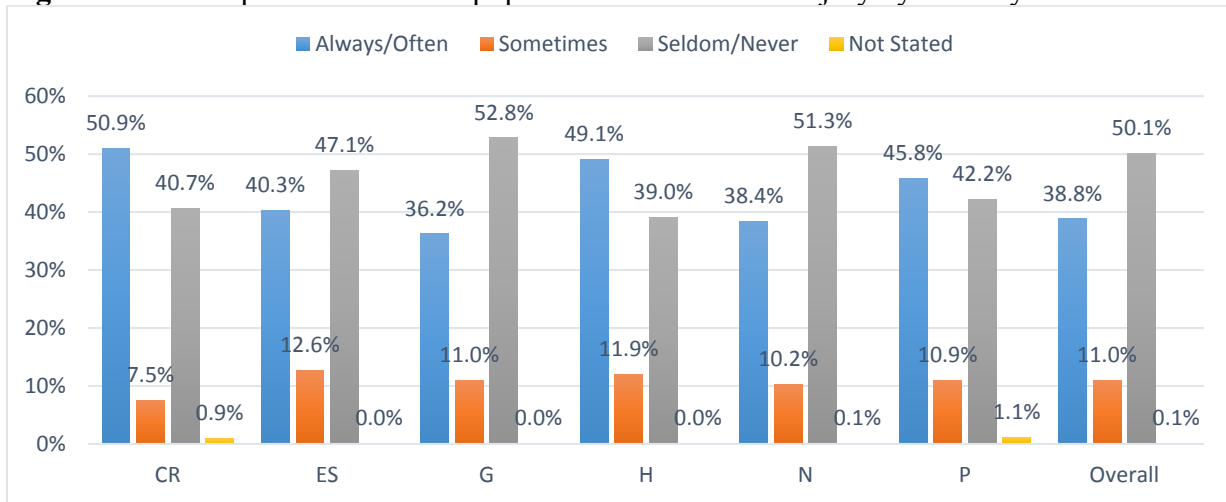


1 Questions: C30. At your workplace, taking as a reference a usual day of work, how often are you exposed to the following situations? C. Have reduced space to have mobility and handle all work tools properly; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 38.8% of respondents reported the frequent use of equipment, including instruments, tools, or machines, that can cause injury, such as cuts, bumps, lacerations, punctures, and amputations, with Costa Rica (50.9%) and Honduras (49.1%) reporting the greatest proportions of frequent use (Figure C.4.4.). The primary (52.9%) and secondary (43.1%) sectors reported far greater frequent use of potentially injurious equipment than the tertiary (21.4%) sector (Figure C.4.5.). In general, men also reported a greater proportion of frequent use of injurious equipment than women across all industries (Figure C.4.6.).

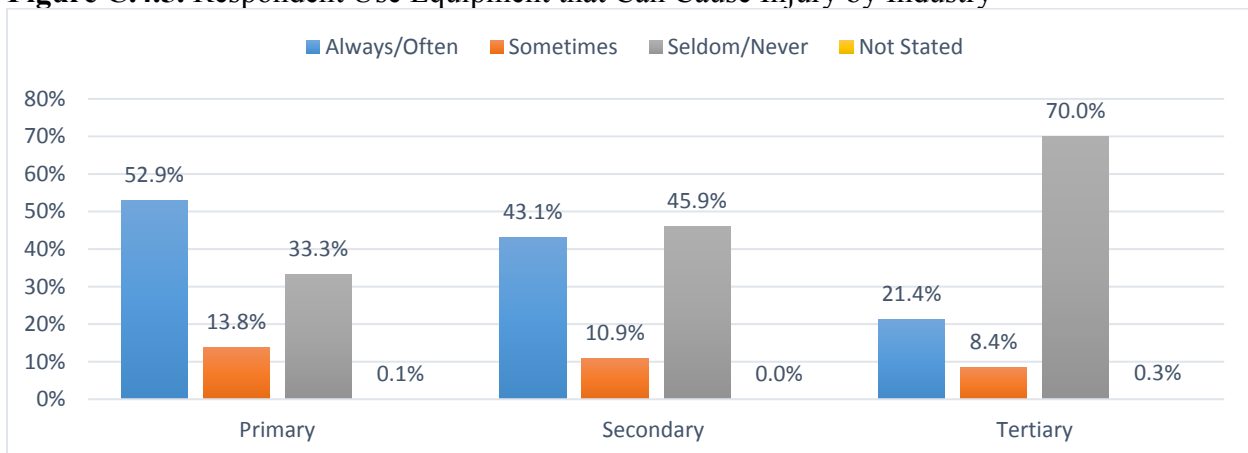
Figure C.4.4. Respondent Use of Equipment that Can Cause Injury by Country and Overall



1 Questions: C30. At your workplace, taking as a reference a usual day of work, how often are you exposed to the following situations? D. Use equipment (instruments, tools or machines), which can cause damage (cuts, bumps, laceration, punctures, amputations, etc.)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

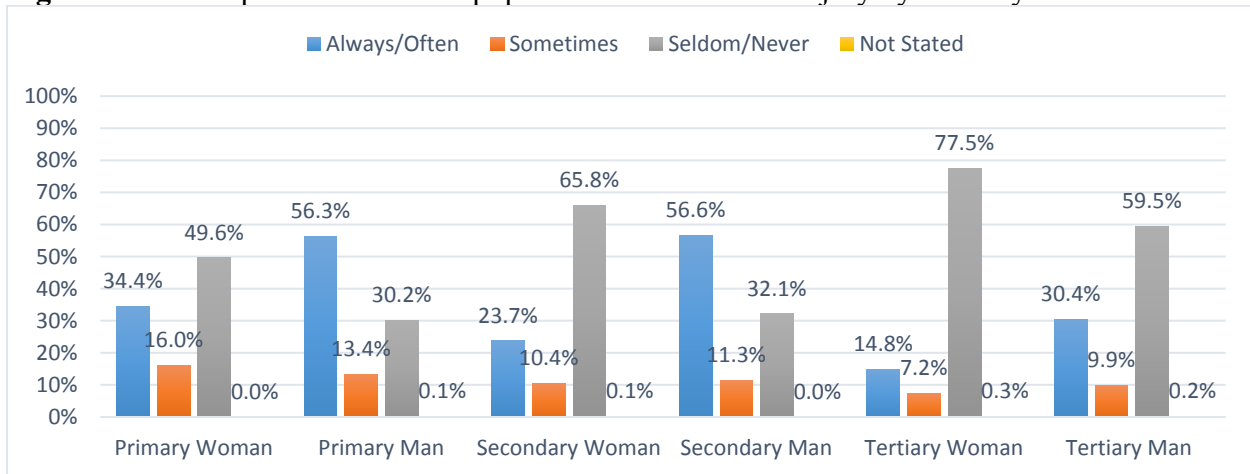
Figure C.4.5. Respondent Use Equipment that Can Cause Injury by Industry



1 Questions: C30. At your workplace, taking as a reference a usual day of work, how often are you exposed to the following situations? D. Use equipment (instruments, tools or machines), which can cause damage (cuts, bumps, laceration, punctures, amputations, etc.); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.6. Respondent Use of Equipment that Can Cause Injury by Industry and Sex

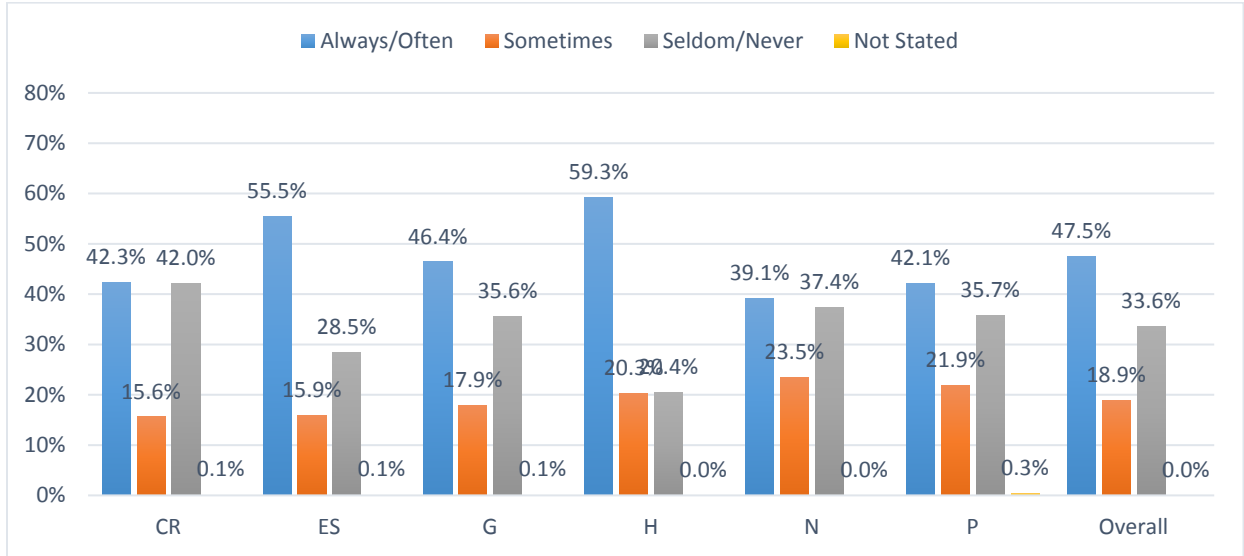


1 Questions: C30. At your workplace, taking as a reference a usual day of work, how often are you exposed to the following situations? D. Use equipment (instruments, tools or machines), which can cause damage (cuts, bumps, laceration, punctures, amputations, etc.); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

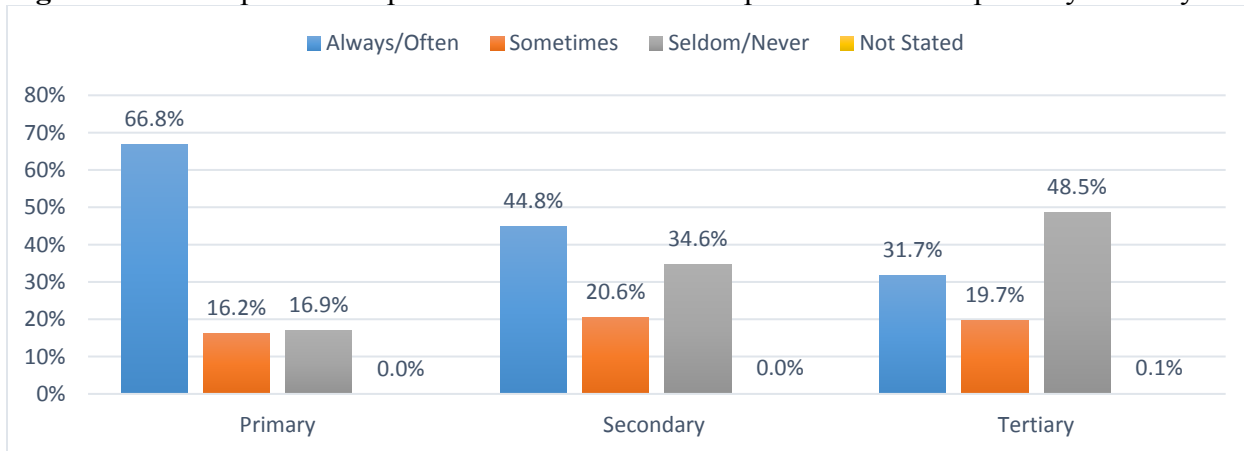
Nearly half (47.5%) of respondents reported frequent exposure to extreme hot temperatures at their workplace, with Honduras (59.3%) reporting the greatest proportion (Figure C.4.7.). The primary sector (65.1%) experienced the greatest proportion of regular extreme heat exposure compared to the secondary (46.1%) and tertiary (31.8%) sectors (Figure C.4.8.). In general, men reported greater proportions of frequent extreme heat exposure than women across all industries, except for the secondary sector (Figure C.4.9.).

Figure C.4.7. Respondent Exposure to Extreme Hot Temperatures at Workplace by Country and Overall



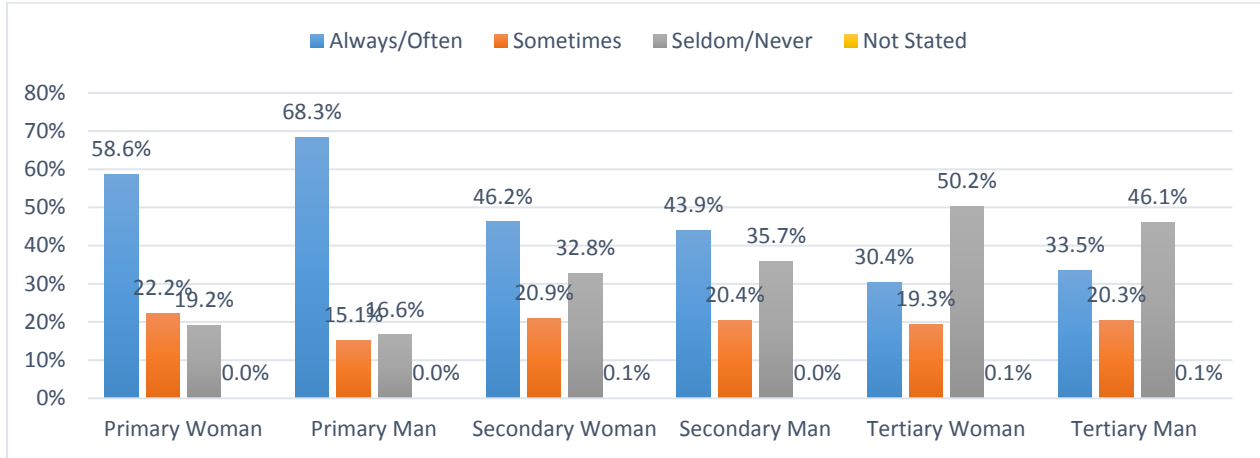
1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? A. Extreme hot temperatures
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.4.8. Respondent Exposure to Extreme Hot Temperatures at Workplace by Industry



1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? A. Extreme hot temperatures; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.9. Respondent Exposure to Extreme Hot Temperatures at Workplace by Industry and Sex

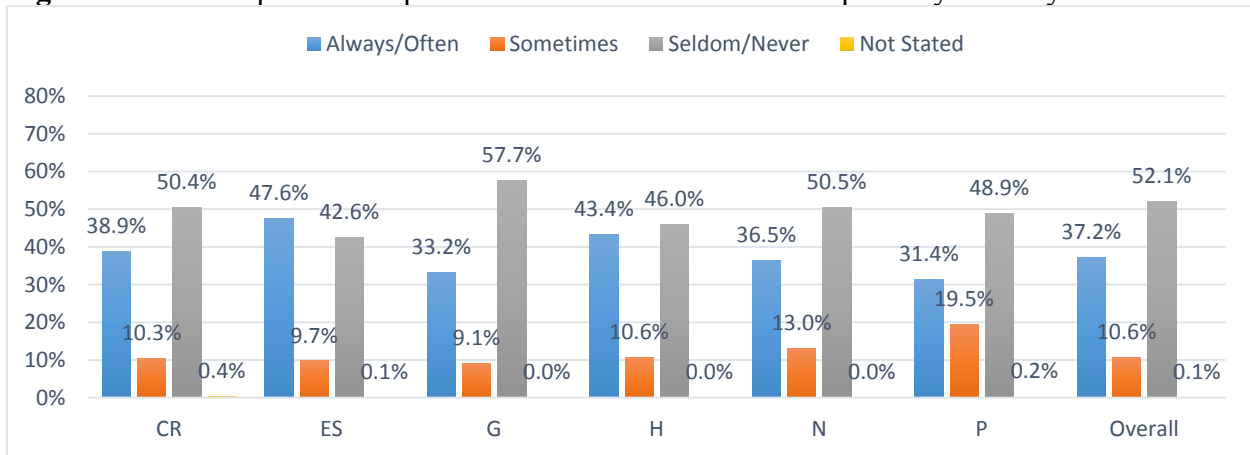


1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? A. Extreme hot temperatures; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequent exposure to solar radiation at the workplace was reported among 37.2% of respondents overall, with the greatest proportion in El Salvador (47.6%) (Figure C.4.10.). Again, the primary sector (69.5%) experienced the greatest proportion of frequent solar radiation exposure compared to the secondary (24.5%) and tertiary (18.9%) sectors (Figure C.4.11.). Men also reported greater proportions of frequent solar radiation exposure than women across all industries (Figure C.4.12.).

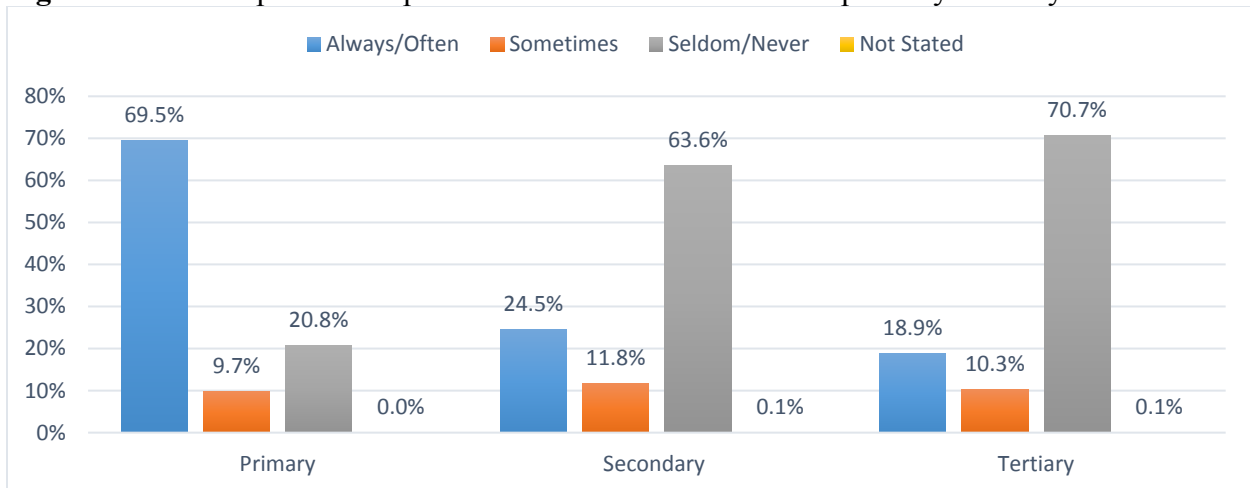
Figure C.4.10. Respondent Exposure to Solar Radiation at Workplace by Country and Overall



1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? E. Solar light (radiation)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

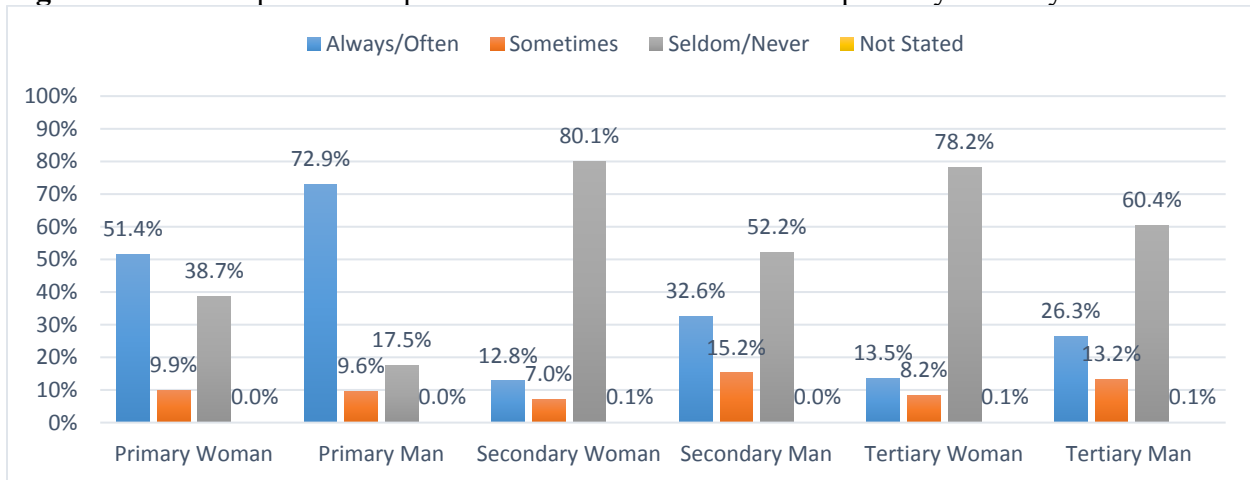
Figure C.4.11. Respondent Exposure to Solar Radiation at Workplace by Industry



1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? E. Solar light (radiation); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.12. Respondent Exposure to Solar Radiation at Workplace by Industry and Sex

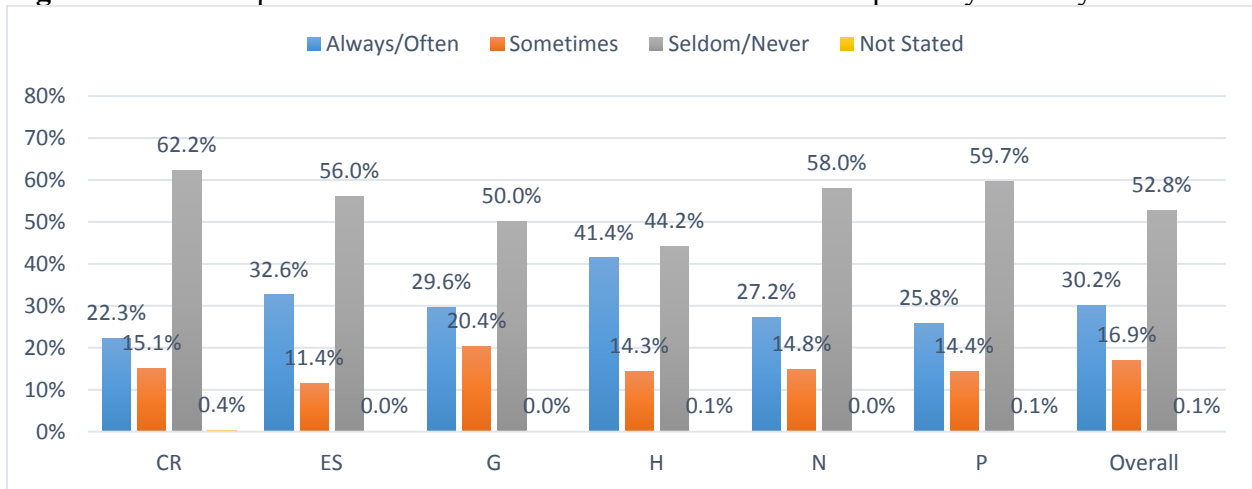


1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? E. Solar light (radiation); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequently breathing chemical substances in the form of dust, fumes, aerosols, vapors, gases, or mists, excluding tobacco smoke, was reported among 30.2% of respondents overall, with the greatest proportion in Honduras (41.4%) (Figure C.4.13). Again, the primary sector (39.8%) experienced the greatest proportion of frequently breathing chemical substances compared to the secondary (30.0%) and tertiary (21.4%) sectors (Figure C.4.14.). Men also reported greater proportions of frequently breathing chemical substances than women across all industries (Figure C.4.15.).

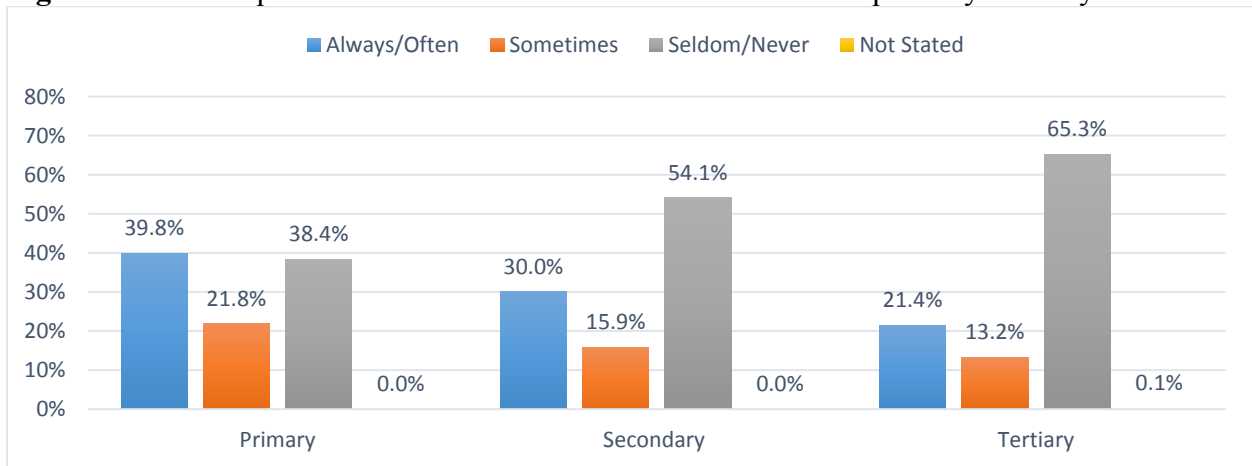
Figure C.4.13. Respondent Breathes Chemical Substances at Workplace by Country and Overall



1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? F. Breathe chemical substances in the form of dust, fumes, aerosols, vapors, gases and/or mist, excluding tobacco smoke

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

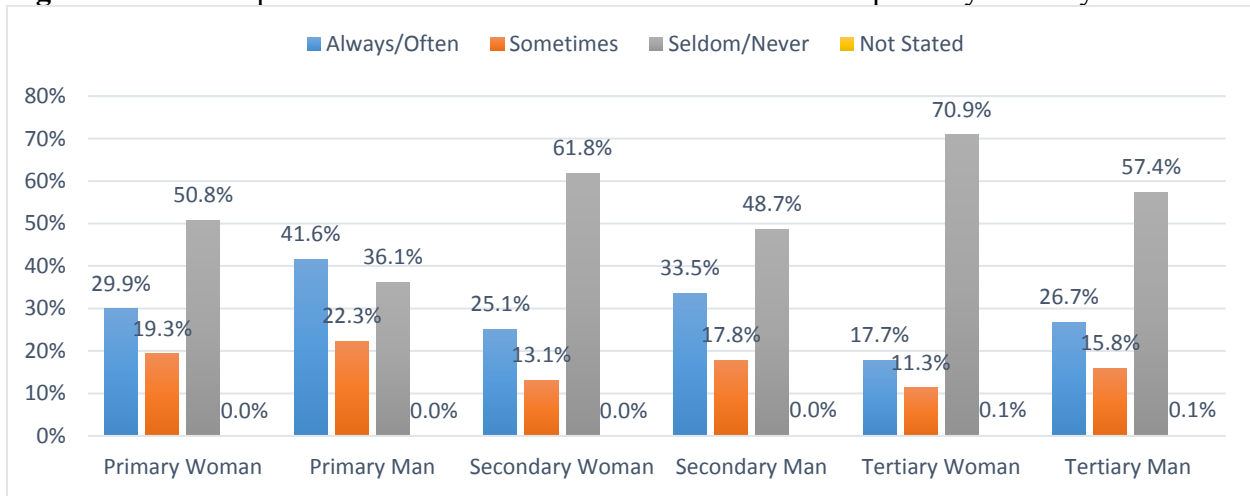
Figure C.4.14. Respondent Breathes Chemical Substances at Workplace by Industry



1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? F. Breathe chemical substances in the form of dust, fumes, aerosols, vapors, gases and/or mist, excluding tobacco smoke; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.15. Respondent Breathes Chemical Substances at Workplace by Industry and Sex

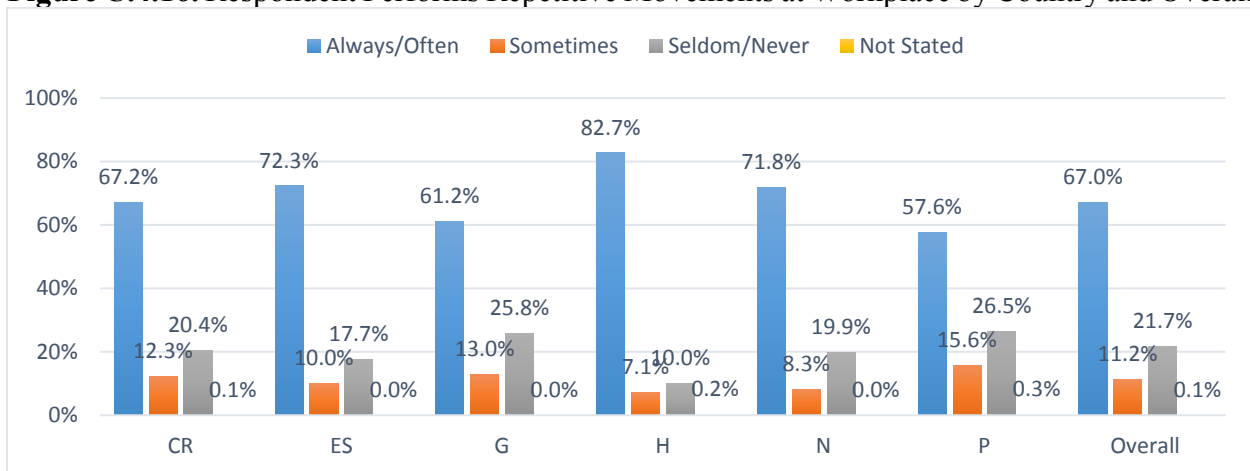


1 Questions: C31. Now, regarding the environment of your workplace and taking as a reference a usual day of work, how often are you exposed to the following conditions? F. Breathe chemical substances in the form of dust, fumes, aerosols, vapors, gases and/or mist, excluding tobacco smoke; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequent performance of repetitive, almost identical movements with fingers, hands, or arms every few seconds was reported among 67% of respondents overall, with the greatest proportion reported in Honduras (82.7%) (Figure C.4.16.). Respondents in the primary sector (74.7%) reported the greatest proportion of frequently performing repetitive movements compared to those in the secondary (70.4%) and tertiary (56.2%) sectors (Figure C.4.17.). Again, men reported greater proportions of frequently performing repetitive movements than women across all industries (Figure C.4.18.).

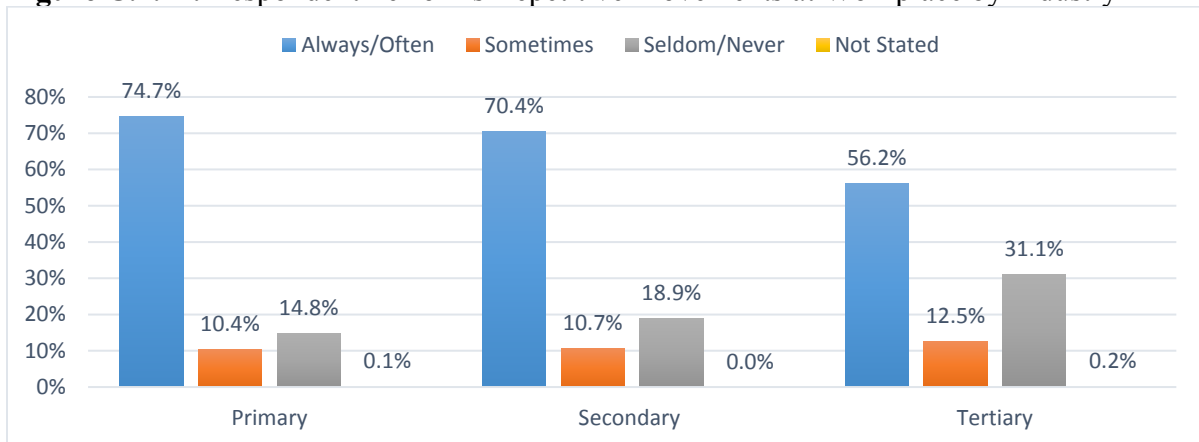
Figure C.4.16. Respondent Performs Repetitive Movements at Workplace by Country and Overall



1 Questions: C32. At your main workplace, taking as a reference a typical day or workday, how often do the following situations arise? B. Perform repetitive, almost identical movements with your fingers, hands or arms every few seconds

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

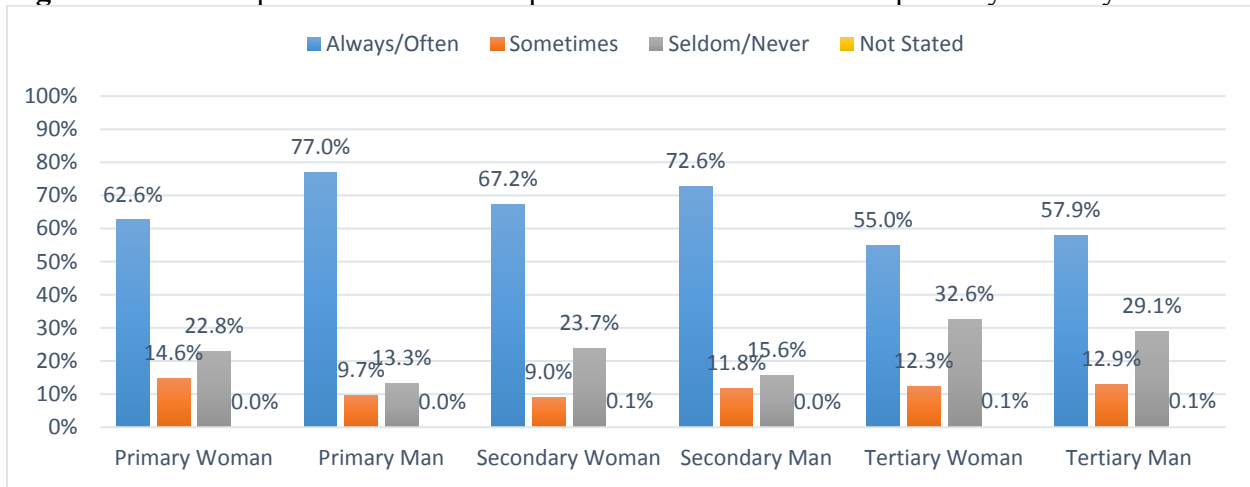
Figure C.4.17. Respondent Performs Repetitive Movements at Workplace by Industry



1 Questions: C32. At your main workplace, taking as a reference a typical day or workday, how often do the following situations arise? B. Perform repetitive, almost identical movements with your fingers, hands or arms every few seconds; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

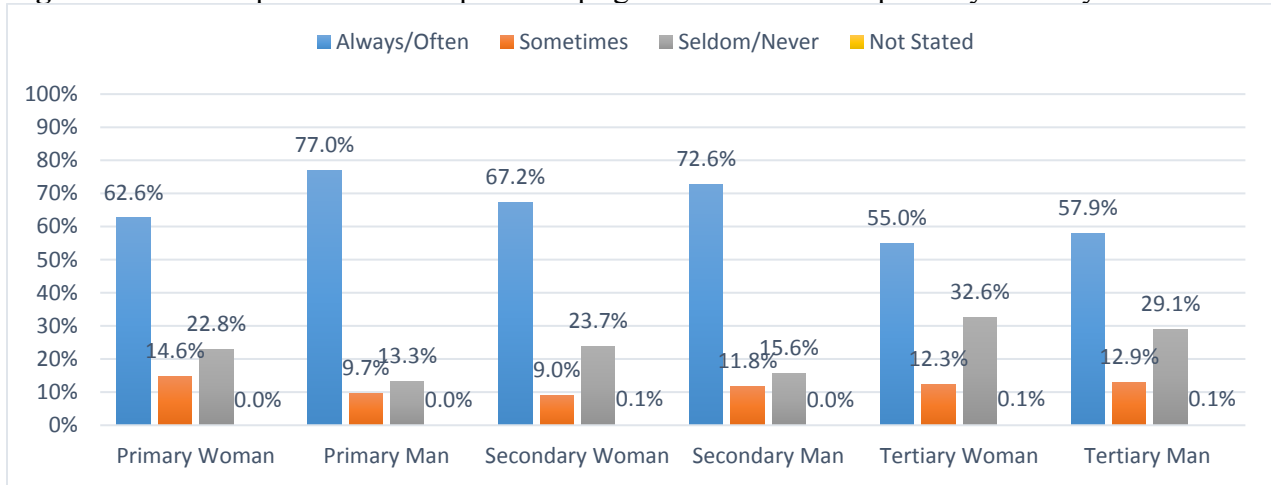
Figure C.4.18. Respondent Performs Repetitive Movements at Workplace by Industry and Sex



1 Questions: C32. At your main workplace, taking as a reference a typical day or workday, how often do the following situations arise? B. Perform repetitive, almost identical movements with your fingers, hands or arms every few seconds; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequent time spent in the upright position at the workplace was reported among 76.3% of respondents overall, with the greatest proportion in Costa Rica (78.3%) (Figure C.4.19.). The primary (87.5%) sector respondents experienced the greatest proportion of time frequently spent in the upright position compared to the secondary (74.8%) and tertiary (65.5%) sector respondents (Figure C.4.20.). Time spent in the upright position varied by industry and sex (Figure C.4.21.).

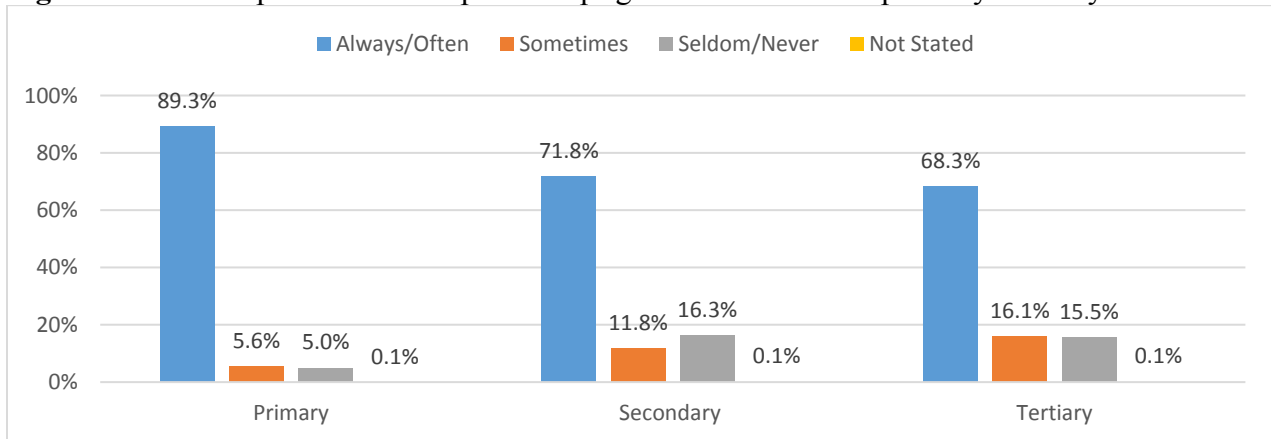
Figure C.4.19. Respondent Time Spent in Upright Position at Workplace by Country and Overall



1 Questions: C33. At your main workplace, taking as a reference a usual day of work, for how long do you stay in each of the following positions? A. Up

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

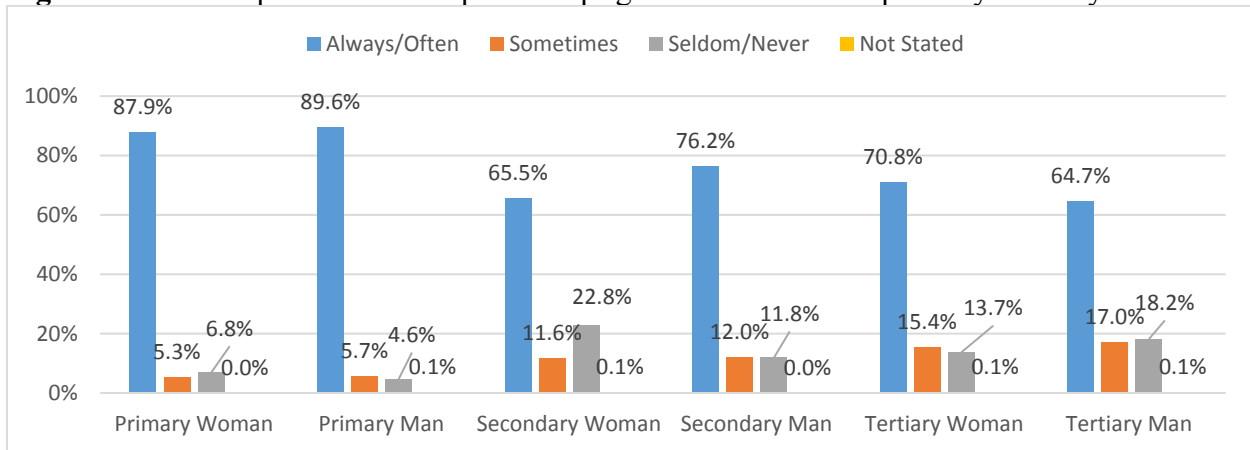
Figure C.4.20. Respondent Time Spent in Upright Position at Workplace by Industry



1 Questions: C33. At your main workplace, taking as a reference a usual day of work, for how long do you stay in each of the following positions? A. Up; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.21. Respondent Time Spent in Upright Position at Workplace by Industry and Sex

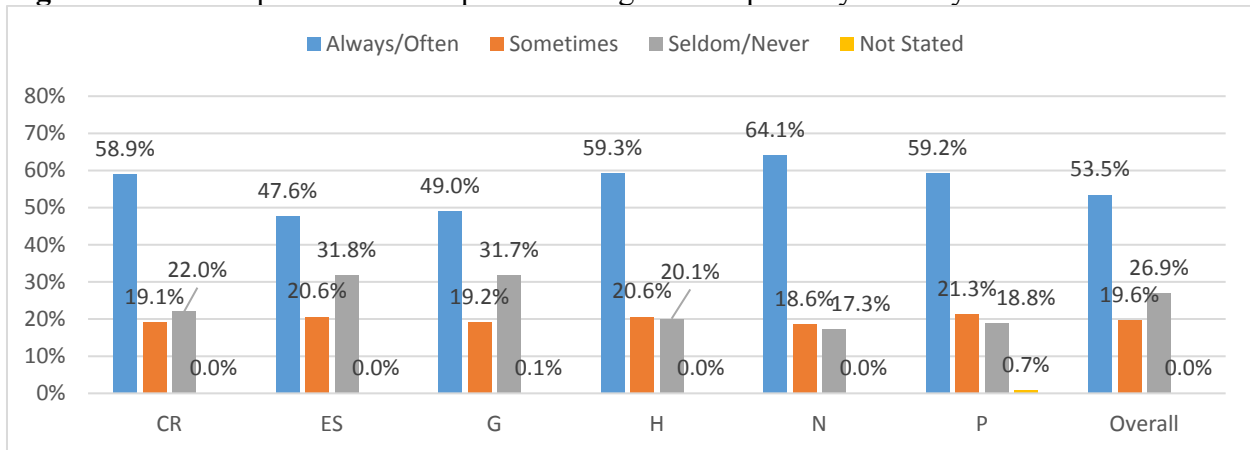


1 Questions: C33. At your main workplace, taking as a reference a usual day of work, for how long do you stay in each of the following positions? A. Up; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequent time spent walking at the workplace was reported among 53.5% of respondents overall, with the greatest proportion in Nicaragua (64.1%) (Figure C.4.22.). The primary (73%) sector respondents experienced the greatest proportion of frequent time spent walking while at work compared to the secondary (43.6%) and tertiary (44.5%) sector respondents (Figure C.4.23.). Frequent time spent walking varied by industry and sex (Figure C.4.24.).

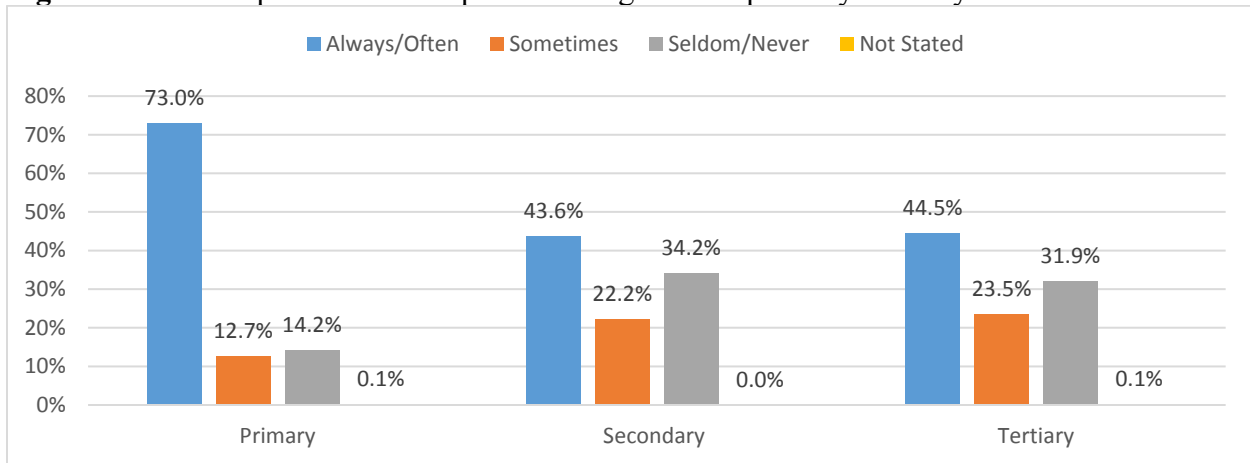
Figure C.4.22. Respondent Time Spent Walking at Workplace by Country and Overall



1 Questions: C33. At your main workplace, taking as a reference a usual day of work, for how long do you stay in each of the following positions? C. Walking

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

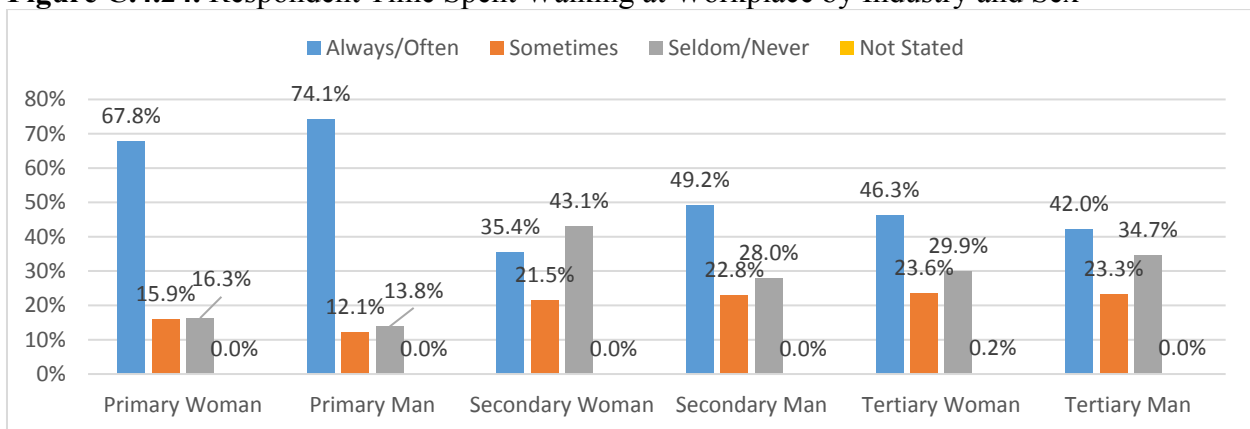
Figure C.4.23. Respondent Time Spent Walking at Workplace by Industry



1 Questions: C33. At your main workplace, taking as a reference a usual day of work, for how long do you stay in each of the following positions? C. Walking; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.24. Respondent Time Spent Walking at Workplace by Industry and Sex

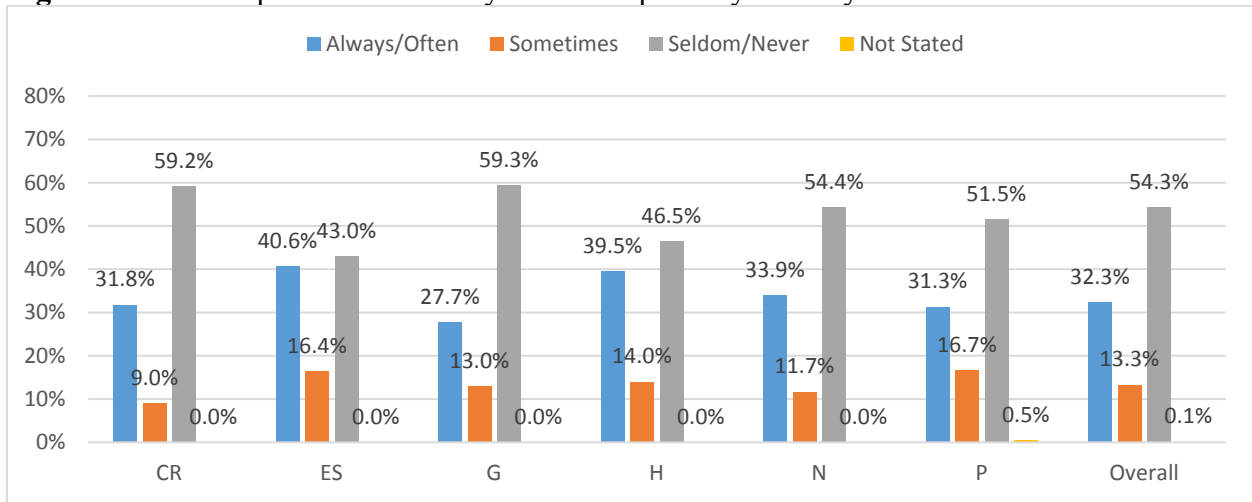


1 Questions: C33. At your main workplace, taking as a reference a usual day of work, for how long do you stay in each of the following positions? C. Walking; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequent eye strain at the workplace was reported among 32.3% of respondents overall, with the greatest proportion in El Salvador (40.6%) (Figure C.4.25.). The secondary (37.0%) sector respondents experienced the greatest proportion of frequent eye strain compared to the primary (32.0%) and tertiary (27.8%) sector respondents (Figure C.4.26.). Frequent eye strain among participants varied by industry and sex (Figure C.4.27.).

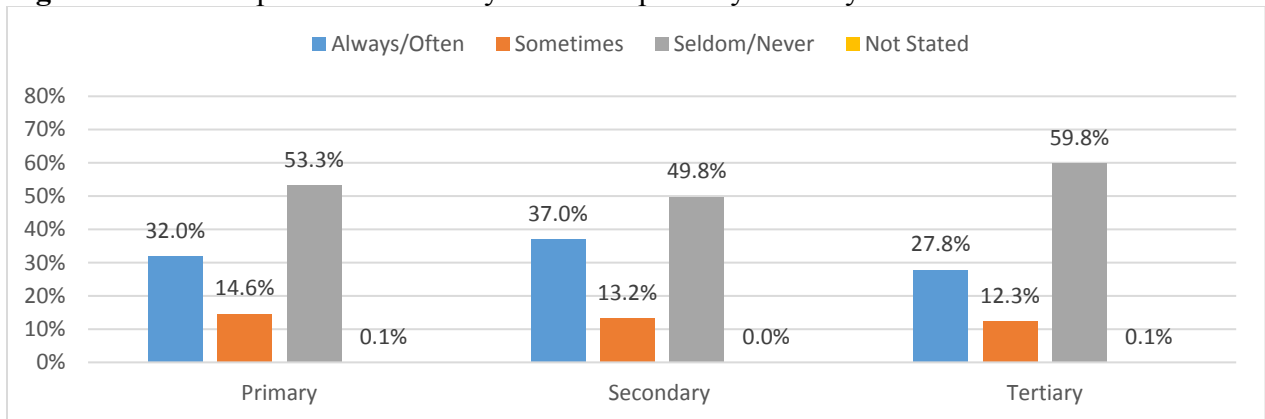
Figure C.4.25. Respondent Strains Eyes at Workplace by Country and Overall



1 Questions: C35. In your main job, taking as a reference a usual day of work, how often do you have to...? A. Strain your eyes

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

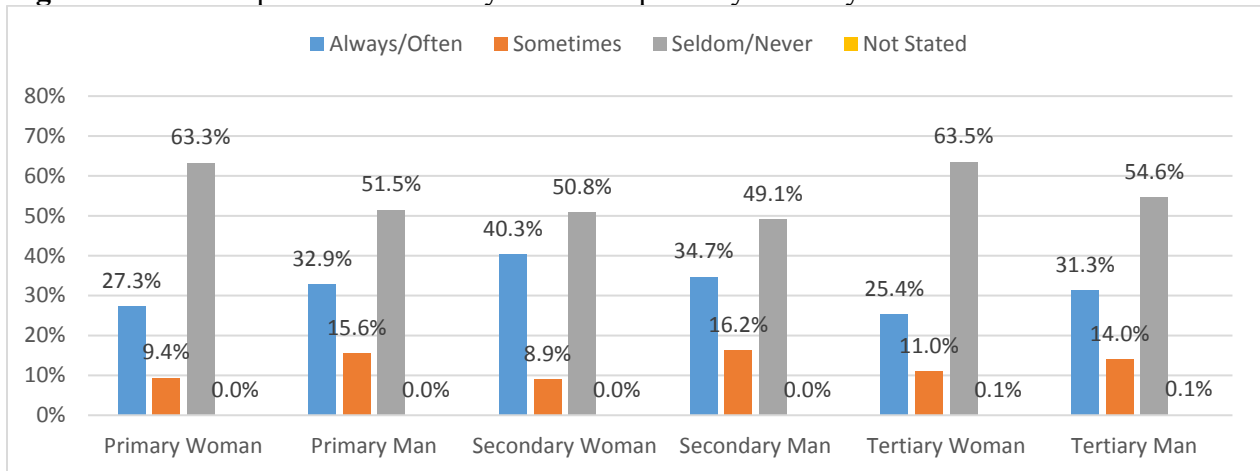
Figure C.4.26. Respondent Strains Eyes at Workplace by Industry



1 Questions: C35. In your main job, taking as a reference a usual day of work, how often do you have to...? A. Strain your eyes; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.27. Respondent Strains Eyes at Workplace by Industry and Sex

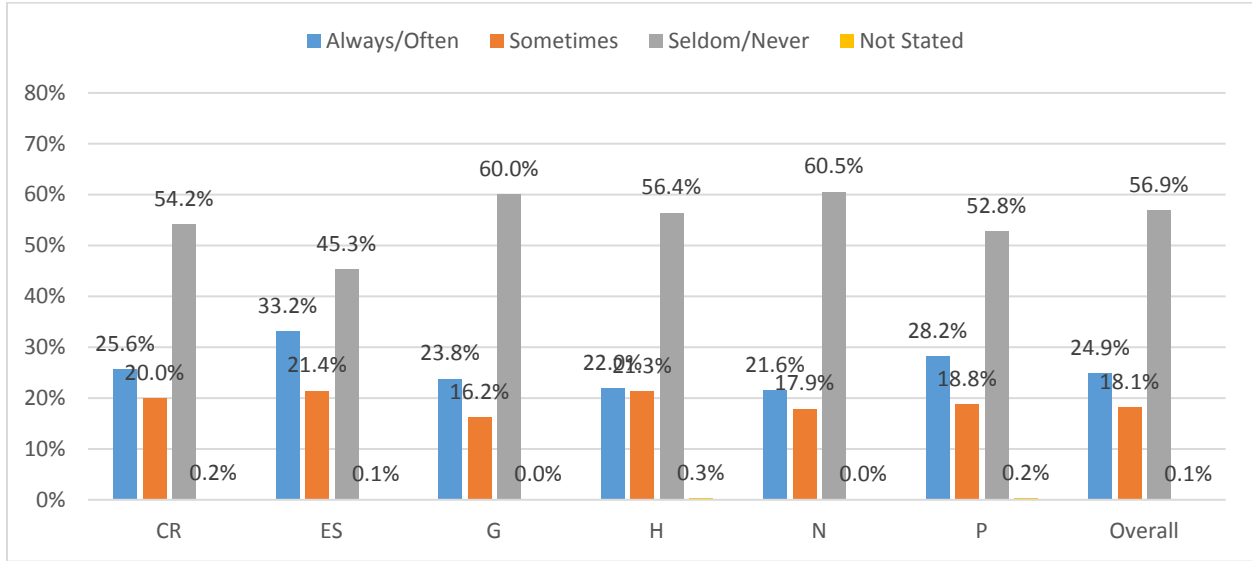


1 Questions: C35. In your main job, taking as a reference a usual day of work, how often do you have to...? A. Strain your eyes; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

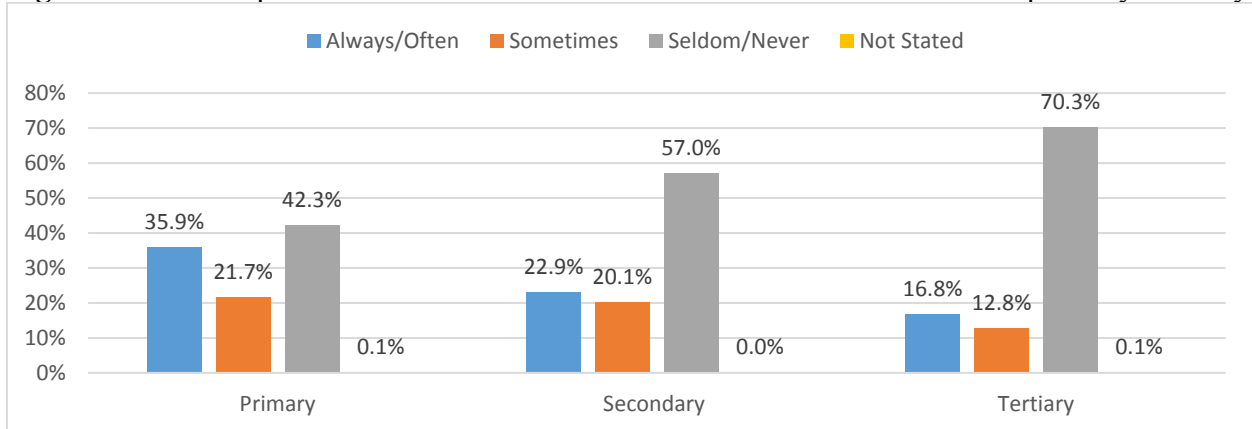
Frequent performance of job tasks that require working in an uncomfortable position was reported among 24.9% of respondents overall, with the greatest proportion of respondents who reported such performance El Salvador (33.2%) (Figure C.4.28.). Again, the primary (35.9%) sector respondents reported the greatest proportion of frequently performing job tasks in an uncomfortable position compared to the secondary (22.9%) and tertiary (16.8%) sector respondents (Figure C.4.29.). Men also reported greater proportions of frequently working in an uncomfortable position than women across all industries (Figure C.4.30.).

Figure C.4.28. Respondent Performs Tasks in Uncomfortable Position at Workplace by Country and Overall



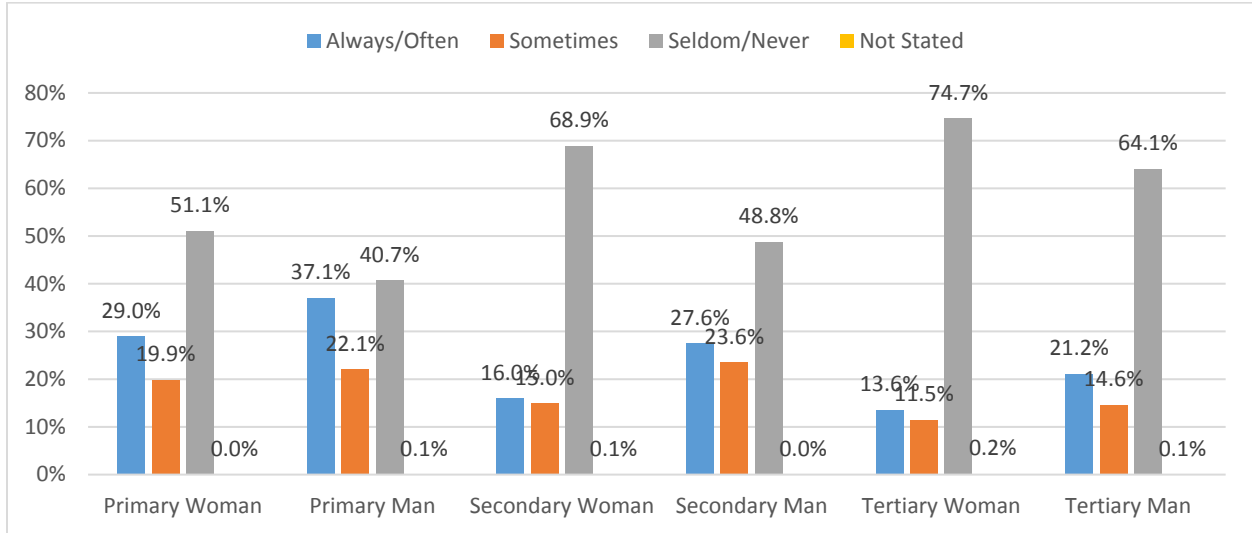
1 Questions: C35. In your main job, taking as a reference a usual day of work, how often do you have to...? B. Perform job tasks that require you to work in an uncomfortable position
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.4.29. Respondent Performs Tasks in Uncomfortable Position at Workplace by Industry



1 Questions: C35. In your main job, taking as a reference a usual day of work, how often do you have to...? B. Perform job tasks that require you to work in an uncomfortable position; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

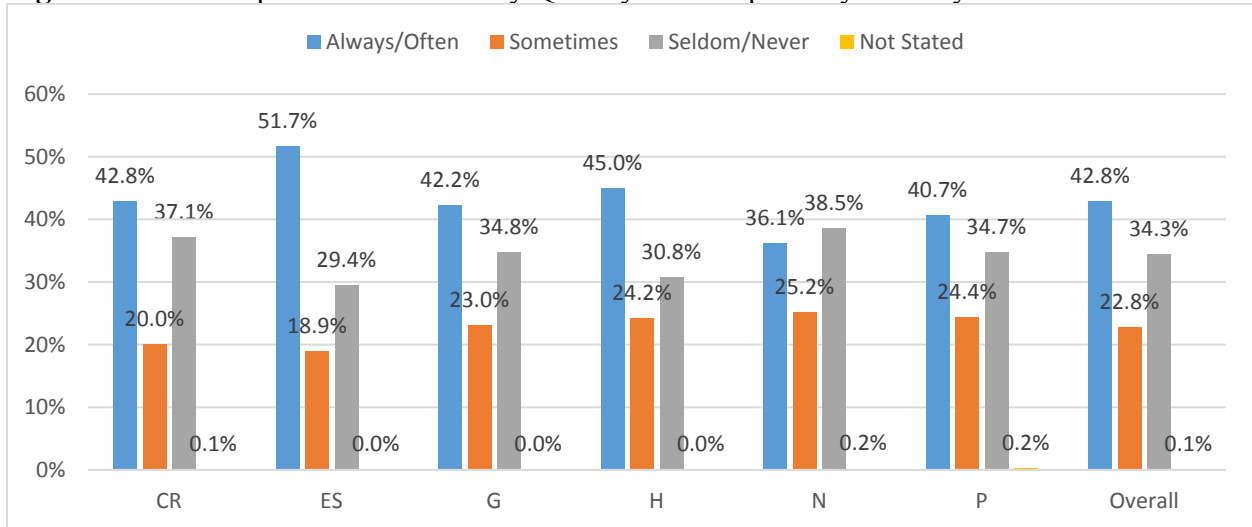
Figure C.4.30. Respondent Performs Tasks in Uncomfortable Position at Workplace by Industry and Sex



1 Questions: C35. In your main job, taking as a reference a usual day of work, how often do you have to...? B. Perform job tasks that require you to work in an uncomfortable position; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.31. Respondent Works Very Quickly at Workplace by Country and Overall

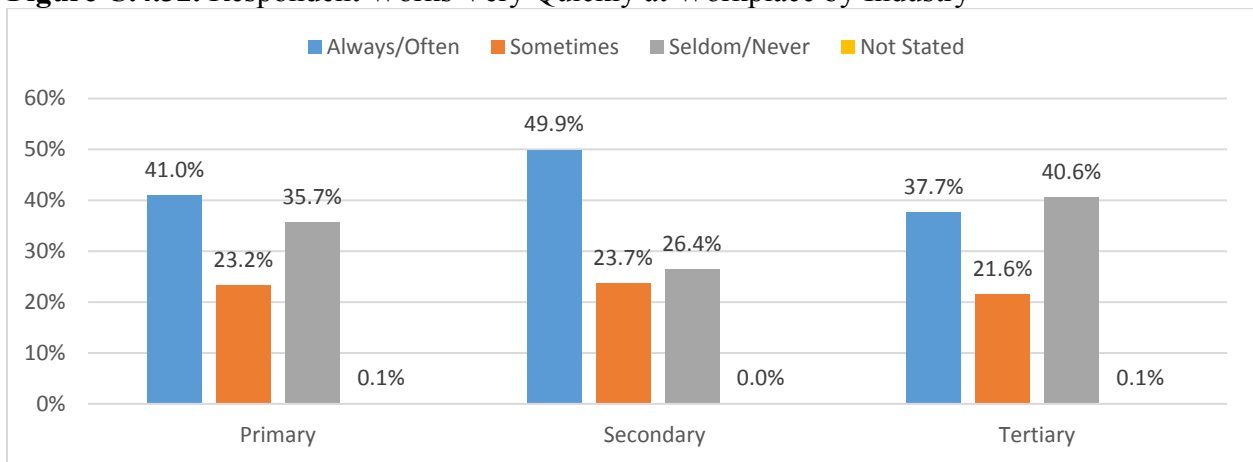


1 Questions: C36. At your main job, taking as a reference a usual day of work, tell us, how often do you have to face the following demands in order to perform you job? A. You have to work very quickly

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Frequently working very quickly was reported among 42.8% of respondents overall, with the greatest proportion of respondents frequently working very quickly in El Salvador (51.7%) (Figure C.4.31.). The secondary (49.9%) sector respondents experienced the greatest proportion of frequently working very quickly compared to the primary (41.0%) and tertiary (37.7%) sector respondents (Figure C.4.32.). Frequent working very quickly among respondents varied by industry and sex (Figure C.4.33.).

Figure C.4.32. Respondent Works Very Quickly at Workplace by Industry



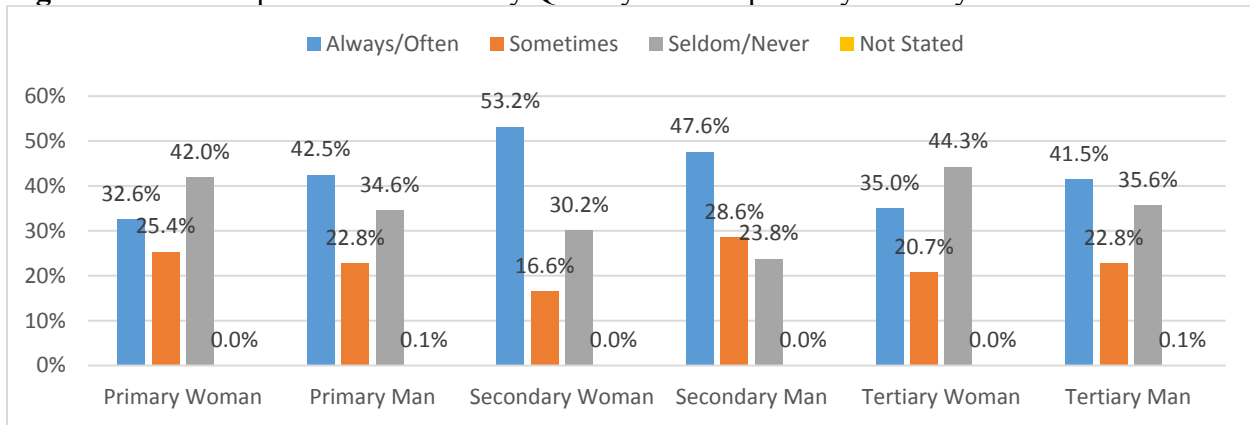
1 Questions: C36. At your main job, taking as a reference a usual day of work, tell us, how often do you have to face the following demands in order to perform you job? A. You have to work very quickly; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Insights from the Focus Groups

Guatemala's FG participants commented on physical discomfort, sometimes harm, suffered by maquila workers. Examples included repetitive movements while using sewing machines and uncomfortable chairs. Moreover, employees were asked to reach high production goals, which they considered excessive. They also voiced health concerns, such as back pain, digestive problems, nervousness, stress, and mental health problems related to the psychological damage suffered through verbal abuse. They also commented that working conditions in clandestine workshops could be even worse than in the maquilas, usually representing cottage industries. The work is performed in private homes that generally lacks employee policies, safety measures, emergency egress, or fire extinguishers.

Figure C.4.33. Respondent Works Very Quickly at Workplace by Industry and Sex

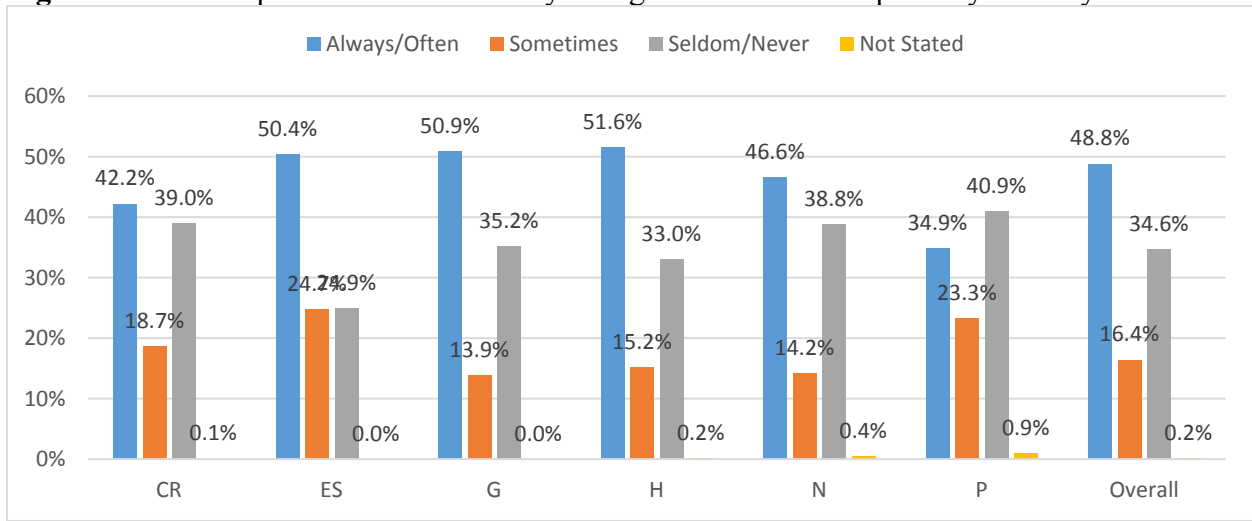


1 Questions: C36. At your main job, taking as a reference a usual day of work, tell us, how often do you have to face the following demands in order to perform you job? A. You have to work very quickly; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequently being required to control many things at once while working was reported among 48.8% of respondents overall. The greatest proportion of those being frequently required to control many things at once while working was reported in Honduras (51.6%) (Figure C.4.34.). While there were little differences across sectors, the secondary (50.5%) sector respondents experienced the greatest proportion of frequently being required to control many things compared to the primary (47.6%) and tertiary (48.3%) sector respondents (Figure C.4.35.). Little differences were observed between men and women across sectors (Figure C.4.36.).

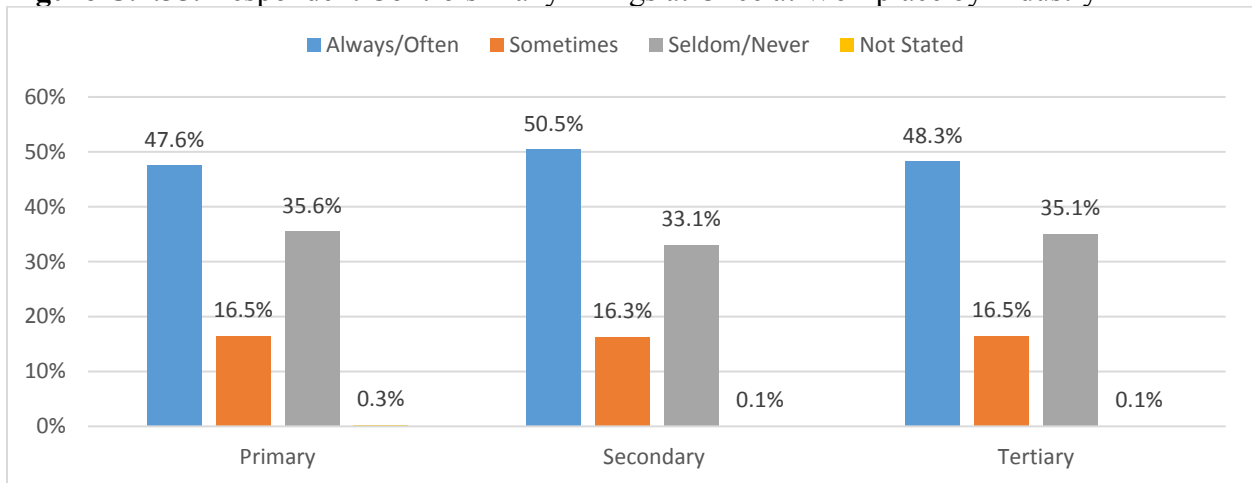
Figure C.4.34. Respondent Controls Many Things at Once at Workplace by Country and Overall



1 Questions: C36. At your main job, taking as a reference a usual day of work, tell us, how often do you have to face the following demands in order to perform you job? G. Your job requires that you have to control many things at once

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

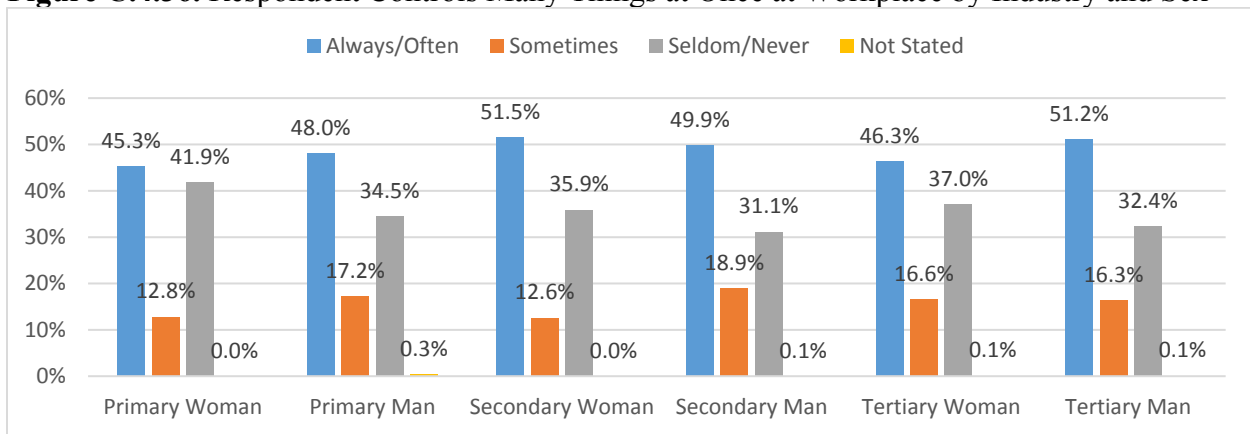
Figure C.4.35. Respondent Controls Many Things at Once at Workplace by Industry



1 Questions: C36. At your main job, taking as a reference a usual day of work, tell us, how often do you have to face the following demands in order to perform you job? G. Your job requires that you have to control many things at once; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.36. Respondent Controls Many Things at Once at Workplace by Industry and Sex



1 Questions: C36. At your main job, taking as a reference a usual day of work, tell us, how often do you have to face the following demands in order to perform you job? G. Your job requires that you have to control many things at once; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

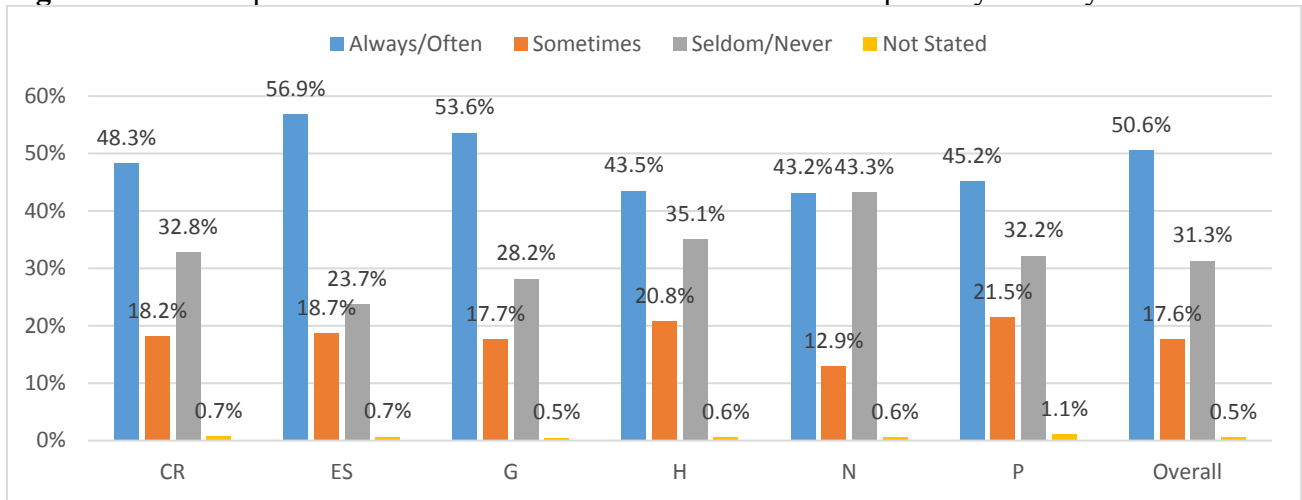
2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Rarely having influence over the amount of work assigned at the workplace was reported among 31.3% of respondents overall, with the greatest proportion of respondents reportedly having little influence over the amount of work assigned to them at the workplace being found in Nicaragua (43.3%) Figure C.4.37.). The tertiary (33.8%) sector respondents experienced the greatest proportion of rarely having influence over the amount of work compared to the primary (28.5%) and secondary (31.3%) sector respondents (Figure C.4.38.). Small differences were observed between men and women across sectors (Figure C.4.39.).

Insights from the Focus Groups

Stress was related to the need to reach the metrics required to earn more money. FG participants explained that they felt victimized for not earning the expected amount of money every time a worker failed to meet certain goals. They considered this practice to be discriminatory since the staff felt unprotected, never knowing what to expect in terms of their bonuses or other working conditions. Participants also described other unfavorable working conditions, including sitting in uncomfortable (and sometimes dirty) chairs for several hours and inadequate climate control, with air conditioners not being used in poorly ventilated areas or, on the contrary, being set to excessively cold temperatures.

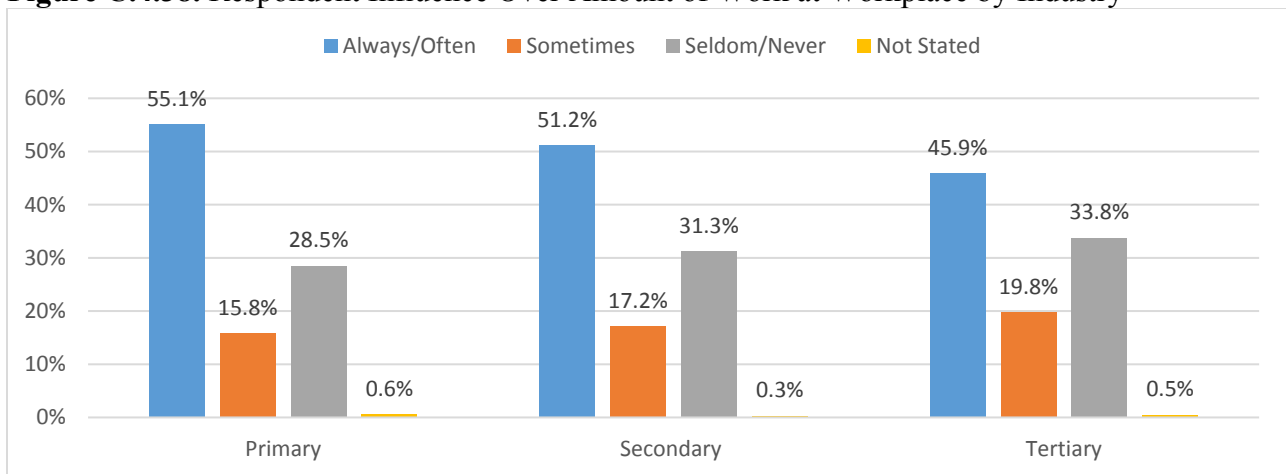
Figure C.4.37. Respondent Influence Over Amount of Work at Workplace by Country and Overall



1 Questions: C37. In your main job, taking as a reference a usual day of work, how often does the following apply to your job? A. You have influence over the amount of work that is assigned or given to you

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

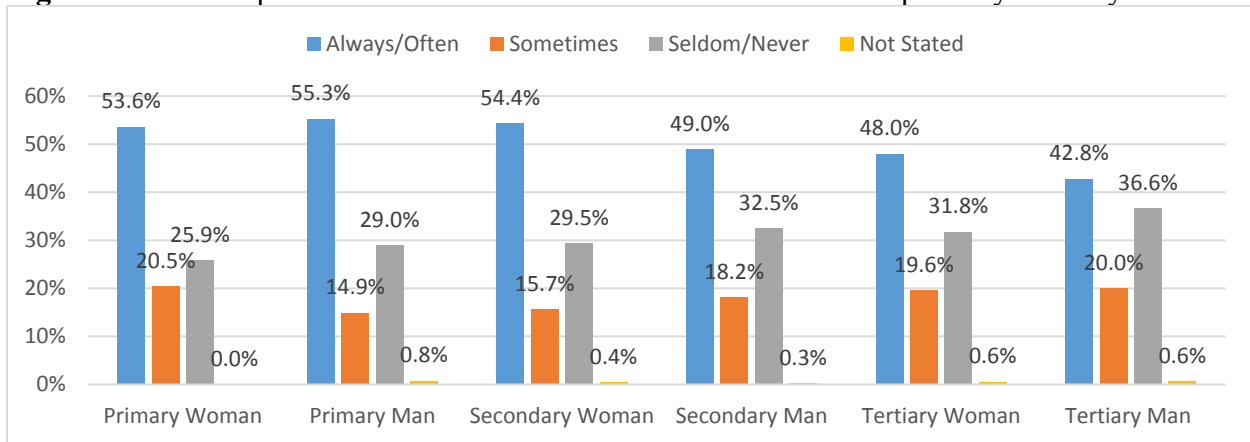
Figure C.4.38. Respondent Influence Over Amount of Work at Workplace by Industry



1 Questions: C37. In your main job, taking as a reference a usual day of work, how often does the following apply to your job? A. You have influence over the amount of work that is assigned or given to you; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.39. Respondent Influence Over Amount of Work at Workplace by Industry and Sex

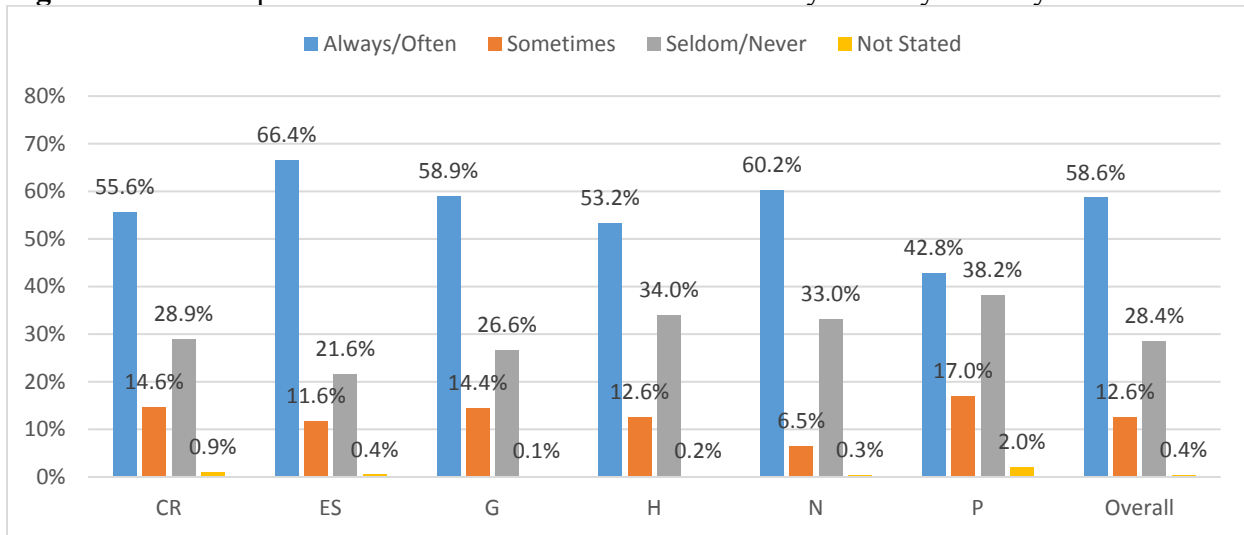


1 Questions: C37. In your main job, taking as a reference a usual day of work, how often does the following apply to your job? A. You have influence over the amount of work that is assigned or given to you; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Rarely being allowed to leave work for at least an hour due to a personal or family issue without having to ask for special permission was reported among 28.4% of respondents overall, with the greatest proportion of those respondents being found in Panama (38.2%) (Figure C.4.40.). The tertiary (31.6%) sector respondents experienced the greatest proportion of rarely being allowed to leave work for a family issue compared to the primary (24.2%) and secondary (31.1%) sector respondents (Figure C.4.41.). Small differences were observed between men and women across industries (Figure C.4.42).

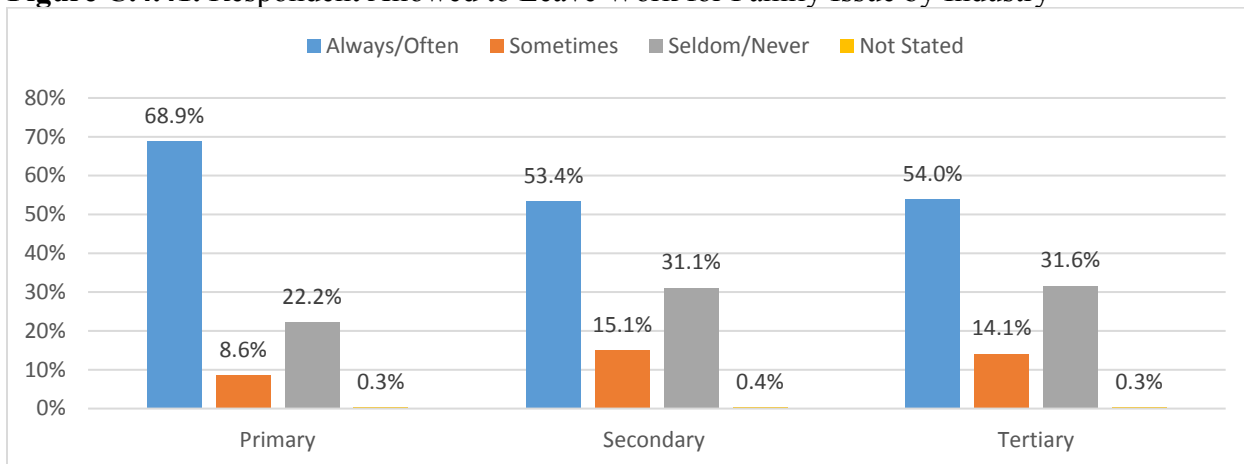
Figure C.4.40. Respondent Allowed to Leave Work for Family Issue by Country and Overall



1 Questions: C37. In your main job, taking as a reference a usual day of work, how often does the following apply to your job? E. If you have a personal or family issue, you are allowed to leave your work for at least an hour without having to ask for a special permission

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

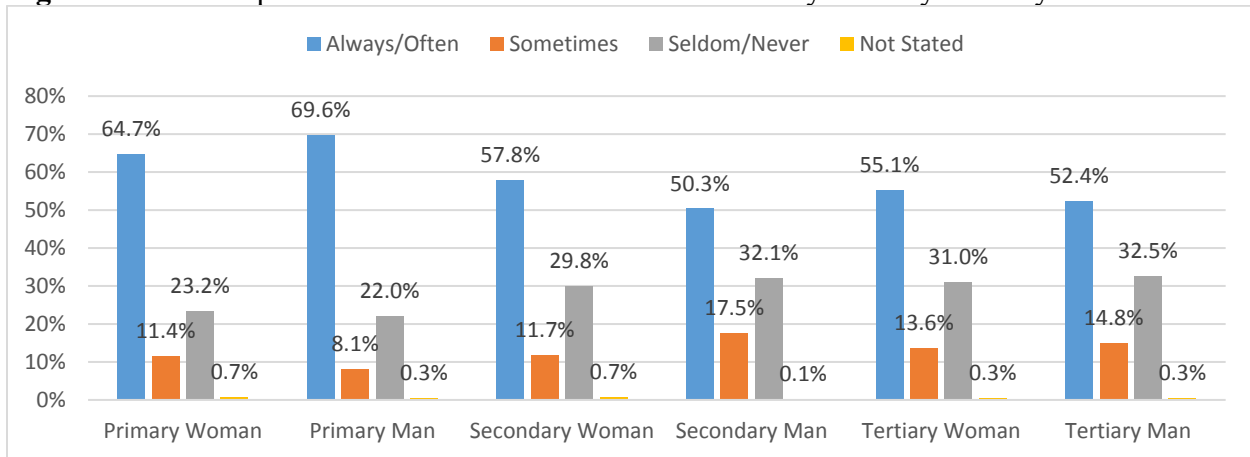
Figure C.4.41. Respondent Allowed to Leave Work for Family Issue by Industry



1 Questions: C37. In your main job, taking as a reference a usual day of work, how often does the following apply to your job? E. If you have a personal or family issue, you are allowed to leave your work for at least an hour without having to ask for a special permission; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?;

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.42. Respondent Allowed to Leave Work for Family Issue by Industry and Sex

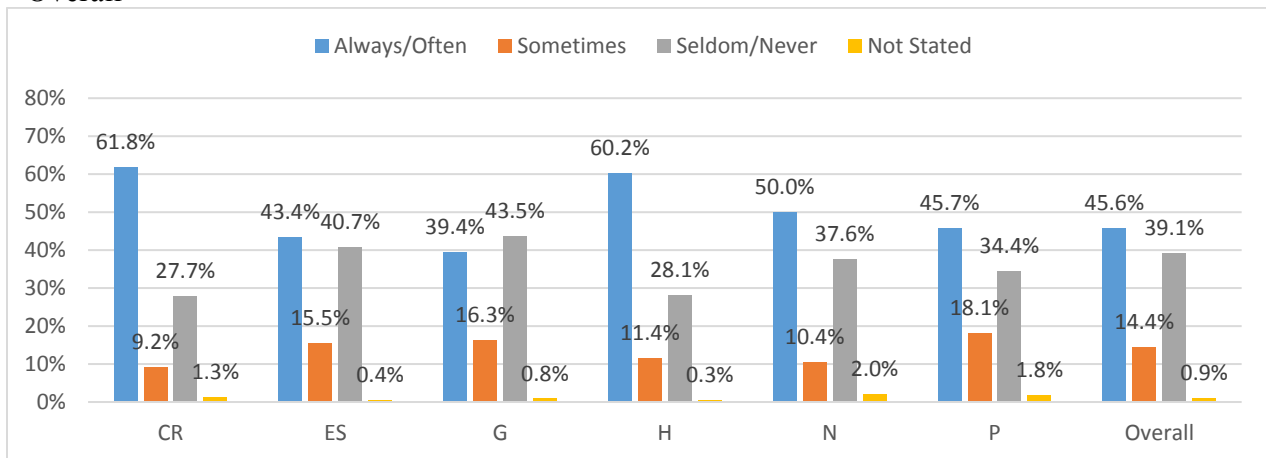


1 Questions: C37. In your main job, taking as a reference a usual day of work, how often does the following apply to your job? E. If you have a personal or family issue, you are allowed to leave your work for at least an hour without having to ask for a special permission; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequently worrying about how difficult it would be to find another job upon becoming unemployed was reported among 45.6% of respondents overall, with the greatest proportion of those respondents being found in Costa Rica (61.8%) (Figure C.4.43.). Frequent worry about the difficulty in finding another job was similar across industry sectors and by sex (Figure C.4.44., Figure C.4.45.).

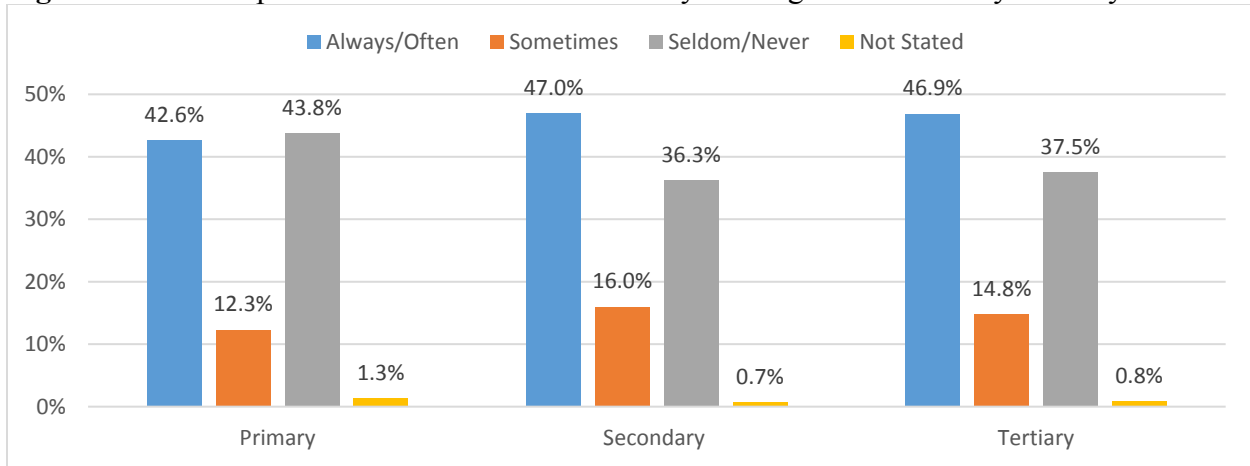
Figure C.4.43. Respondent Worried About Difficulty Finding Another Job by Country and Overall



1 Questions: C38. Now I'm going to read a list of changes that may occur at your job. For each of the items in the list tell me, how worried are you right now? A. By how difficult it would be to find another job if you became unemployed

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

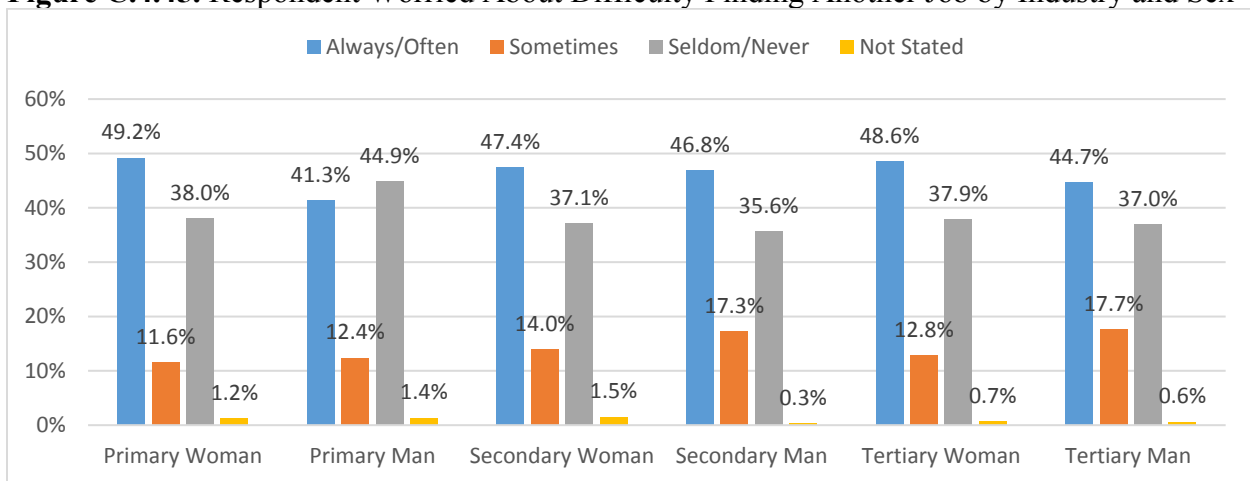
Figure C.4.44. Respondent Worried About Difficulty Finding Another Job by Industry



1 Questions: C38. Now I'm going to read a list of changes that may occur at your job. For each of the items in the list tell me, how worried are you right now? A. By how difficult it would be to find another job if you became unemployed; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?;

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.45. Respondent Worried About Difficulty Finding Another Job by Industry and Sex



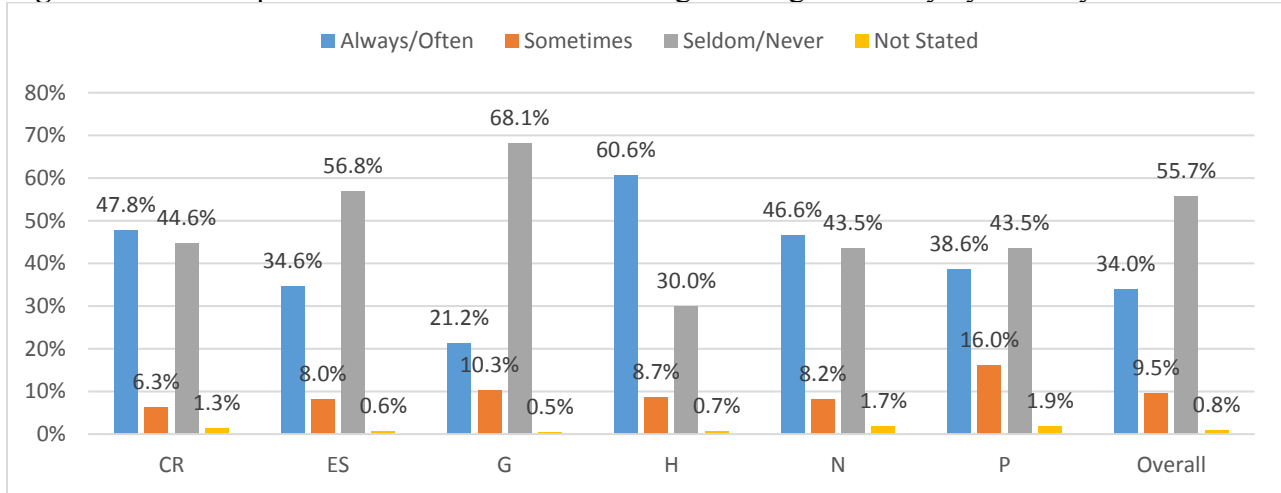
1 Questions: C38. Now I'm going to read a list of changes that may occur at your job. For each of the items in the list tell me, how worried are you right now? A. By how difficult it would be to find another job if you became unemployed; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Frequently worrying about suffering a change in salary, including not receiving a raise, receiving a salary reduction, or being paid, was reported among 34% of respondents overall, with the greatest proportion of those reporting this concern being found in Honduras (60.6%) (Figure

C.4.46.). Frequent worry about a salary change was similar across industry sectors and by sex (Figure C.4.47., Figure C.4.48.).

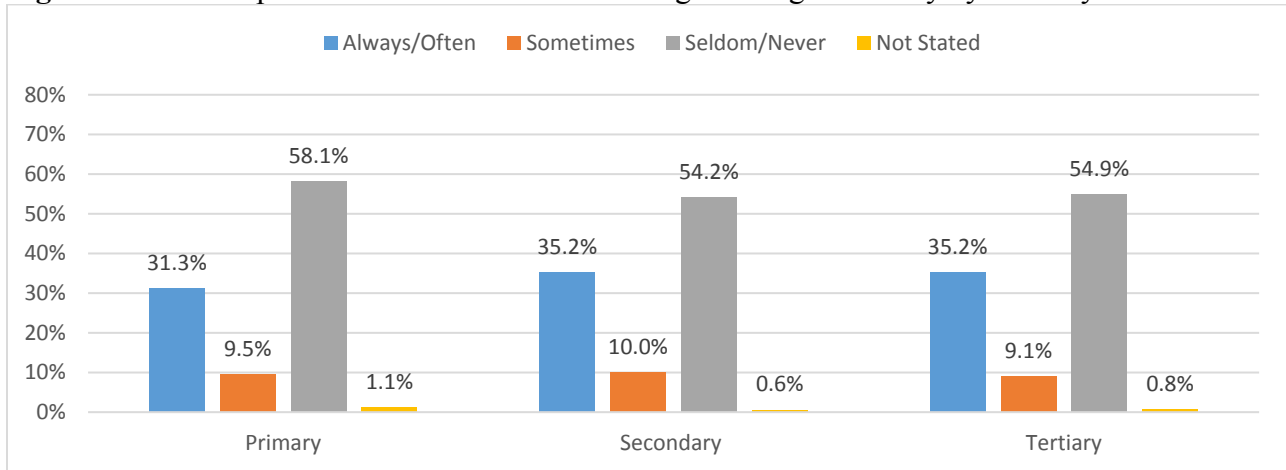
Figure C.4.46. Respondent Worried About Suffering a Change in Salary by Country and Overall



1 Questions: C38. Now I'm going to read a list of changes that may occur at your job. For each of the items in the list tell me, how worried are you right now? C. Suffering a change in your salary (not getting it updated, getting a salary reduction, being paid in kind)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.4.47. Respondent Worried About Suffering a Change in Salary by Industry

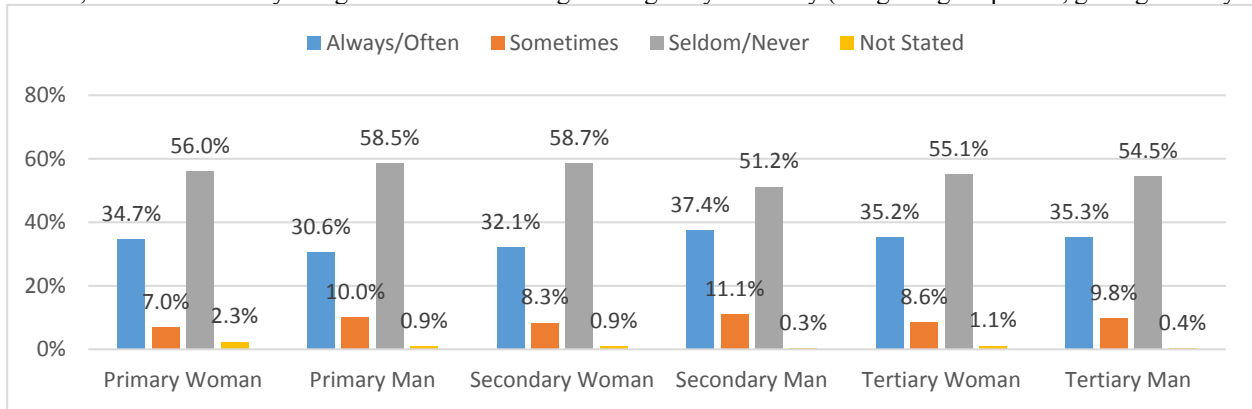


1 Questions: C38. Now I'm going to read a list of changes that may occur at your job. For each of the items in the list tell me, how worried are you right now? C. Suffering a change in your salary (not getting it updated, getting a salary reduction, being paid in kind); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.48. Respondent Worried About Suffering a Change in Salary by Industry and Sex

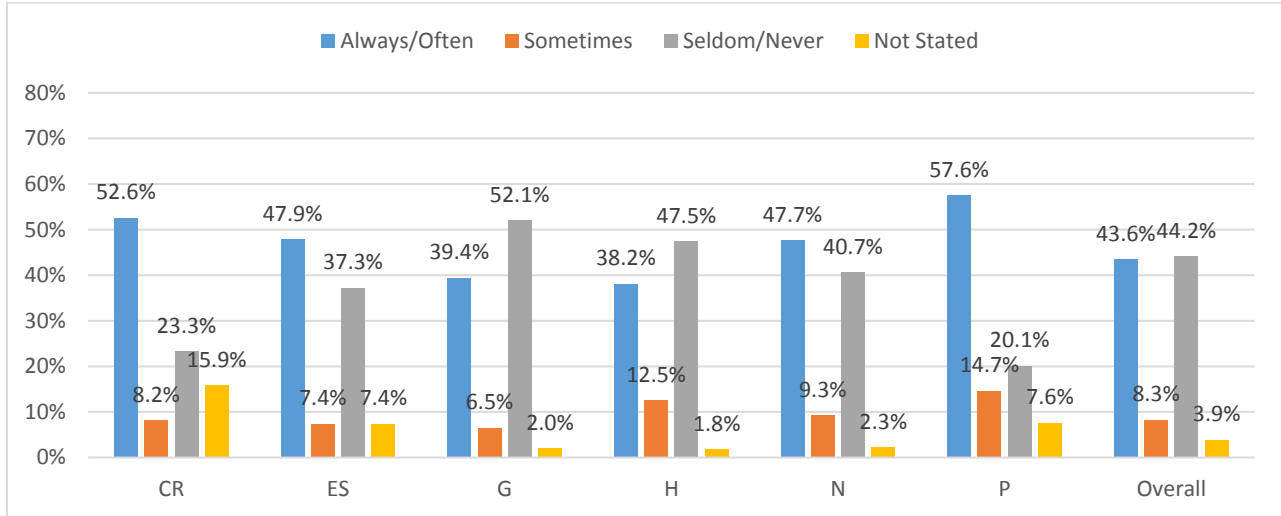
1 Questions: C38. Now I'm going to read a list of changes that may occur at your job. For each of the items in the list tell me, how worried are you right now? C. Suffering a change in your salary (not getting it updated, getting a salary



reduction, being paid in kind); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

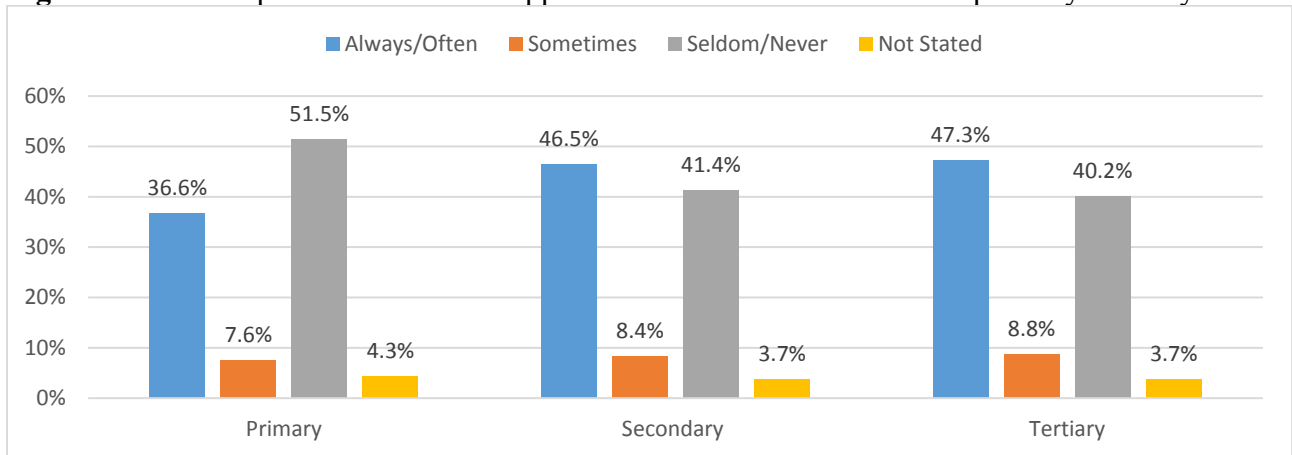
Rarely receiving support from a boss or immediate superior to perform job duties was reported among 44.2% of respondents overall, with the greatest proportion of respondents reporting this concern being found in Guatemala (52.1%) (Figure C.4.49.). The primary (51.5%) sector respondents experienced the greatest proportion of rarely receiving boss or supervisor support compared to the secondary (41.4%) and tertiary (40.2%) sector respondents (Figure C.4.50.). Rarely receiving support from a boss for tasks in the workplace varied across industries and by sex (Figure C.5.51.).

Figure C.4.49. Respondent Receives Support from Boss for Tasks at Workplace by Country and Overall



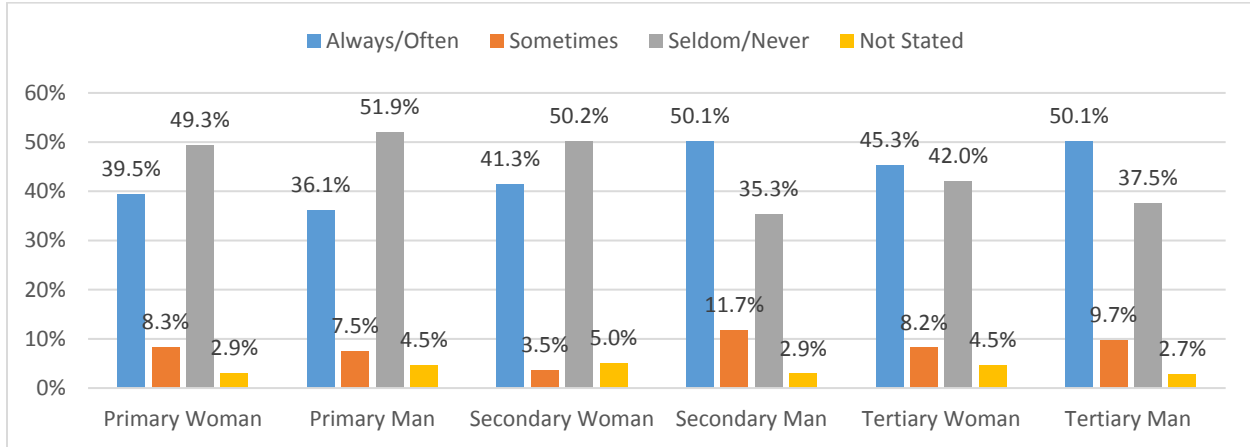
1 Questions: C39. In your main job, taking as a reference a day or usual work day, how often do the following conditions occur? F. You get help and support from your boss or your immediate superior to perform your duties
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.4.50. Respondent Receives Support from Boss for Tasks at Workplace by Industry



1 Questions: C39. In your main job, taking as a reference a day or usual work day, how often do the following conditions occur? F. You get help and support from your boss or your immediate superior to perform your duties; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.51. Respondent Receives Support from Boss for Tasks at Workplace by Industry and Sex



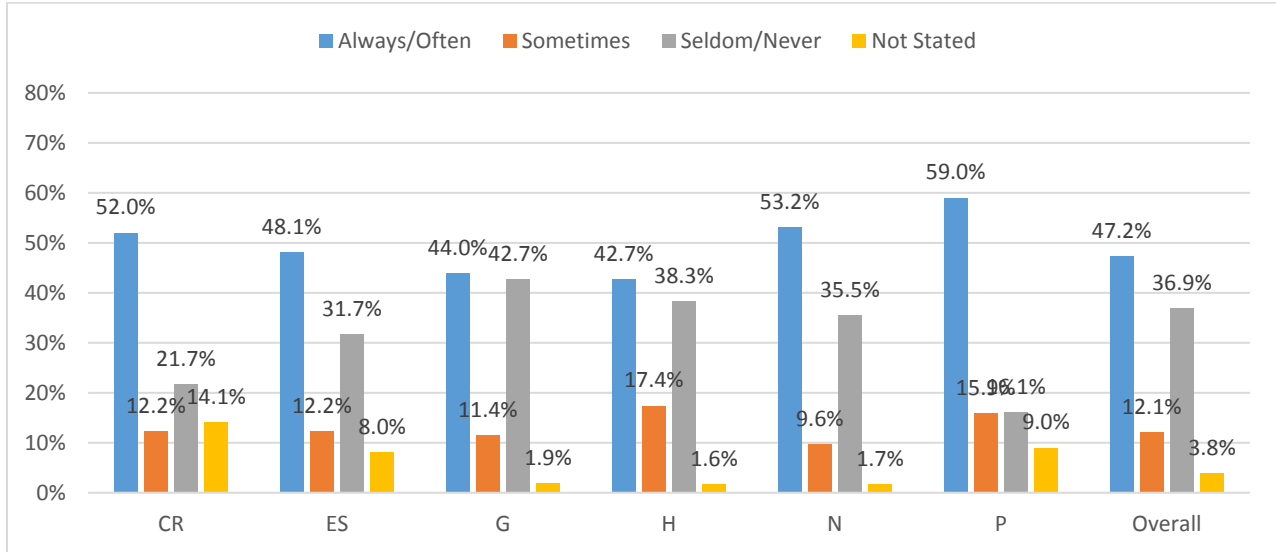
1 Questions: C39. In your main job, taking as a reference a day or usual work day, how often do the following conditions occur? F. You get help and support from your boss or your immediate superior to perform your duties; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Rarely receiving the recognition deserved from superiors was reported among 36.9% of respondents overall, with the greatest proportion of respondents reporting this concern being found in Guatemala (42.7%) (Figure C.4.52.). The primary (42.7%) sector respondents experienced the greatest proportion of rarely receiving deserved recognition compared to the secondary (34.4%) and tertiary (33.7%) sector respondents (Figure C.4.53.). Women reported rarely receiving the recognition deserved from superiors in greater proportions than men across industries (Figure C.4.54.).

Insights from the Focus Groups

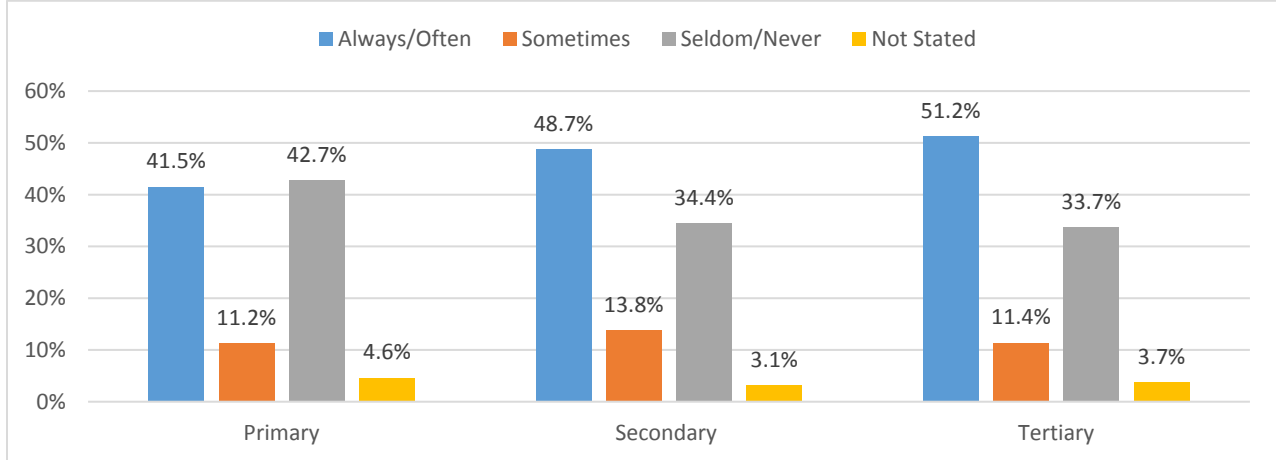
Call center jobs, which were predominantly in Costa Rica, were described by participants in ways that aligned with definitions of precarious employment, characterized by minimum wage, easy dismissal, lack of follow-up of labor complaints, and lower than expected bonuses. These working conditions often lead to feelings of job insecurity, a continuous desire to quit, vulnerability to the owners' interests, and a fear of being fired. The participants mentioned that call centers have very high levels of job turnover.

Figure C.4.52. Respondent Receives the Recognition Desired at Workplace by Country and Overall



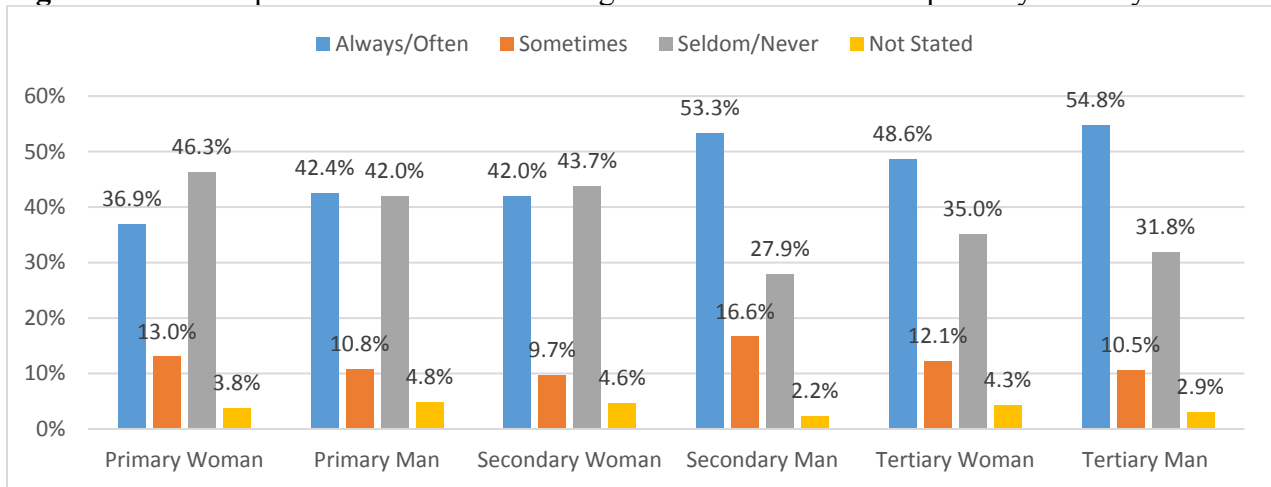
1 Questions: C40. In your working position, taking as a reference a usual day of work, how often do the following occur? A. Your superiors give you the recognition you deserve
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.4.53. Respondent Receives the Recognition Desired at Workplace by Industry



1 Questions: C40. In your working position, taking as a reference a usual day of work, how often do the following occur? A. Your superiors give you the recognition you deserve; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.4.54. Respondent Receives the Recognition Deserved at Workplace by Industry and Sex



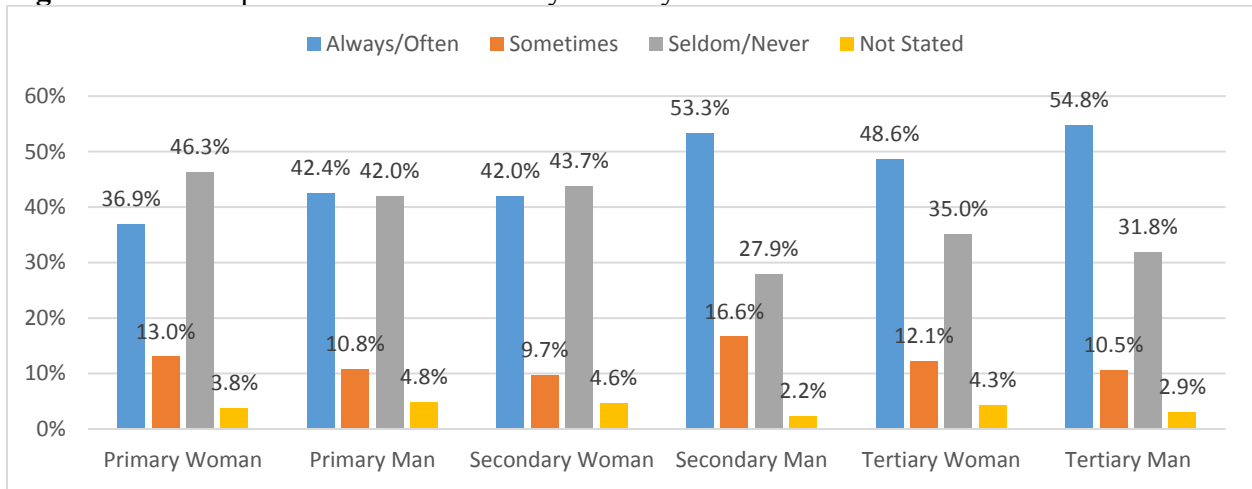
1 Questions: C40. In your working position, taking as a reference a usual day of work, how often do the following occur? A. Your superiors give you the recognition you deserve; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

C.5. Health Status and Wellbeing

In general, most respondents (49.9%) considered their health status to be *good* (Figure C.5.1.). Respondents in Nicaragua and Honduras reported the greatest proportions of respondents reporting their health status to be *fair* at 39.5% and 38.2%, respectively (Figure C.5.1.). Respondents in Panama (27.6%) reported the greatest proportion of those believing their health status was *very good* (Figure C.5.1.). Across industry sectors, those working in the primary sector (14.0%) were least likely to report their health status as *very good* (Figure C.5.2.). Women in the primary (5.0%), secondary (2.7%), and tertiary (2.9%) sectors were more likely to report their health status as *poor* compared to men (3.2%, 2.3%, and 1.9%) (Figure C.5.3.).

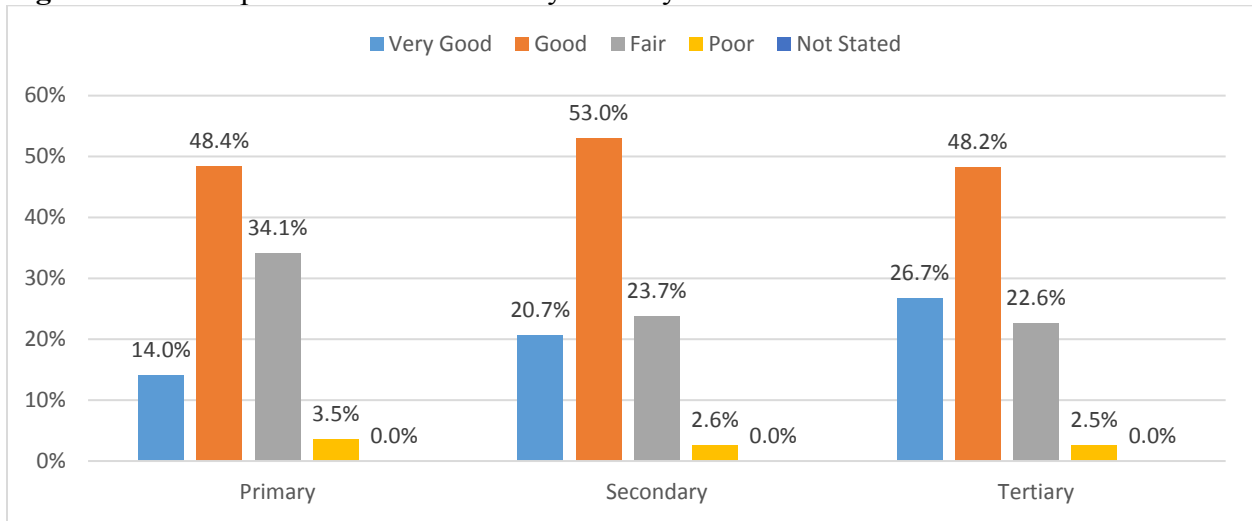
Figure C.5.1. Respondent Health Status by Country and Overall



1 Questions: D41. In general, how do you consider your health status to be?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

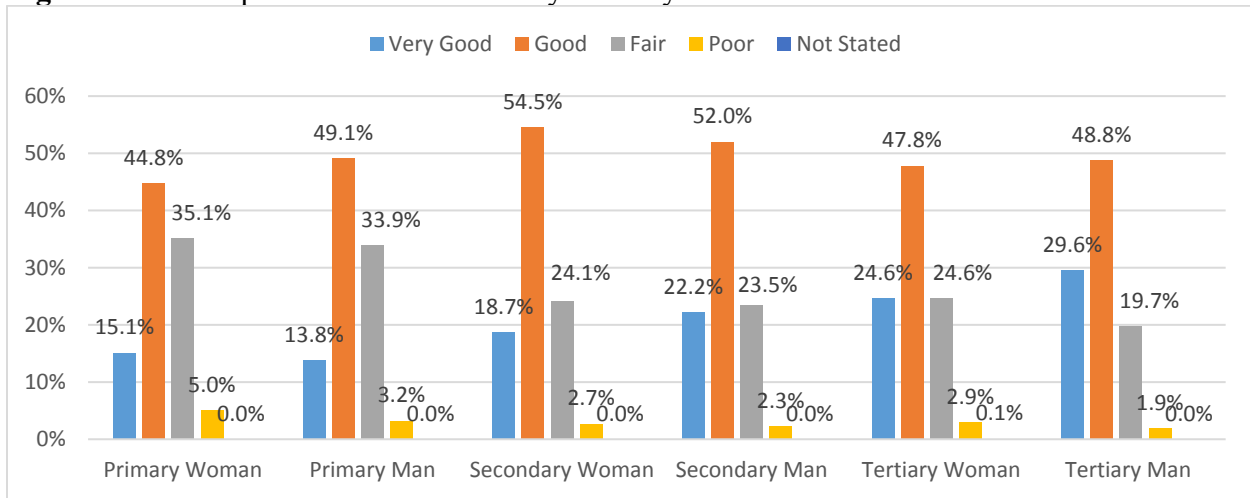
Figure C.5.2. Respondent Health Status by Industry



1 Questions: D41. In general, how do you consider your health status to be?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.3. Respondent Health Status by Industry and Sex

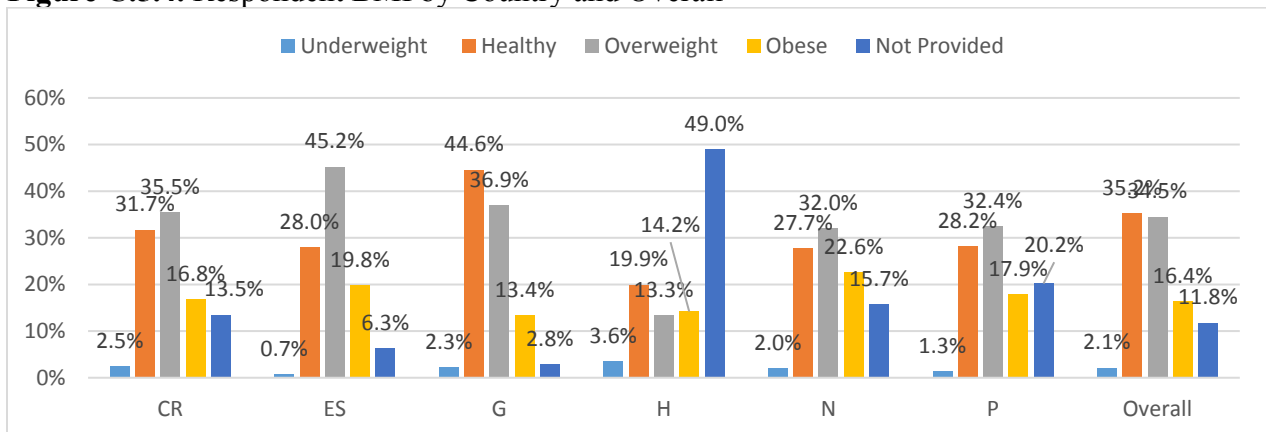


1 Questions: D41. In general, how do you consider your health status to be?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, the greatest proportion of respondents were a *healthy* weight (35.2%), with 2.1% underweight, 34.5% overweight, and 16.4% obese (Figure C.5.4). The greatest proportions of overweight and obese respondents were in El Salvador (45.2%) and Nicaragua (22.6%), respectively (Figure C.5.4.). Obese respondents (19.2%) were more likely to be represented in the tertiary sector than in other sectors (Figure C.5.5.). Women reported greater proportion of obesity across secondary and tertiary sectors than men, but men reported greater proportions of being overweight (Figure C.5.6.).

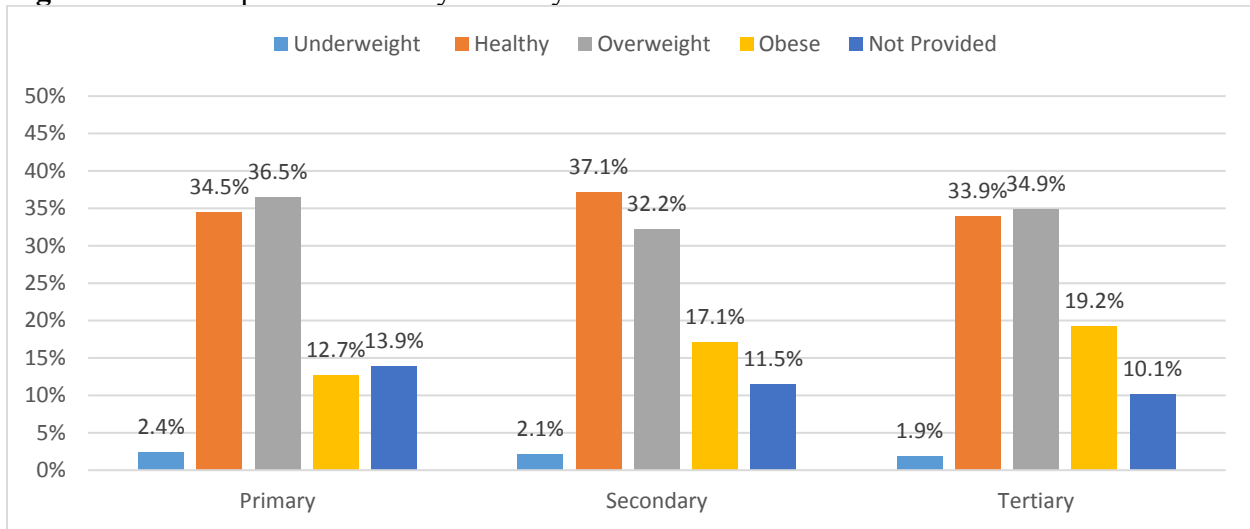
Figure C.5.4. Respondent BMI by Country and Overall



1 Questions: F85. What's your standing height? Please, specify feet and inches; F86. How much do you weigh? Please, specify pounds.

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

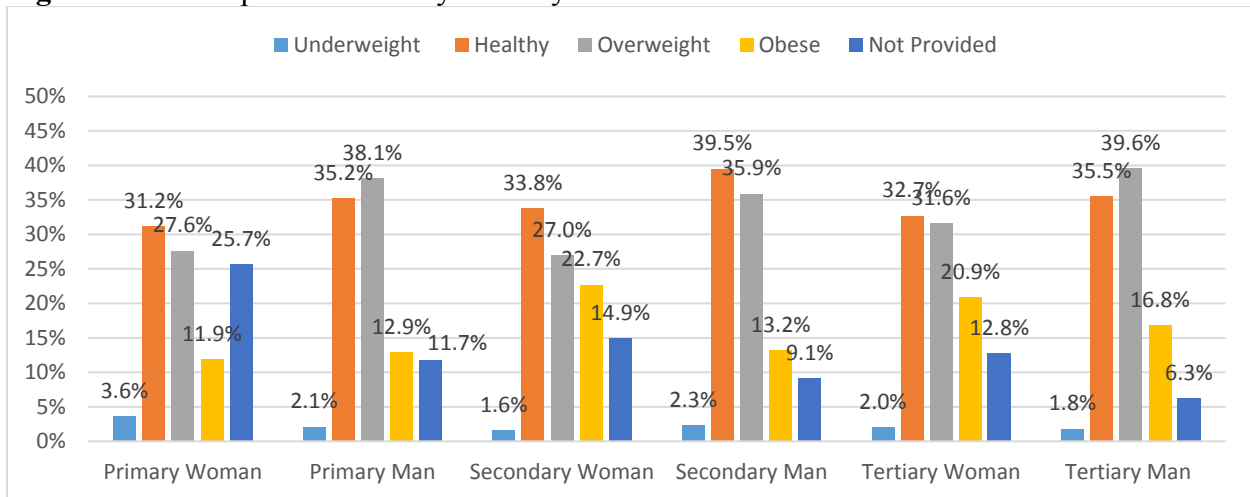
Figure C.5.5. Respondent BMI by Industry



1 Questions: F85. What's your standing height? Please, specify feet and inches; F86. How much do you weigh? Please, specify pounds; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.6. Respondent BMI by Industry and Sex



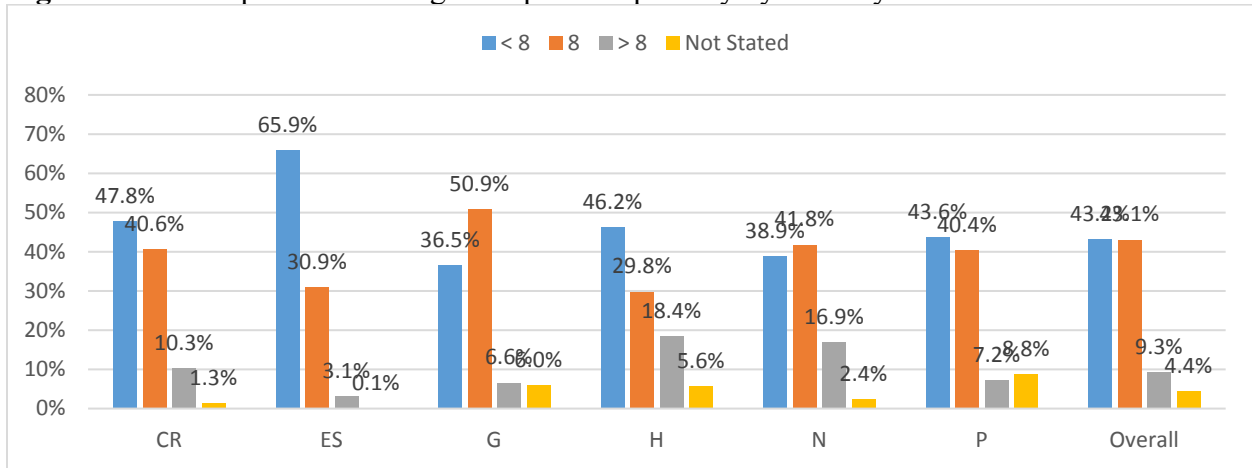
1 Questions: F85. What's your standing height? Please, specify feet and inches; F86. How much do you weigh? Please, specify pounds; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Average sleep hours per day were categorized into less than 8 hours, 8 hours, and more than 8 hours. Overall, respondents reported nearly the same proportion of sleeping less than 8 hours and 8 hours, with only 9.3% reporting sleeping more than 8 hours (Figure C.5.7.). Respondents in El Salvador (65.9%) predominantly reported sleeping less than 8 hours, and those in Honduras

(18.4%) reported the greatest proportion of sleeping more than 8 hours (Figure C.5.7). Substantial differences in average sleep hours across industries and by sex were not noted (Figure C.5.8., Figure C.5.9.).

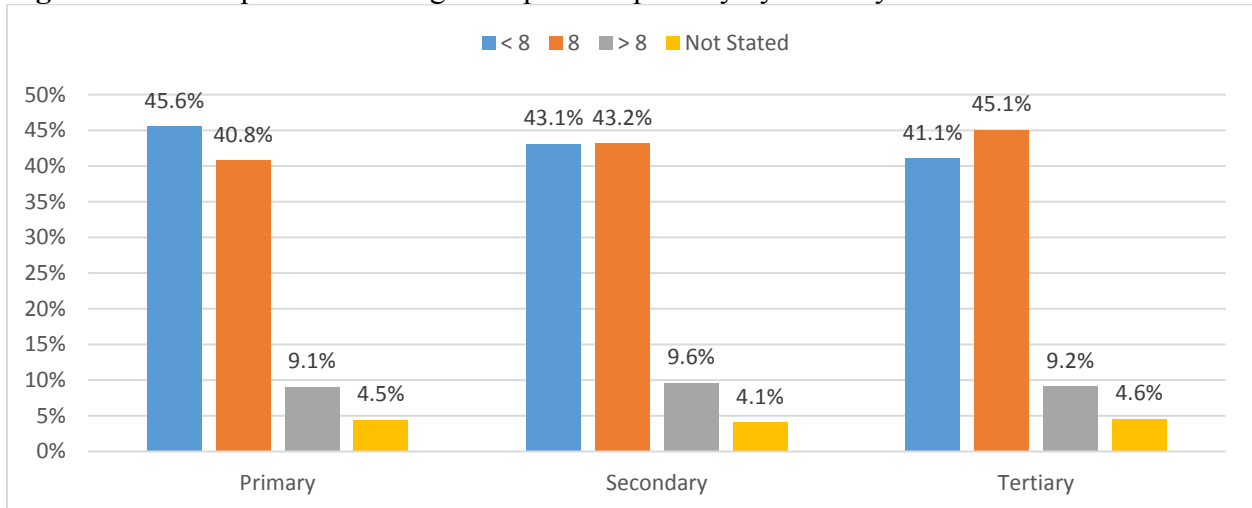
Figure C.5.7. Respondent Average Sleep Hours per Day by Country and Overall



1 Questions: D42. In the last week, how many hours a day did you sleep on average?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

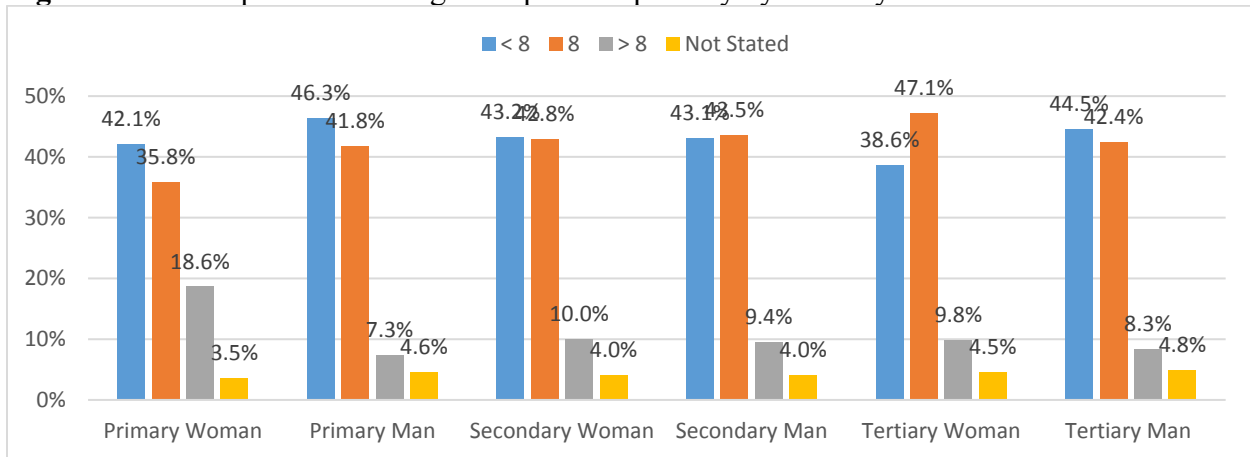
Figure C.5.8. Respondent Average Sleep Hours per Day by Industry



1 Questions: D42. In the last week, how many hours a day did you sleep on average?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.9. Respondent Average Sleep Hours per Day by Industry and Sex

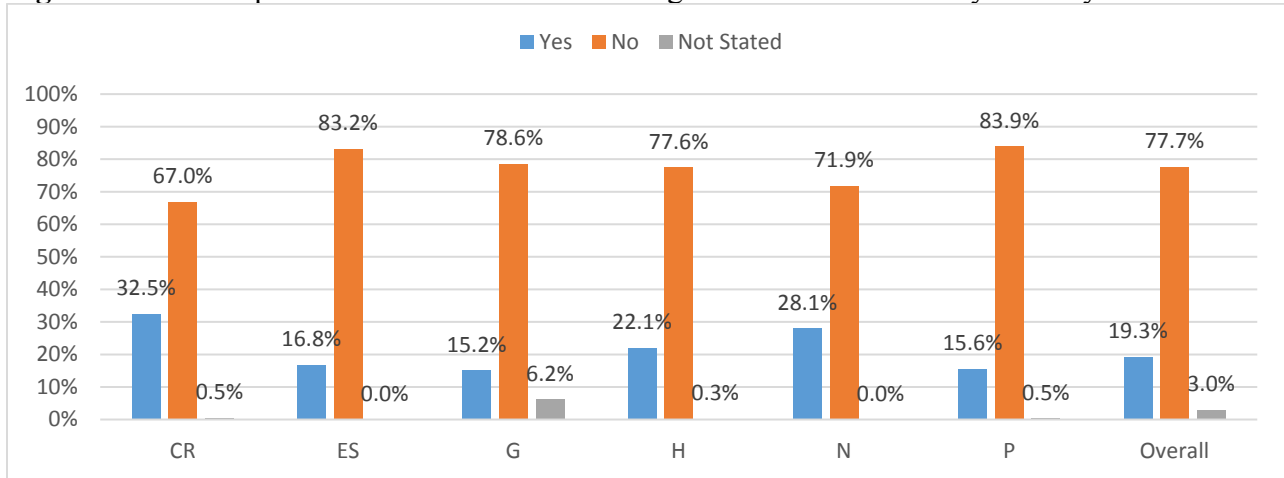


1 Questions: D42. In the last week, how many hours a day did you sleep on average?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 19.3% of respondents reported having smoked at least 100 cigarettes over their lifetime, with the greatest proportion of reported smokers being found in Costa Rica (32.5%) and the least being found in Guatemala (15.2%) (Figure C.5.10.). Across industries, the proportions of reported smokers in the primary and secondary sectors (21.8%, 20.6%) were similar, with a smaller proportion in the tertiary sector (15.6%) (Figure C.5.11.). Substantial differences were reported in the proportions of smokers by sex, with men reportedly smoking over the lifetime more than women across all industries (Figure C.5.12.).

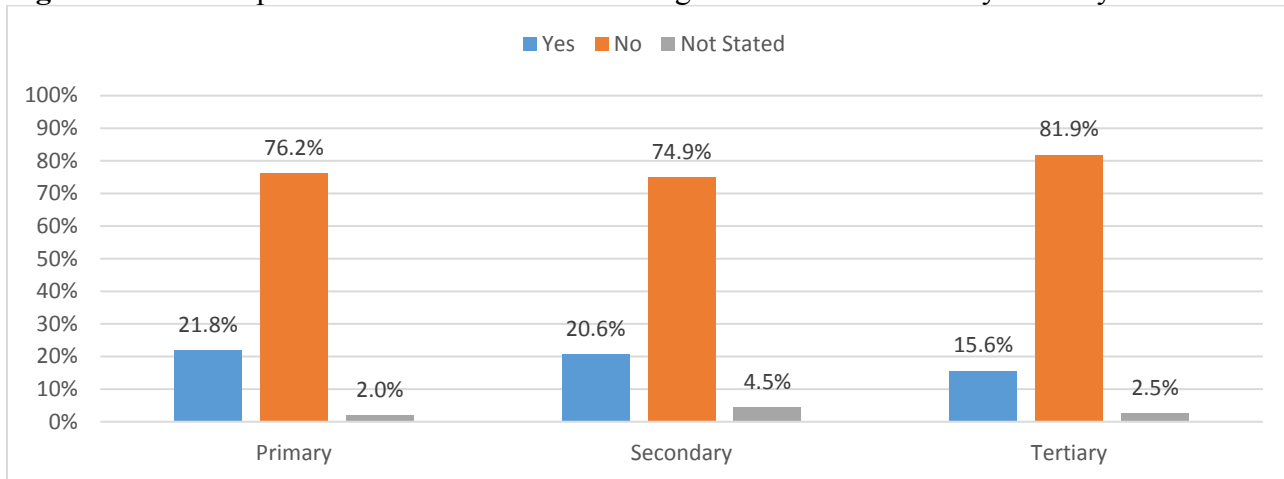
Figure C.5.10. Respondent Smoked at Least 100 Cigarettes over Lifetime by Country and Overall



1 Questions: D43. Have you smoked at least 100 cigarettes during your life?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

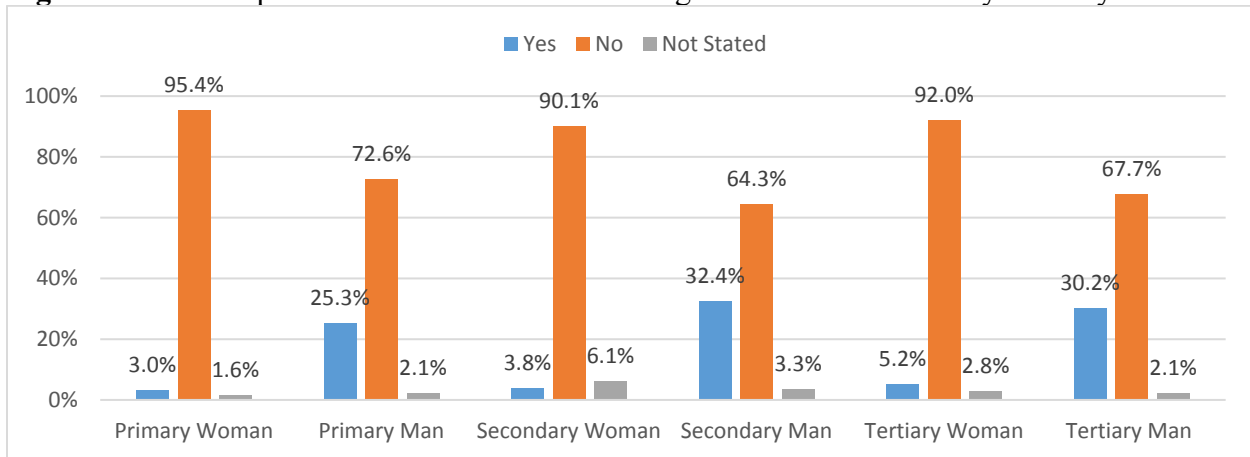
Figure C.5.11. Respondent Smoked at Least 100 Cigarettes over Lifetime by Industry



1 Questions: D43. Have you smoked at least 100 cigarettes during your life?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.12. Respondent Smoked at Least 100 Cigarettes over Lifetime by Industry and Sex

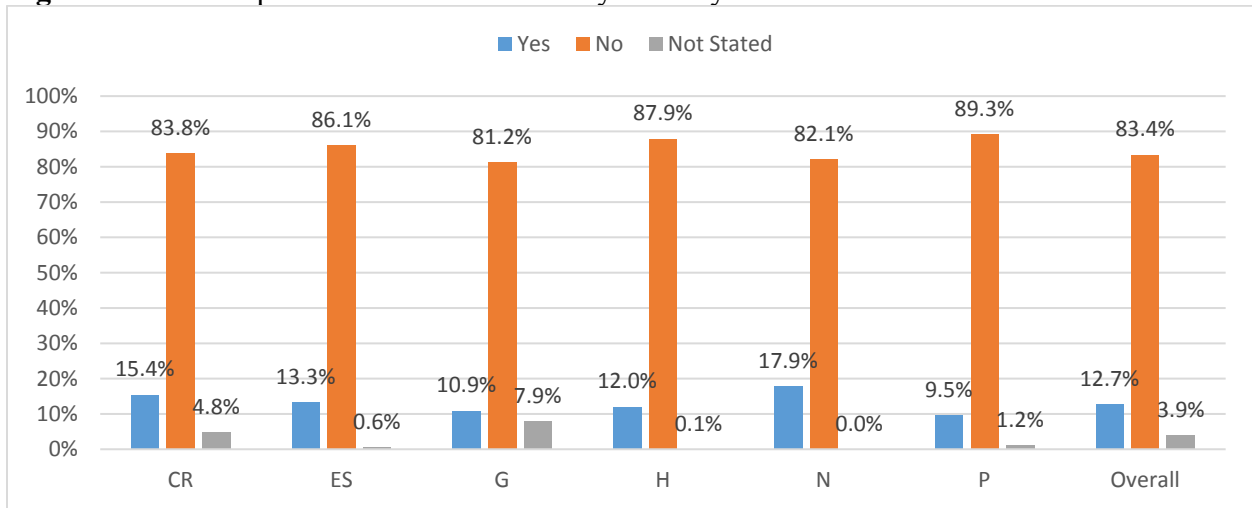


1 Questions: D43. Have you smoked at least 100 cigarettes during your life?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Of those with a history of smoking, 12.7% still smoked, with the greatest proportion of current smokers being found in Nicaragua (17.9%) and the smallest proportion in Panama (9.5%) (Figure C.5.13.). By industry, the proportions of current smokers among those with a history of smoking were primary (13.9%), secondary (14.0%), and tertiary (10.3%) (Figure C.5.14.). Again, across industries, men were more likely to be currently still smoking, primarily in the secondary (22.1%) and tertiary (20.8%) sectors compared to the primary sector (16.4%), and compared to women (Figure C.5.15.).

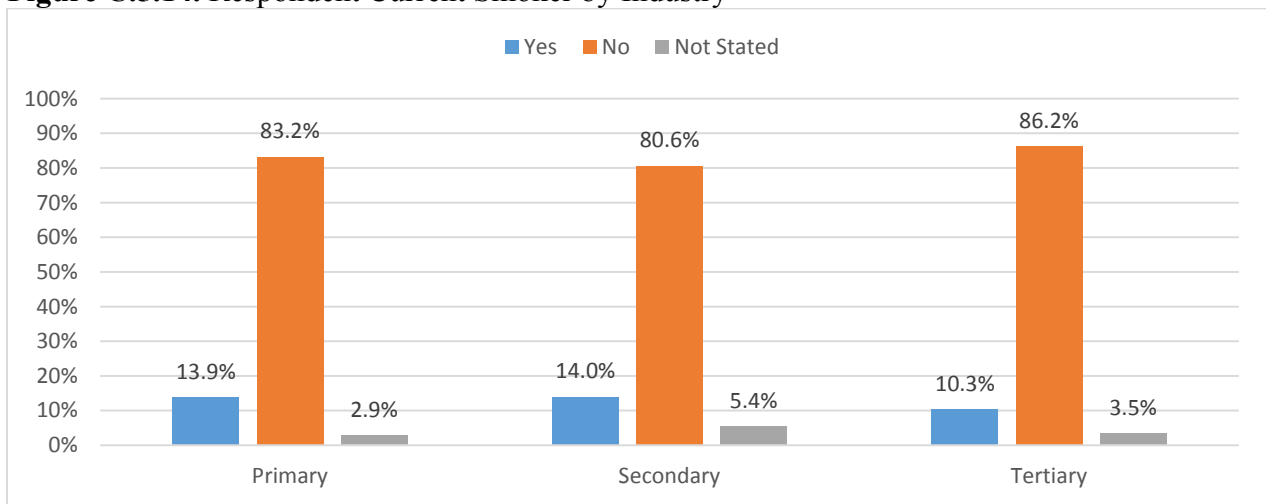
Figure C.5.13. Respondent Current Smoker by Country and Overall



1 Questions: D44. Do you smoke now?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

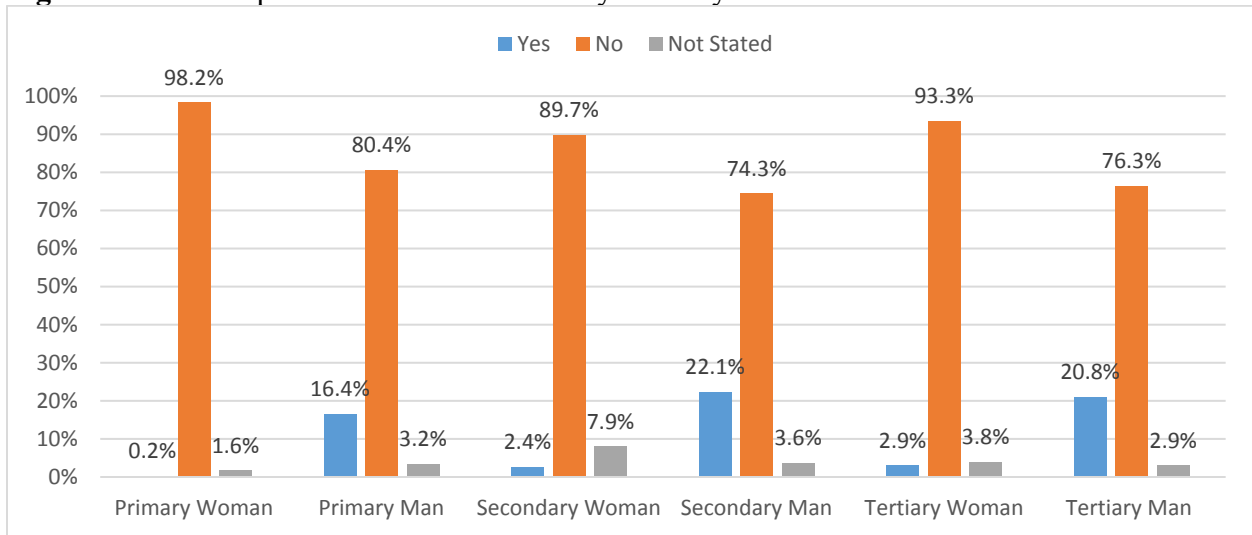
Figure C.5.14. Respondent Current Smoker by Industry



1 Questions: D44. Do you smoke now?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.15. Respondent Current Smoker by Industry and Sex

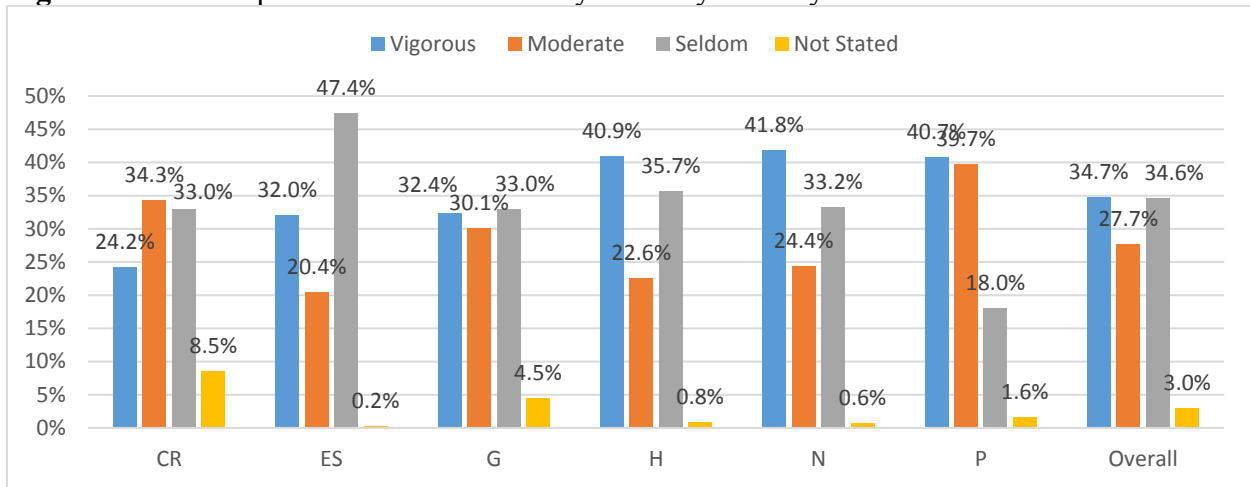


1 Questions: D44. Do you smoke now?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Exercise activity level related to sports, brisk walking, cycling, or other exercise, and did not include housework or physical activity that was part of the job. Activity level was categorized as vigorous activity for at least 30 minutes three times per week; moderate activity for at least three times per week; and seldom activity for preferring sedentary activities. Overall, respondents in, Nicaragua (41.8%), Honduras (40.9%), and Panama (40.7%) reported the greatest proportions of vigorous exercise activity, while respondents in Costa Rica (24.2%) reported the least proportion of vigorous activity (Figure C.5.16.). El Salvadorans respondents (47.4%) reported the greatest proportion of seldom activity (Figure C.5.16.). There were no substantial differences in reported exercise activity level across industries in general, but men reported exercising more than women across industries (Figure C.5.17., Figure C.5.18.).

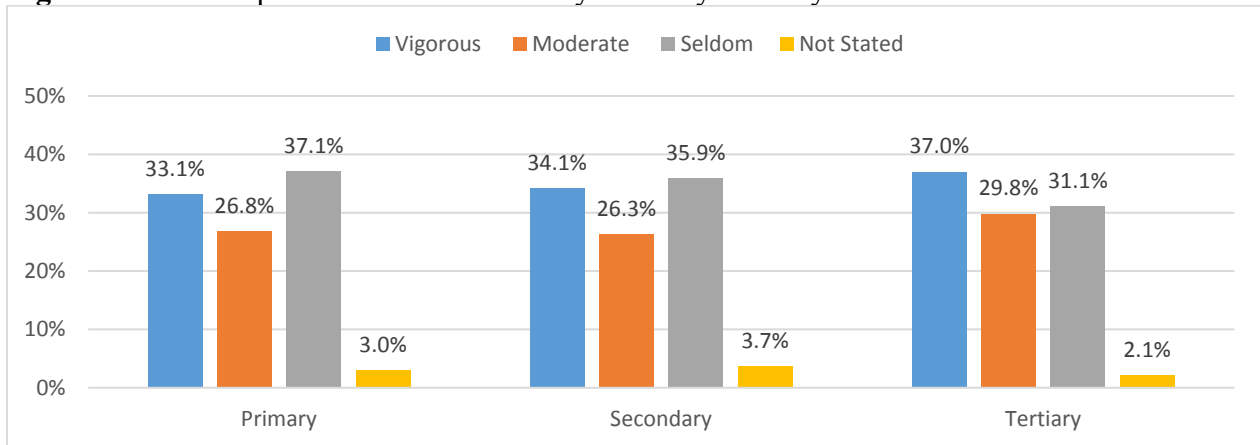
Figure C.5.16. Respondent Exercise Activity Level by Country and Overall



1 Questions: D45. Which of the following best describes your activity level? Include sport, exercise, brisk walking, cycling for recreation or to get to and from places, but do not include housework or physical activity that may be part of your job.

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

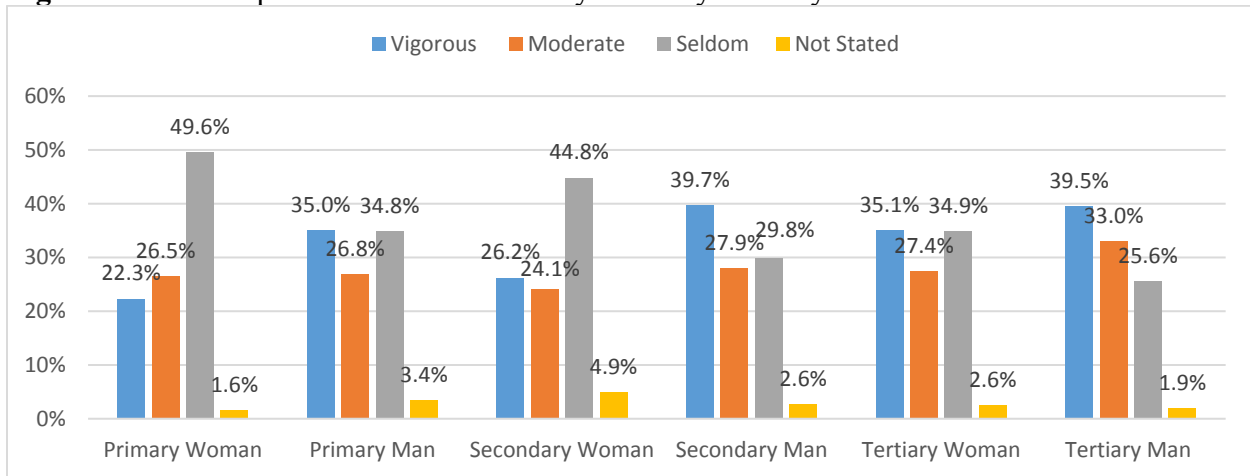
Figure C.5.17. Respondent Exercise Activity Level by Industry



1 Questions: D45. Which of the following best describes your activity level? Include sport, exercise, brisk walking, cycling for recreation or to get to and from places, but do not include housework or physical activity that may be part of your job.; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

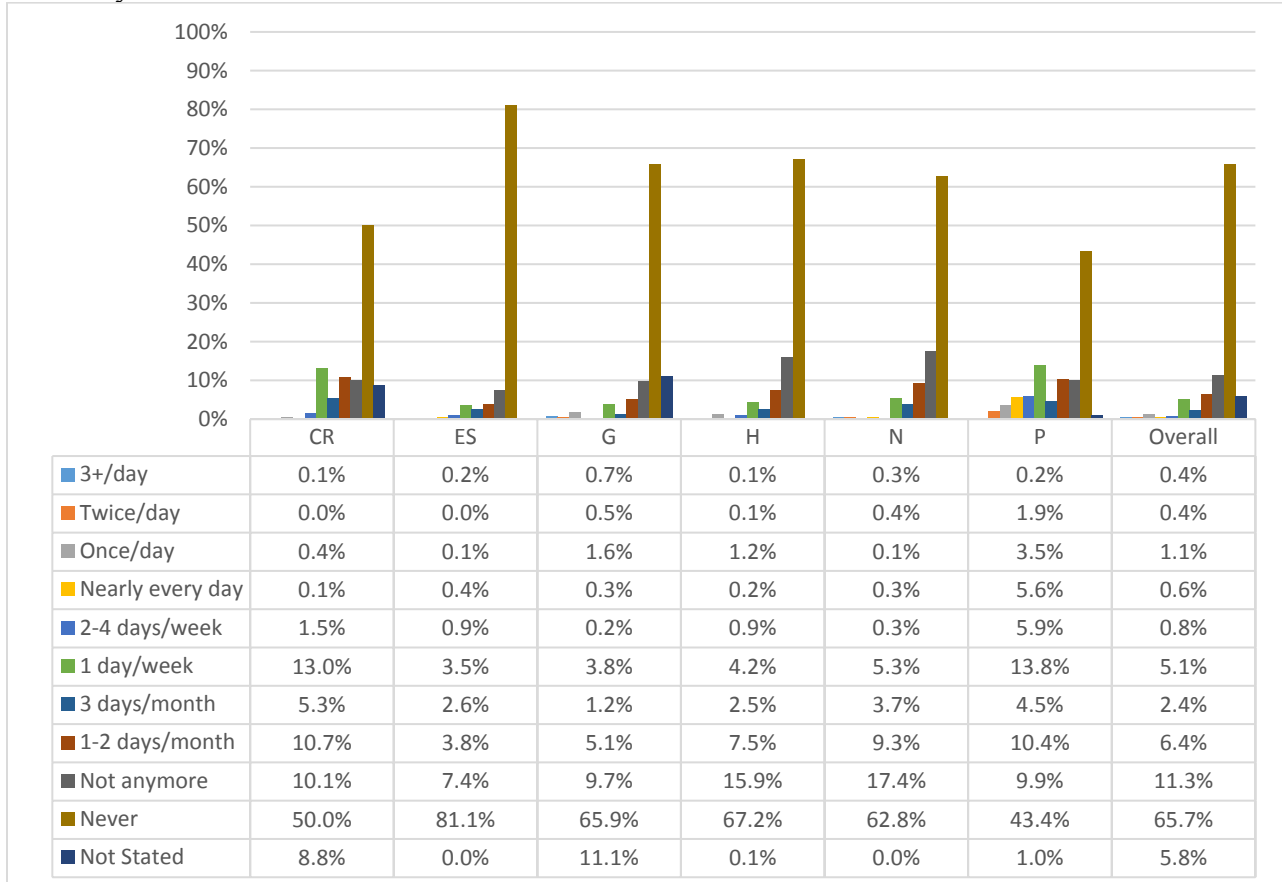
Figure C.5.18. Respondent Exercise Activity Level by Industry and Sex



1 Questions: D45. Which of the following best describes your activity level? Include sport, exercise, brisk walking, cycling for recreation or to get to and from places, but do not include housework or physical activity that may be part of your job.; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 65.7% of respondents reported never drinking alcoholic beverages in the previous 30 days. Drinking alcohol one day per week in the past 30 days was most frequently reported in Costa Rica (13.0%) and Panama (13.8%) (Figure C.5.19.). Substantial differences in the consumption of alcohol were not reported across industries (Figure C.5.20.). Across industries, men reported drinking alcohol more than women in the previous 30 days (Figure C.5.21.).

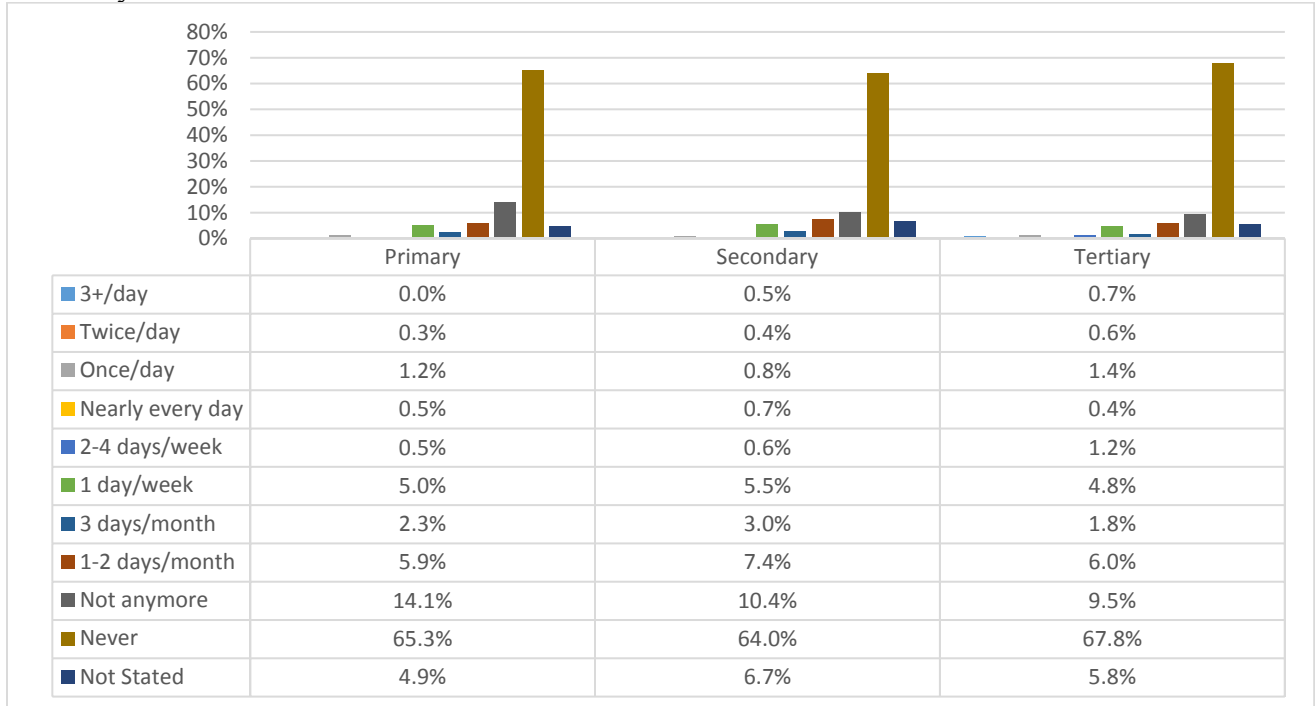
Figure C.5.19. Respondent Consumption of Alcoholic Drinks per Day over Past 30 Days by Country and Overall



1 Questions: D46. Considering all of your drinking times in the past 30 days, about how often did you have any beer, wine, or liquor?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

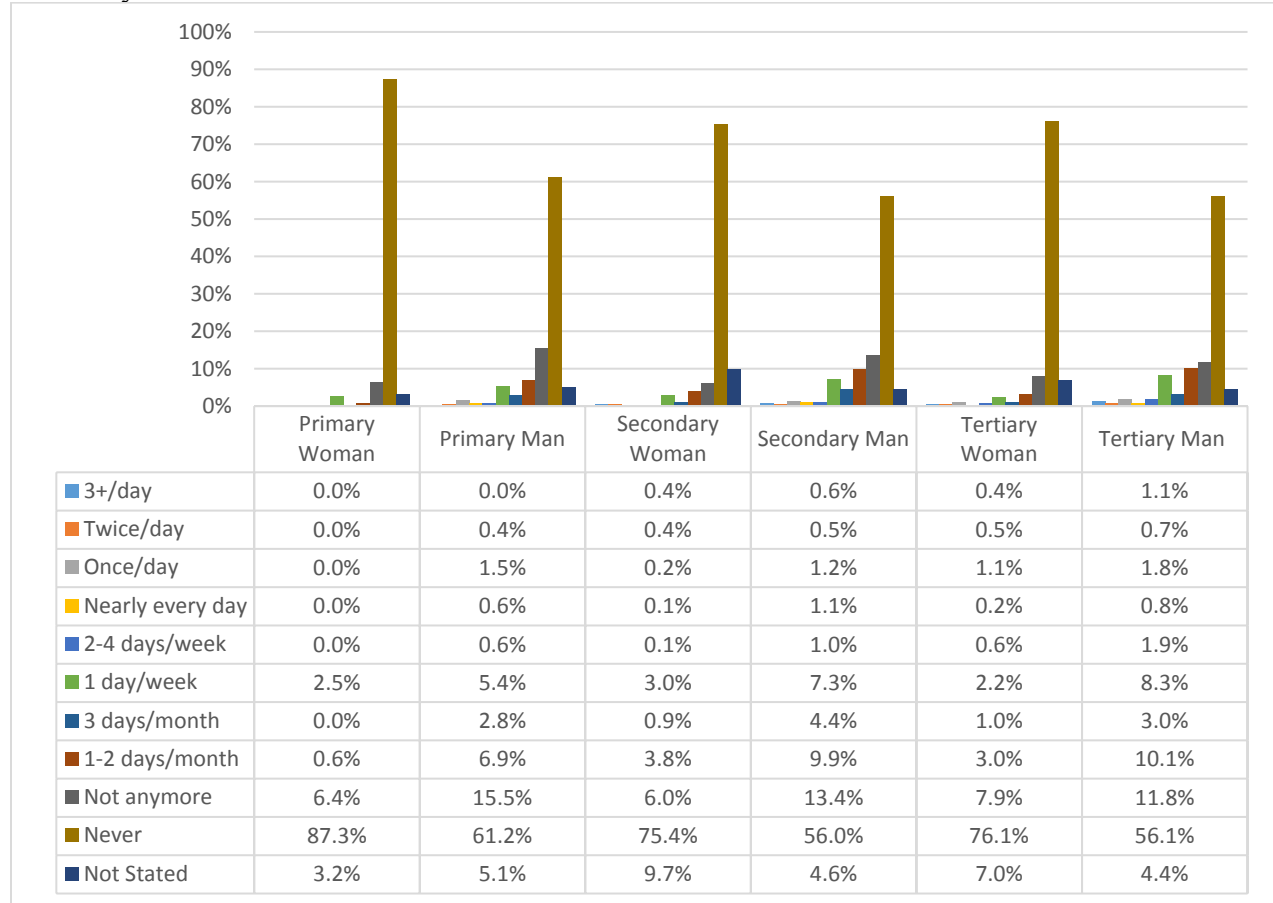
Figure C.5.20. Respondent Consumption of Alcoholic Drinks per Day over Past 30 Days by Industry



1 Questions: D46. Considering all of your drinking times in the past 30 days, about how often did you have any beer, wine, or liquor?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

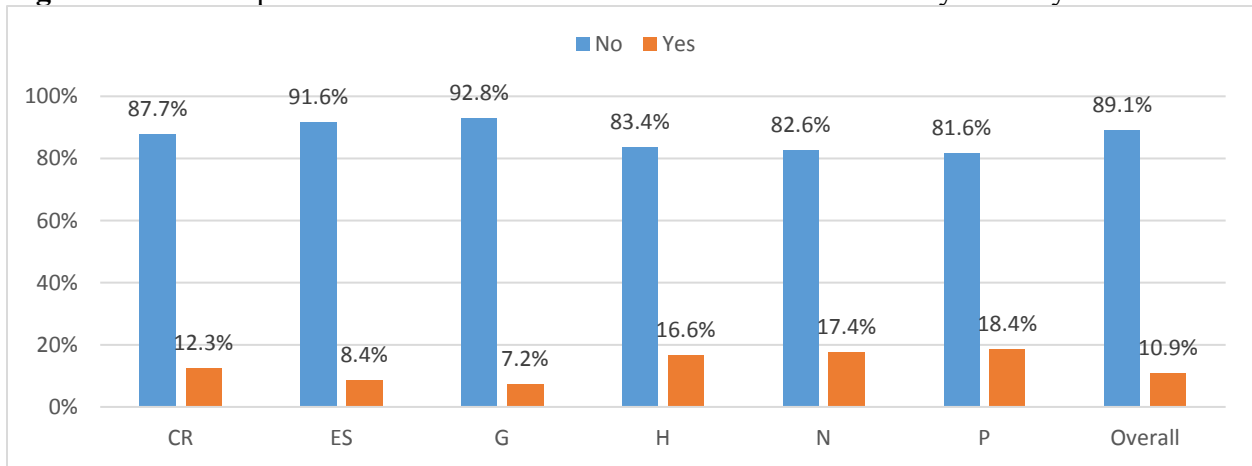
Figure C.5.21. Respondent Consumption of Alcoholic Drinks per Day over Past 30 Days by Industry and Sex



1 Questions: D46. Considering all of your drinking times in the past 30 days, about how often did you have any beer, wine, or liquor?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

The General Health Questionnaire (GHQ-12) consists of 12 items, assessing the severity of a mental problem over the past several weeks using a 4-point scale. Overall, 10.9% of respondents reported poor mental health over the prior four weeks, with the greatest proportion of poor mental health being reported in Panama (18.4%) and the least proportion being reported in Guatemala (7.2%) (Figure C.5.22.). Insubstantial differences in poor mental health were observed across industries, but a greater proportion of women reported poor mental health in the primary (16.5%) and tertiary (11.8%) sectors compared to men (10.5%, 7.4%), respectively (Figure C.5.23., Figure C.5.24.).

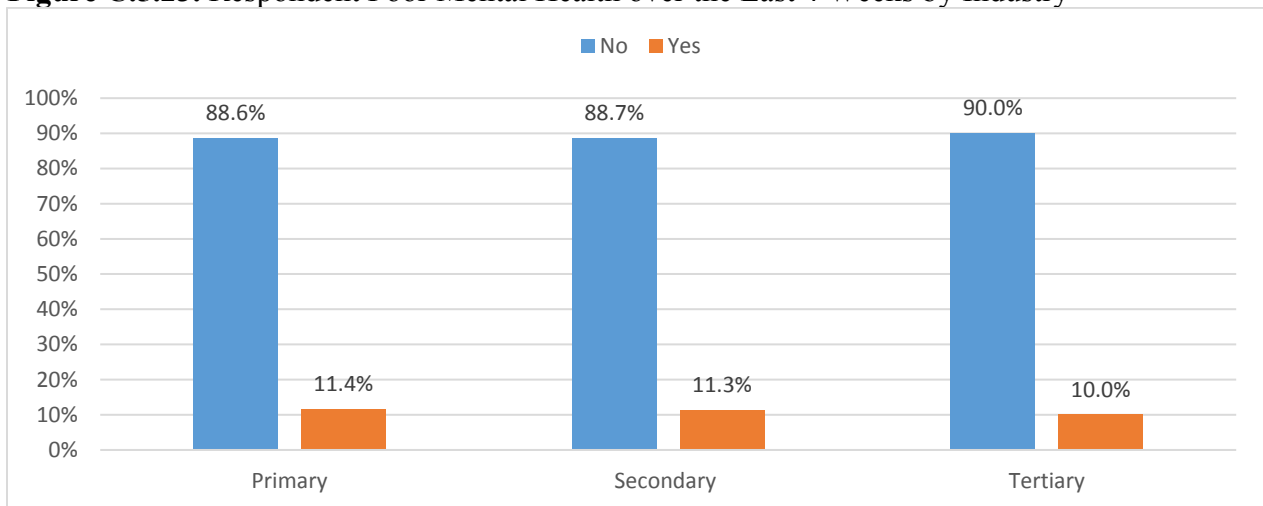
Figure C.5.22. Respondent Poor Mental Health over the Last 4 Weeks by Country and Overall



1 Questions: D49. We would like to know if you have had any discomforts or disorders and how your health has been over the last FOUR weeks. We are interested in knowing about the recent and current problems, not the past ones. Over the past month, how often...? GHQ-12 questions, poor mental health dichotomized yes/no.

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

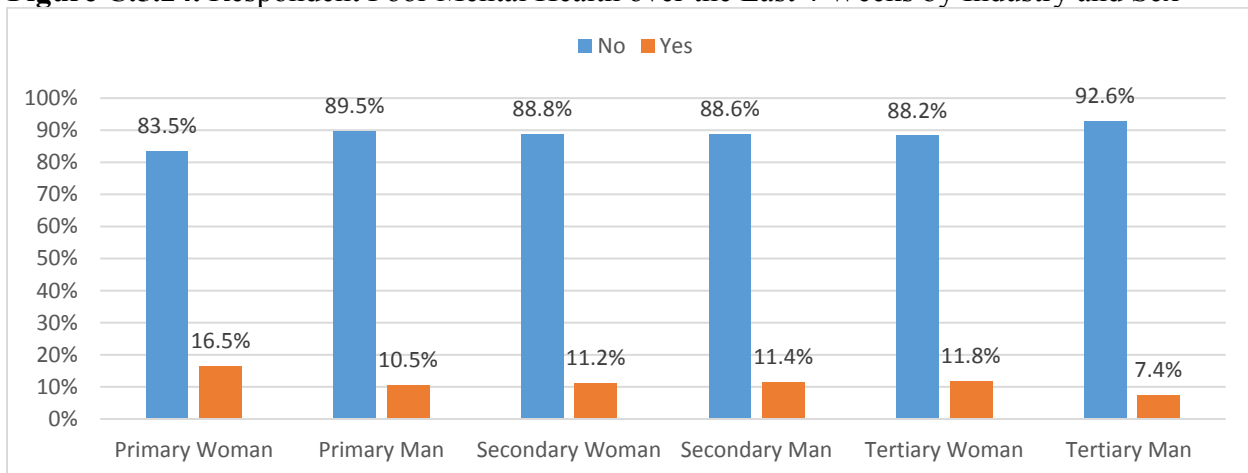
Figure C.5.23. Respondent Poor Mental Health over the Last 4 Weeks by Industry



1 Questions: D49. We would like to know if you have had any discomforts or disorders and how your health has been over the last FOUR weeks. We are interested in knowing about the recent and current problems, not the past ones. Over the past month, how often...? GHQ-12 questions, poor mental health dichotomized yes/no; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.24. Respondent Poor Mental Health over the Last 4 Weeks by Industry and Sex



1 Questions: D49. We would like to know if you have had any discomforts or disorders and how your health has been over the last FOUR weeks. We are interested in knowing about the recent and current problems, not the past ones. Over the past month, how often...? GHQ-12 questions, poor mental health dichotomized yes/no; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

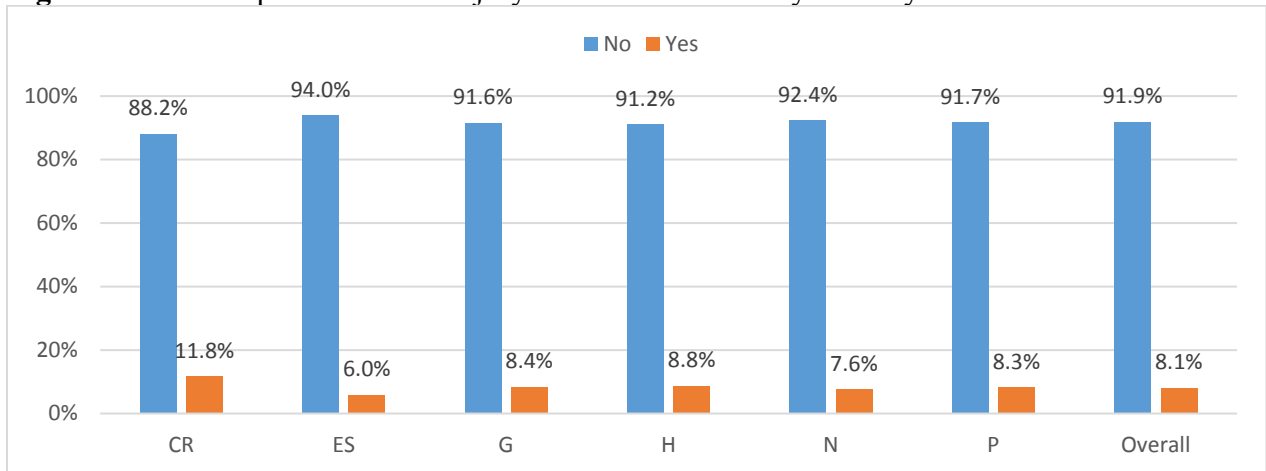
2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Suffering from a work-related injury due to an accident at work in the past 12 months was reported by 8.1% of respondents overall, with the greatest proportion of respondents injured being reported in Costa Rica (11.8%) and the least reported in El Salvador (6%) (Figure C.5.25.). Respondents in the primary sector (13.2%) reported the greatest proportion of work injuries (Figure C.5.26.). Across industries, women (14.3%) reported a greater proportion of having had a work injury than men (13.0%) in the primary sector but, in the secondary and tertiary sectors, men reported a higher proportion of having been injured than women (Figure C.5.27.).

Insights from the Focus Groups

Most participants from Costa Rica were “floor workers” (i.e., they provide direct attention to clients), and these workers highlighted that the nature of their work leads to high stress levels. They explained that call center workers were required to meet specific quantitative “metrics,” which refer to variables, such as number of calls or clients attended and duration of calls. These metrics then formed the basis for their performance evaluations. Several participants reported arriving home some days with little to no motivation to interact with family or friends. They described bad mood and tiredness, lacking the energy to interact with their families, crying easily, and being hypersensitive.

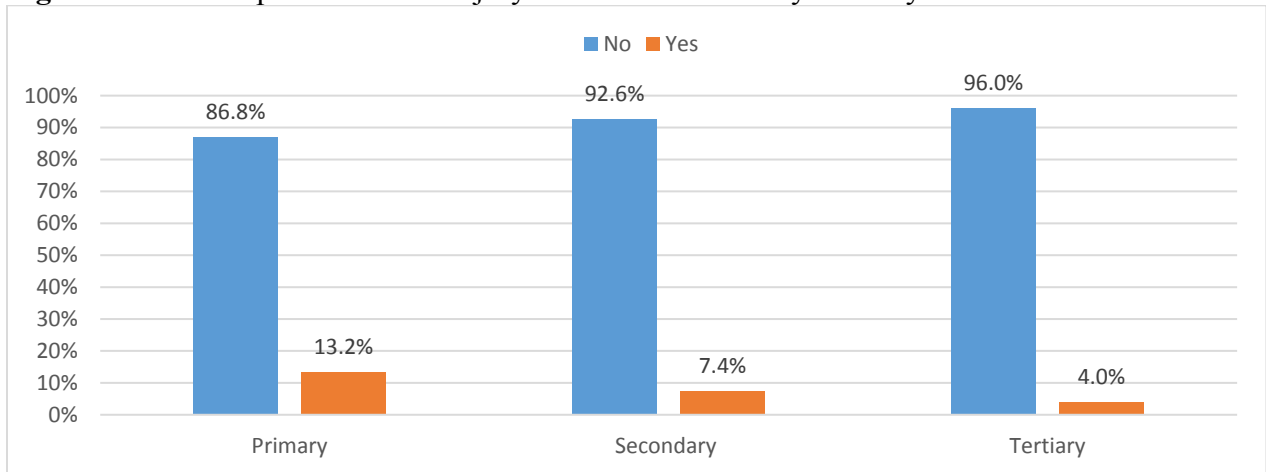
Figure C.5.25. Respondent Work Injury in Past 12 Months by Country and Overall



1 Questions: D50. During the past 12 months, have you suffered any injury or damage of the following kinds, no matter how small, due to an accident at work? Superficial (contusion, external wound, abrasion, laceration); fracture; luxation, sprain or dislocation; amputation; deep (contusion, wound or internal injury); burn, corrosion or bite; poisoning or infection

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

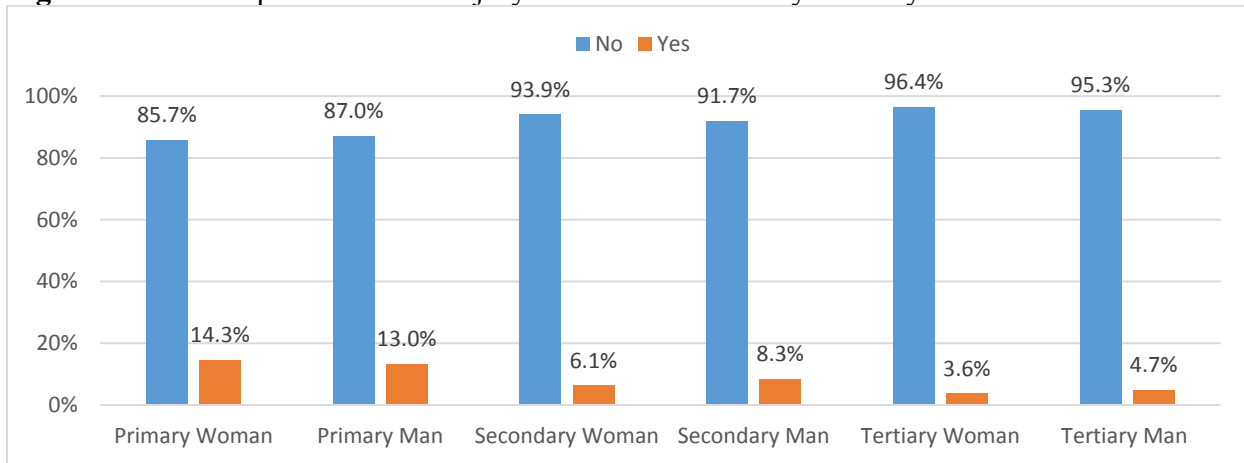
Figure C.5.26. Respondent Work Injury in Past 12 Months by Industry



1 Questions: D50. During the past 12 months, have you suffered any injury or damage of the following kinds, no matter how small, due to an accident at work? Superficial (contusion, external wound, abrasion, laceration); fracture; luxation, sprain or dislocation; amputation; deep (contusion, wound or internal injury); burn, corrosion or bite; poisoning or infection; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

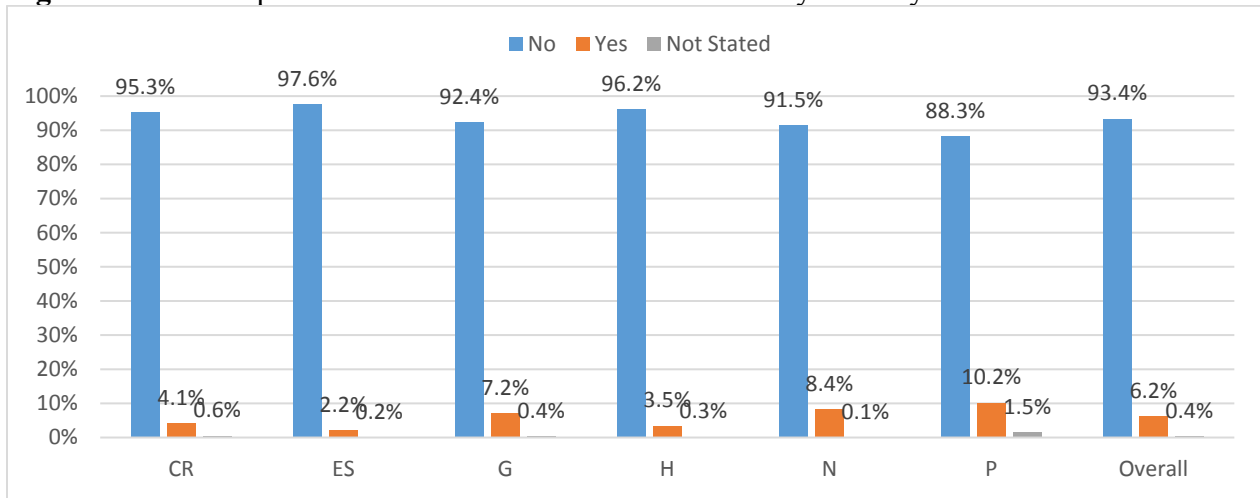
Figure C.5.27. Respondent Work Injury in Past 12 Months by Industry and Sex



1 Questions: D50. During the past 12 months, have you suffered any injury or damage of the following kinds, no matter how small, due to an accident at work? Superficial (contusion, external wound, abrasion, laceration); fracture; luxation, sprain or dislocation; amputation; deep (contusion, wound or internal injury); burn, corrosion or bite; poisoning or infection; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Suffering from a work-related illness in the past 12 months was reported by 6.2% of respondents overall, with the greatest proportion being reported by respondents in Panama (10.2%) and the smallest being reported in El Salvador (2.2%) (Figure C.5.28.). The primary (7.0%) sector respondents reported the greatest proportion of work-related illnesses in the past 12 months (Figure C.5.29.). Across industries, women reported slightly more work-related illnesses than men in the primary (8.5% versus 6.7%) and tertiary (6.1% versus 5.6%) sectors. (Figure C.5.30.).

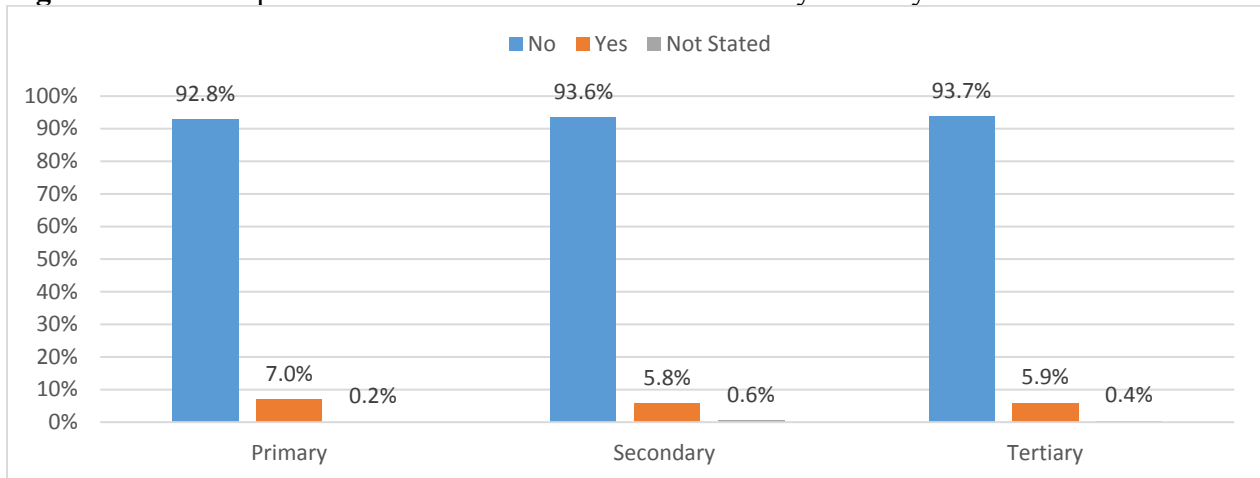
Figure C.5.28. Respondent Work Illness in Past 12 Months by Country and Overall



1 Questions: D59. During the past 12 months, have you suffered one or more illnesses diagnosed by a doctor that have been caused by work?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

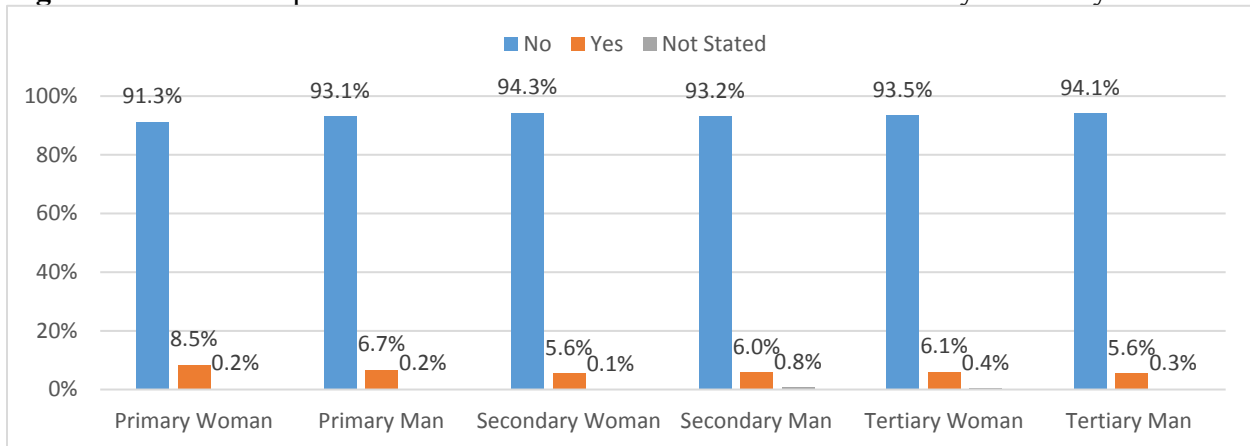
Figure C.5.29. Respondent Work Illness in Past 12 Months by Industry



1 Questions: D59. During the past 12 months, have you suffered one or more illnesses diagnosed by a doctor that have been caused by work?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.5.30. Respondent Work Illness in Past 12 Months by Industry and Sex

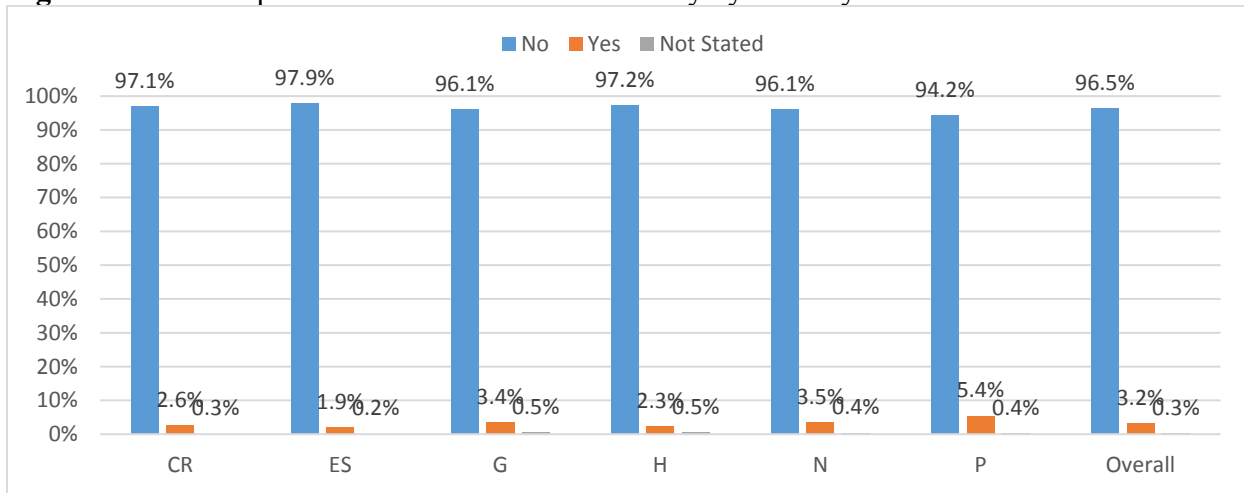


1 Questions: D59. During the past 12 months, have you suffered one or more illnesses diagnosed by a doctor that have been caused by work?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Permanent disability limiting one’s ability to move, walk, use hands, listen, see, or speak was reported by 3.2% overall, with the greatest proportion of permanent disability being reported by Panama respondents (5.4%) and the smallest being reported in El Salvador (1.9%) (Figure C.5.31.). The primary (4.4%) sector respondents reported the greatest proportion of permanent disability (Figure C.5.32.). Small differences in permanent disability proportions among men and women were reported and slightly varied in the secondary and tertiary sectors across industries. However, men (5.0%) reported a greater proportion of permanent disability in the primary sector than women (0.6%) (Figure C.5.33.).

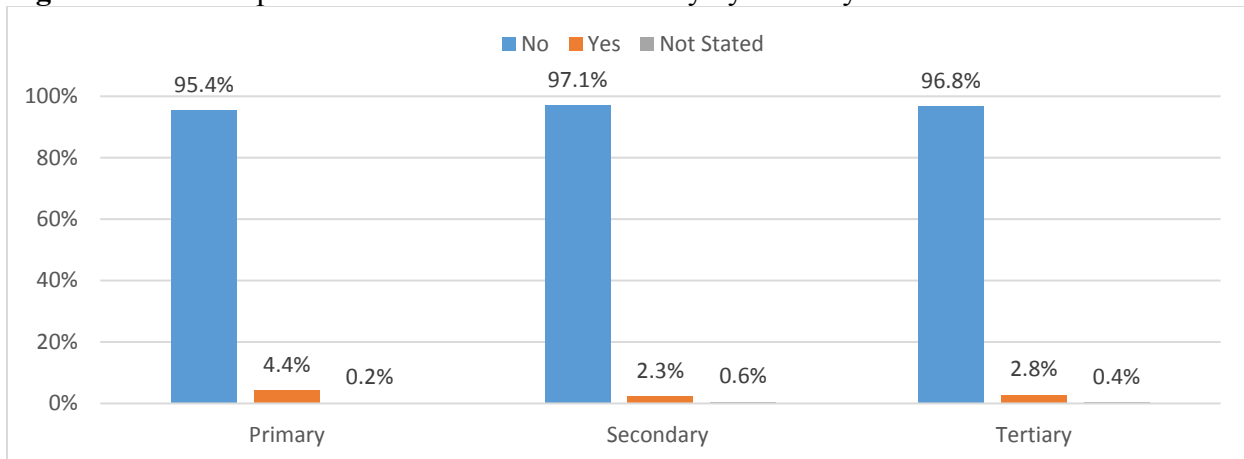
Figure C.5.31. Respondent with Permanent Disability by Country and Overall



1 Questions: D61. Do you have any health problems or permanent disability that limits your ability to move, walk, use your hands, listen, see or speak?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.5.32. Respondent with Permanent Disability by Industry



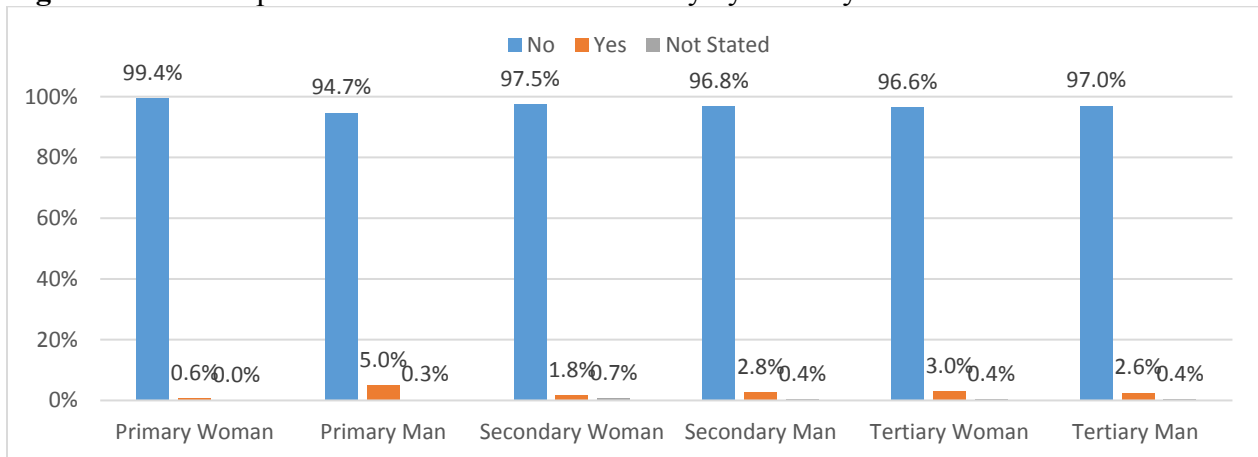
1 Questions: D61. Do you have any health problems or permanent disability that limits your ability to move, walk, use your hands, listen, see or speak?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Insights from the Focus Groups

Two important influences on labor rights are union's existence and the right to strike (Clawson and Clawson 1999). Of the focus groups analyzed, data from Nicaragua stood out for the descriptions of union formation and stories of protest. Nicaraguan FG participants explained that unions in the country have emphasized achieving equal participation of women on their boards of directors. They consider female participation to contribute to achieving meaningful social advances in labor rights and politics. In addition, they stated that strikes are generally considered an accepted tool of protest when problems posed by workers are not resolved in other ways. This differed from FG participants in the other countries, who described reluctance to participate in strikes for fear of being fired or punished. It is important to note, however, that the FG sessions in Nicaragua were conducted before the social unrest related to new labor reforms began in the spring of 2018.

Figure C.5.33. Respondent with Permanent Disability by Industry and Sex



1 Questions: D61. Do you have any health problems or permanent disability that limits your ability to move, walk, use your hands, listen, see or speak?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

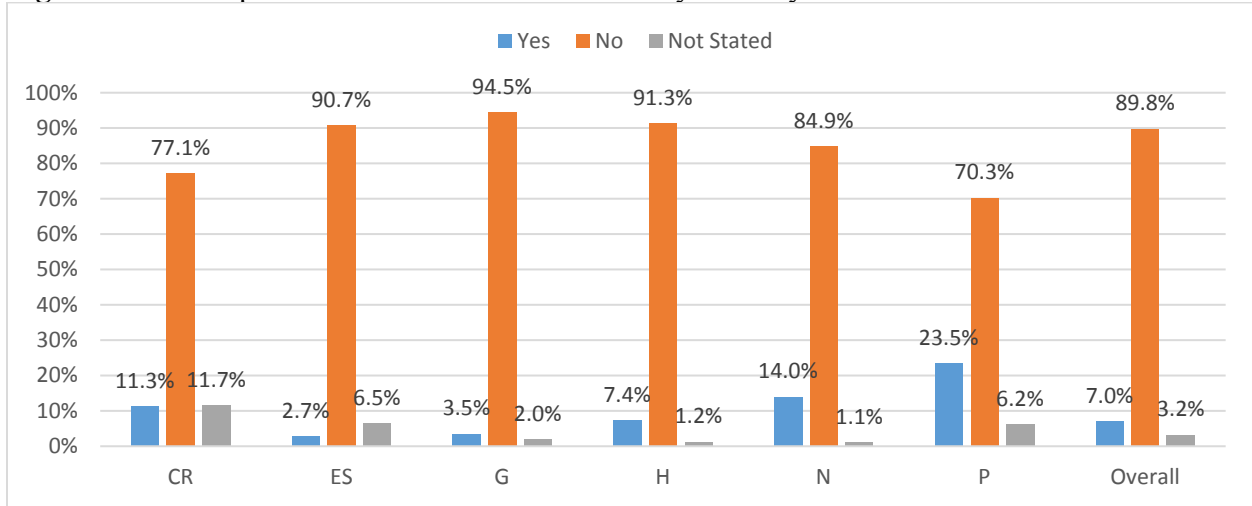
2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

C.6. Resources and Preventive Activities

Having a union at the worksite was reported by 7.0% of respondents overall, with the greatest proportion of respondents reporting having a union at the worksite in Panama (23.5%) and the least in El Salvador (2.7%) (Figure C.6.1.). The secondary (12.9%) sector respondents reported the greatest proportion of unions at the worksite, while the primary (7%) sector respondents

reported the least (Figure C.6.2.). Across industries, men reported having unions at the worksite more than women (Figure C.6.3.).

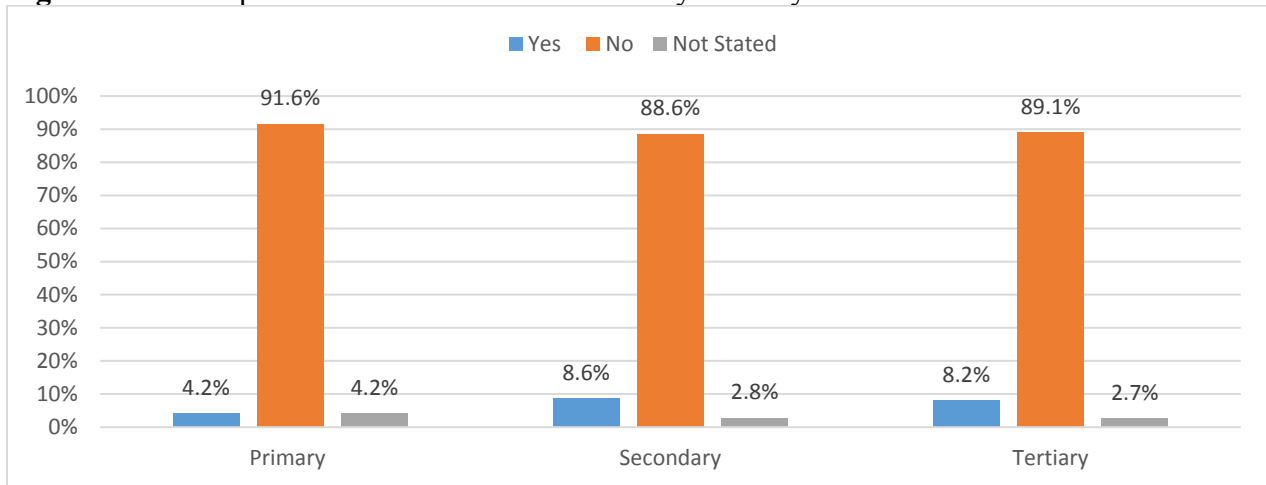
Figure C.6.1. Respondent with Union at Worksite by Country and Overall



1 Questions: E74. Is there a union at your main worksite?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

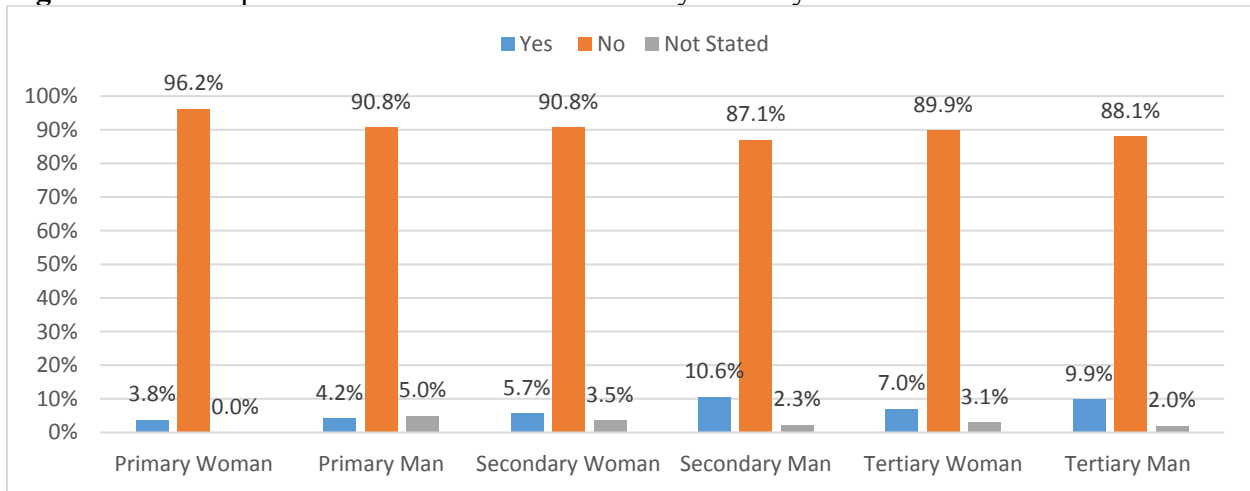
Figure C.6.2. Respondent with Union at Worksite by Industry



1 Questions: E74. Is there a union at your main worksite?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.3. Respondent with Union at Worksite by Industry and Sex

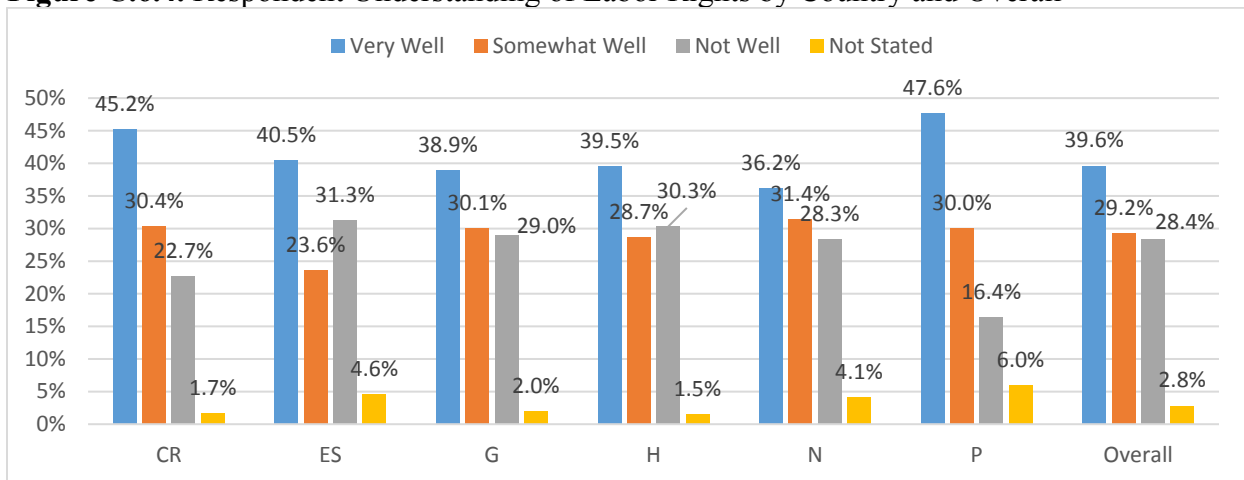


1 Questions: E74. Is there a union at your main worksite?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Poor understanding of labor rights was reported by 28.4% of respondents overall, with the greatest proportion of respondents with poor understanding of labor rights being reported in El Salvador (31.3%) and the least proportion in Panama (16.4%) (Figure C.6.4.). In general, the primary (36.2%) sector respondents reported the greatest proportion of poor understanding (Figure C.6.5.). Women reported greater proportions of poor understanding of labor rights across industries than men (Figure C.6.6.).

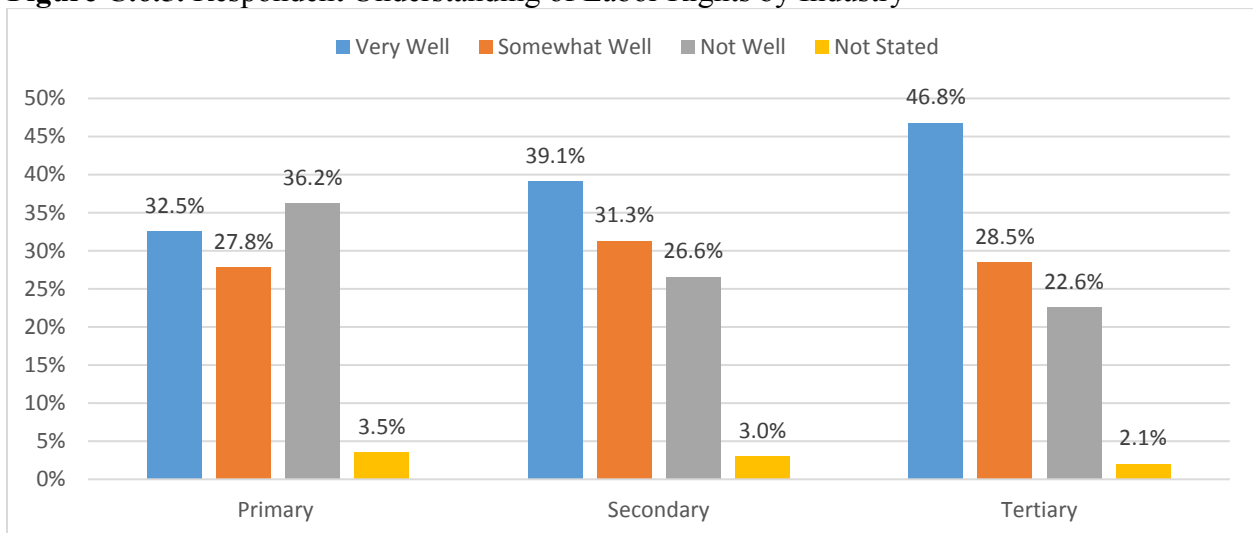
Figure C.6.4. Respondent Understanding of Labor Rights by Country and Overall



1 Questions: E76. How well do you know your labor rights?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.6.5. Respondent Understanding of Labor Rights by Industry



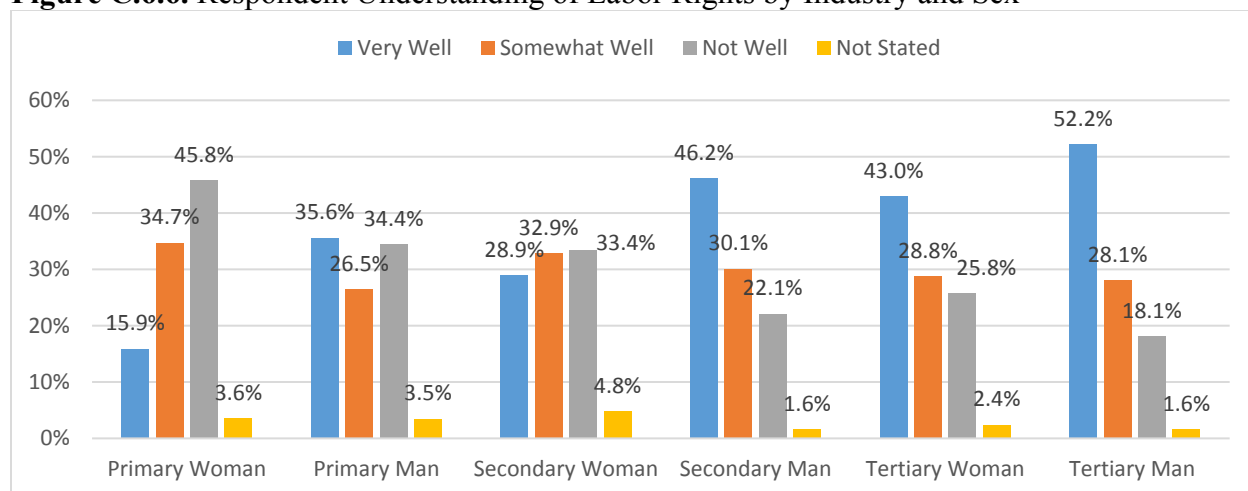
1 Questions: E76. How well do you know your labor rights?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Insights from the Focus Groups

In Panama, FG participants (all women) lacked union training, had mid- to high-education levels, and were focused on improving quality of life and job stability. Three types of employment in the Colon area of Panama reflected the labor dynamics through which the participants in the FGs framed their discussion of labor rights: (a) public sector; (b) private sector within the FTZ; and (c) private sector outside the FTZ. Although Panamanian labor laws apply to all companies, participants explained that the existence of the three types of employment created a complex labor scenario in the Colon area, which required that workers have a general grasp of business laws and regulations as a key component of their work survival strategies.

Figure C.6.6. Respondent Understanding of Labor Rights by Industry and Sex

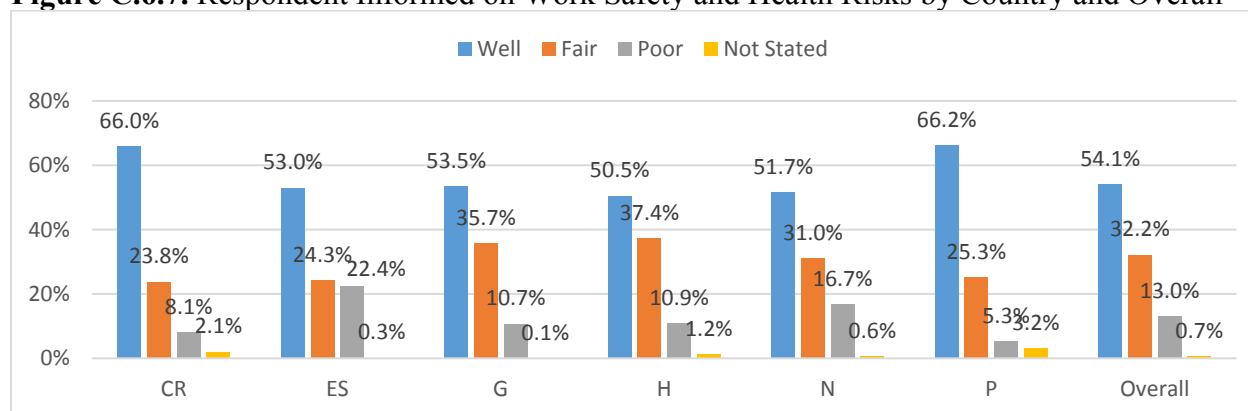


1 Questions: E76. How well do you know your labor rights?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 13.0% of respondents reported being poorly informed on work safety and health risks, with the greatest proportion of being poorly informed being found in El Salvador (22.4%) and the least proportion of being poorly informed being found in Panama (5.3%) (Figure C.6.7.). Those in the primary (17.3%) sector reported being poorly informed more than those in the secondary (9.4%) and tertiary (10.4%) sectors (Figure C.6.8.). Across industries, women reported being poorly informed on work safety and health risks more than men (Figure C.6.9.).

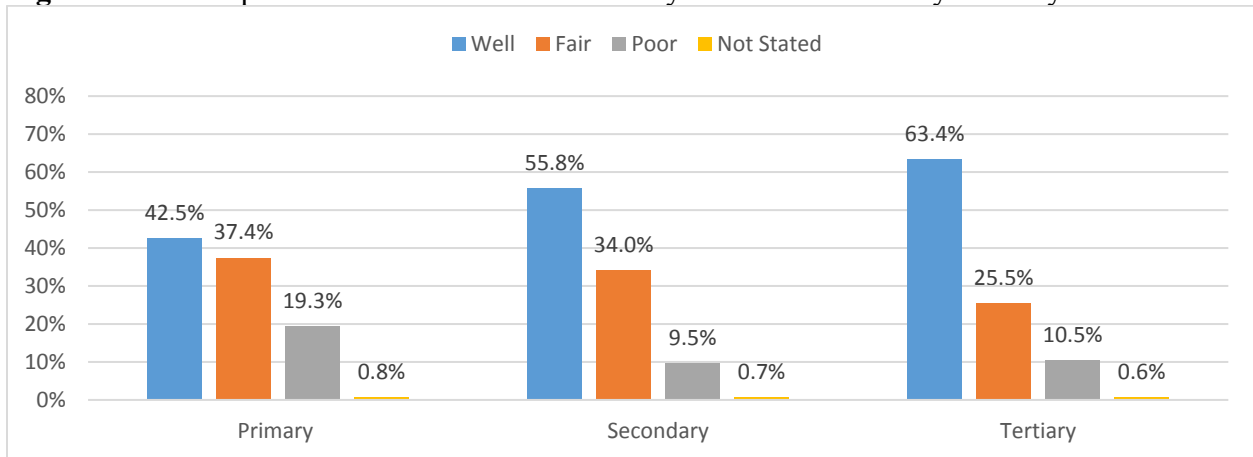
Figure C.6.7. Respondent Informed on Work Safety and Health Risks by Country and Overall



1 Questions: E64. In relation to the risks to your safety and health related to your main job, to what extent would you say you are informed?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

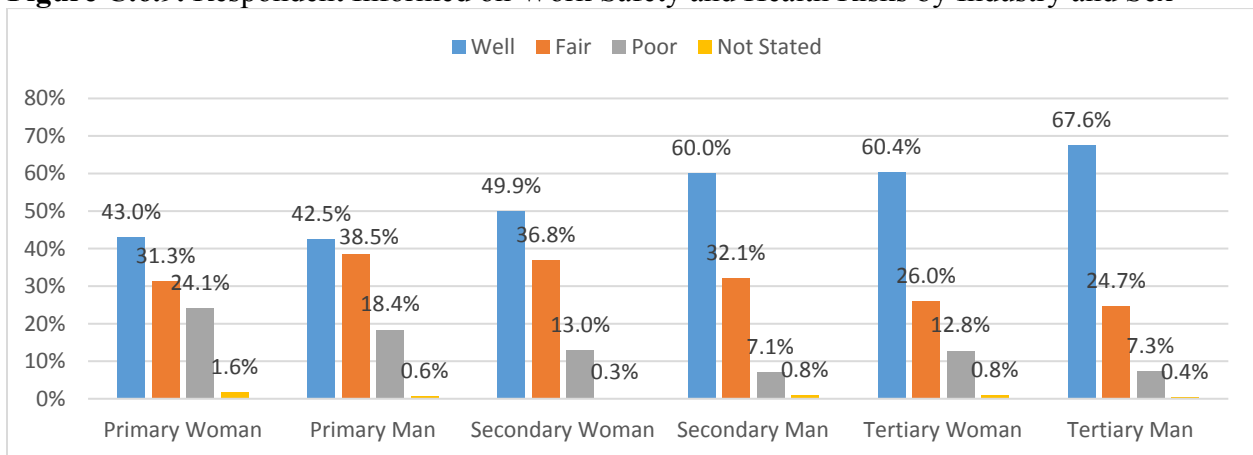
Figure C.6.8. Respondent Informed on Work Safety and Health Risks by Industry



1 Questions: E64. In relation to the risks to your safety and health related to your main job, to what extent would you say you are informed?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.9. Respondent Informed on Work Safety and Health Risks by Industry and Sex

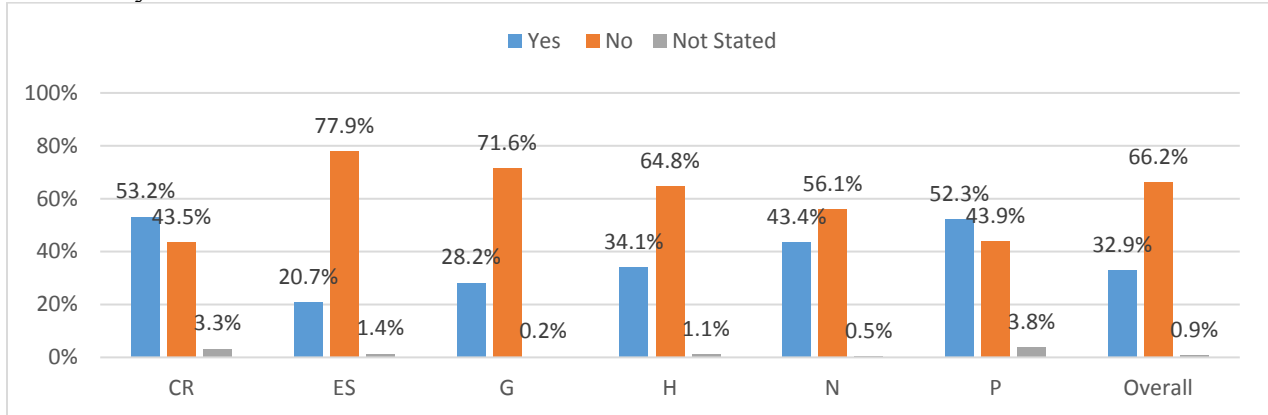


1 Questions: E64. In relation to the risks to your safety and health related to your main job, to what extent would you say you are informed?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Only 32.9% of respondents reported having personal protective equipment (PPE) required for performing their job tasks (Figure C.6.10.). Costa Rican respondents (53.2%) reported the greatest proportion of having PPE compared to El Salvadoran respondents (20.7%), who reported the least (Figure C.6.10.). Those in the tertiary (21.7%) sector reported the least proportion of having PPE, and women reported having PPE less than men across all industries (Figure C.6.11., Figure C.6.12.).

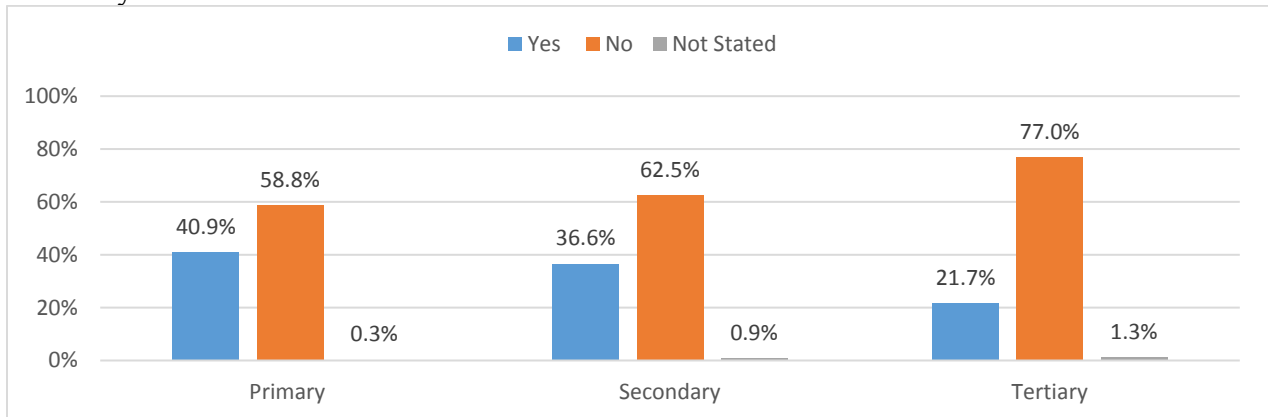
Figure C.6.10. Respondent Has Personal Protective Equipment Required for Job Tasks by Country and Overall



1 Questions: E65. In your main job, do you have Personal Protective Equipment (e.g. helmet, gloves, boots) required for your tasks?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

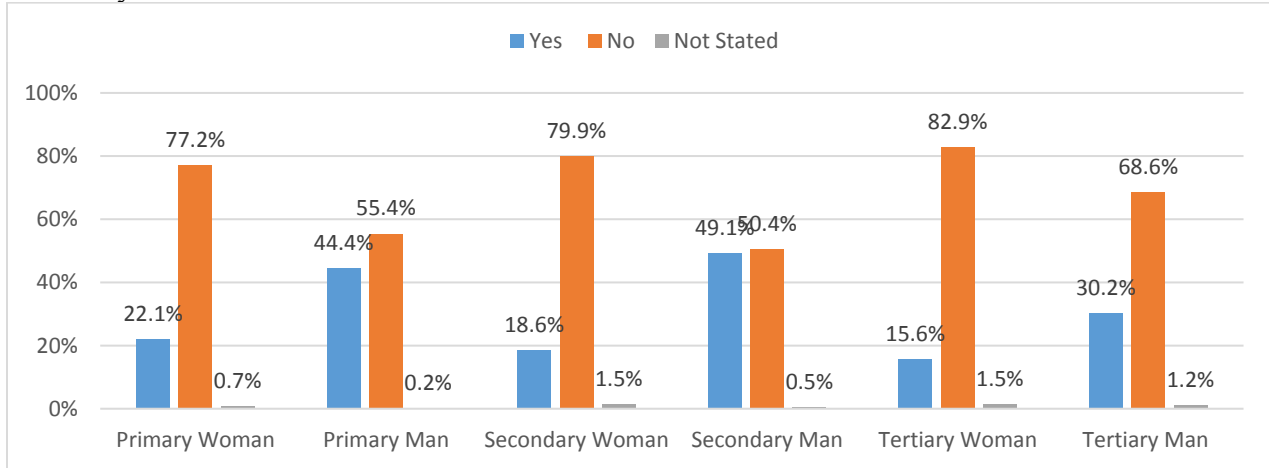
Figure C.6.11. Respondent Has Personal Protective Equipment Required for Job Tasks by Industry



1 Questions: E65. In your main job, do you have Personal Protective Equipment (e.g. helmet, gloves, boots) required for your tasks?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.12. Respondent Has Personal Protective Equipment Required for Job Tasks by Industry and Sex

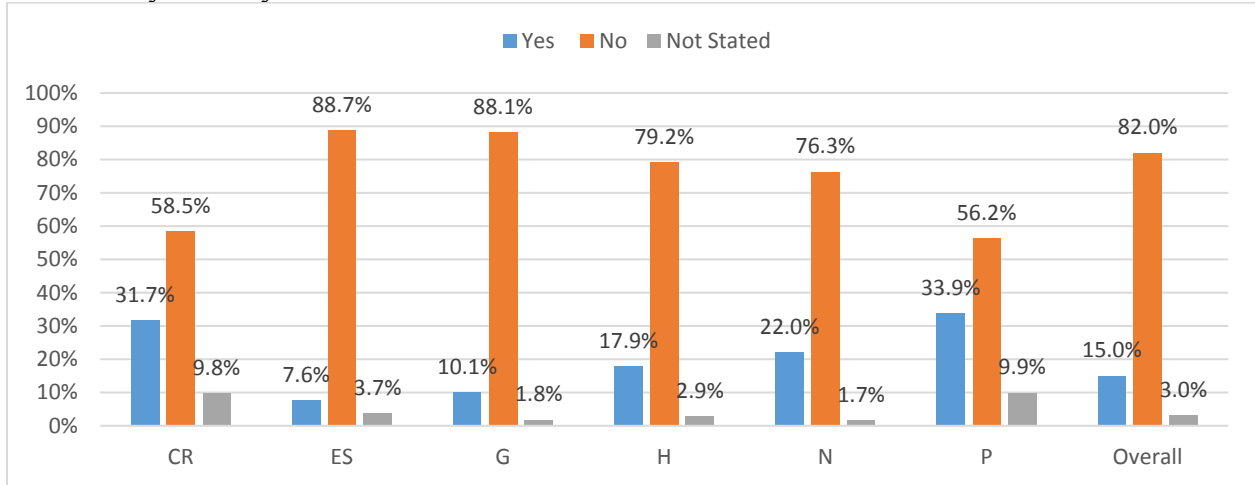


1 Questions: E65. In your main job, do you have Personal Protective Equipment (e.g. helmet, gloves, boots) required for your tasks?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, only 15% of respondents reported health evaluations, measurements, or controls of possible health risks taking place at work over the last 12 months, with the greatest proportion of health evaluations taking place at work according to respondents in Panama (33.9%) and the least proportion in El Salvador (7.6%) (Figure C.6.13). Health evaluations, measurements, and controls were reportedly offered more among the secondary (18.9%) and tertiary (15.4%) sector than in the primary sector (10.5%) (Figure C.6.14.). Across industries, men (22.6%, 18.5%) in the secondary and tertiary sectors reported working in environments where health evaluations were offered more than women (13.7%, 13.2%), respectively (Figure C.6.15).

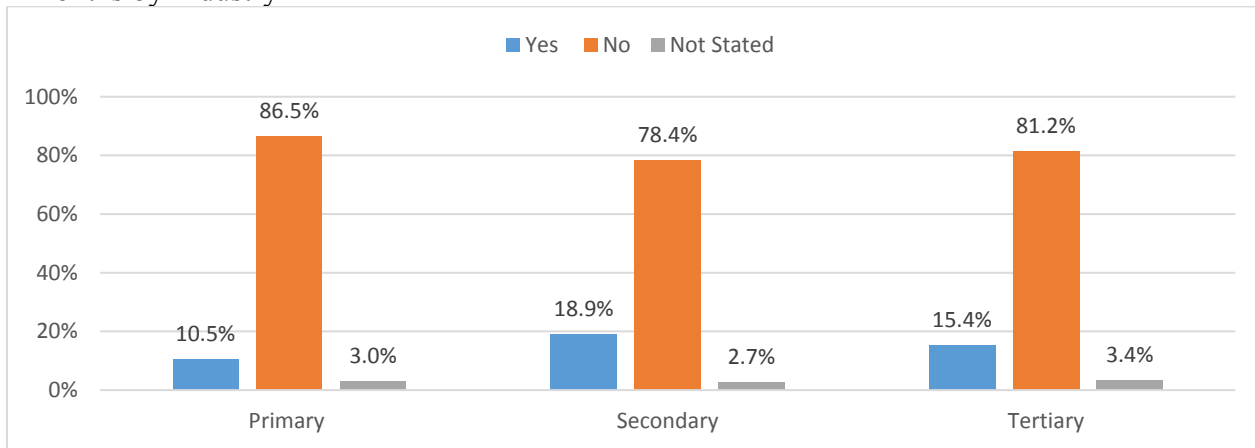
Figure C.6.13. Respondent Offered Health Evaluations at Work for Health Risks in Last 12 Months by Country and Overall



1 Questions: E66. In your main job, do you know if evaluations, measurements or controls of the possible risks to your health have been carried out in the last 12 months?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

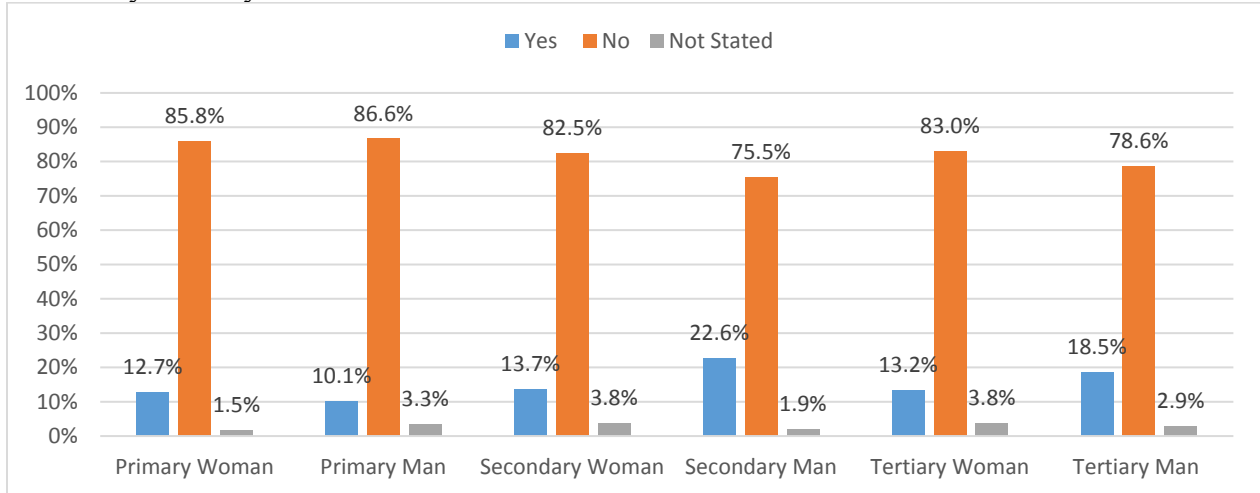
Figure C.6.14. Respondent Offered Health Evaluations at Work for Health Risks in Last 12 Months by Industry



1 Questions: E66. In your main job, do you know if evaluations, measurements or controls of the possible risks to your health have been carried out in the last 12 months?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.15. Respondent Offered Health Evaluations at Work for Health Risks in Last 12 Months by Industry and Sex

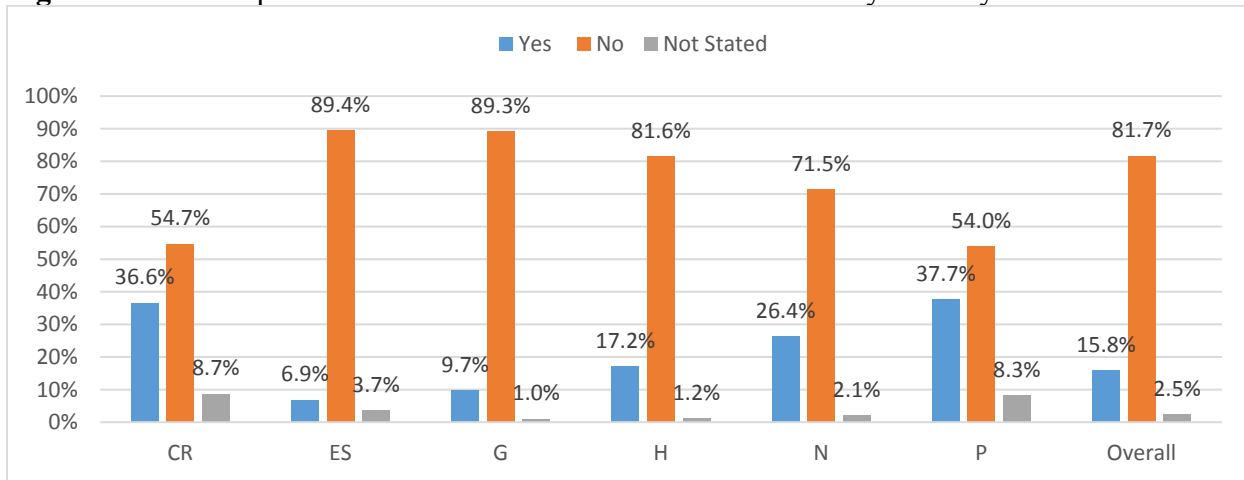


1 Questions: E66. In your main job, do you know if evaluations, measurements or controls of the possible risks to your health have been carried out in the last 12 months?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Services offered at work for the prevention of occupational risks and the promotion of general health were reported by 15.8% of respondents overall, with the greatest proportion of work prevention services reported by Panama respondents (37.7%) and the lowest proportion in El Salvador (6.9%) (Figure C.6.16.). Prevention services were reportedly offered to respondents more in the secondary (19.5%) and tertiary (18.4%) sectors than in the primary (9.3%) sector (Figure C.6.17.). Across industries, men reportedly received the offers of work prevention services more than women (Figure C.6.18.).

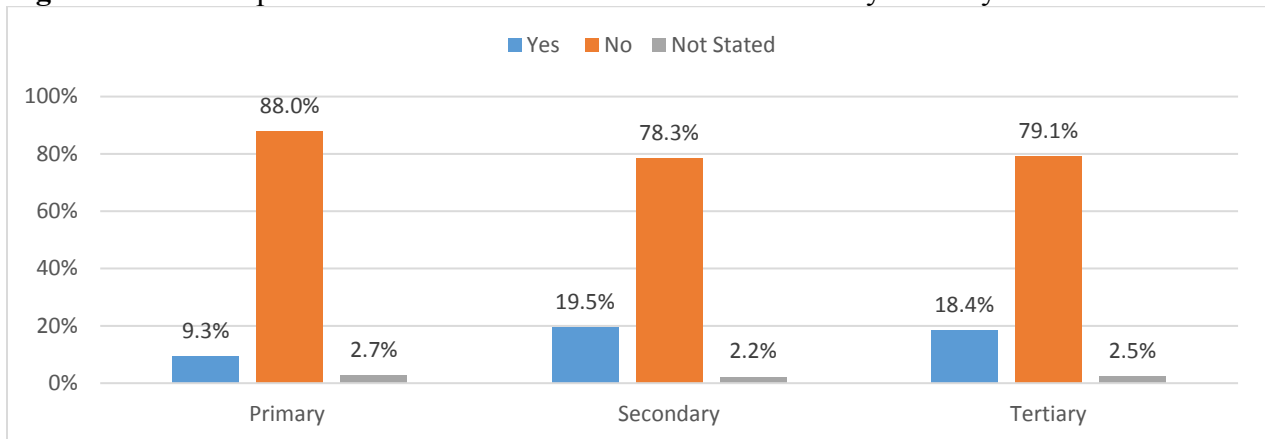
Figure C.6.16. Respondent Offered Prevention Services at Work by Country and Overall



1 Questions: E67. In your main job, do you have access to a service for the prevention of occupational risks or general health?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

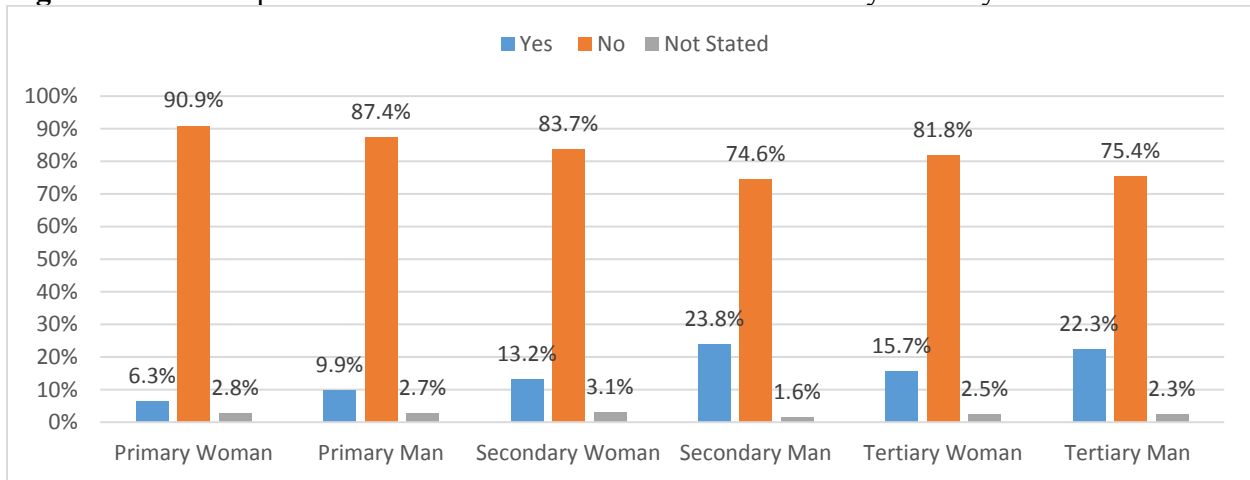
Figure C.6.17. Respondent Offered Prevention Services at Work by Industry



1 Questions: E67. In your main job, do you have access to a service for the prevention of occupational risks or general health?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.18. Respondent Offered Prevention Services at Work by Industry and Sex

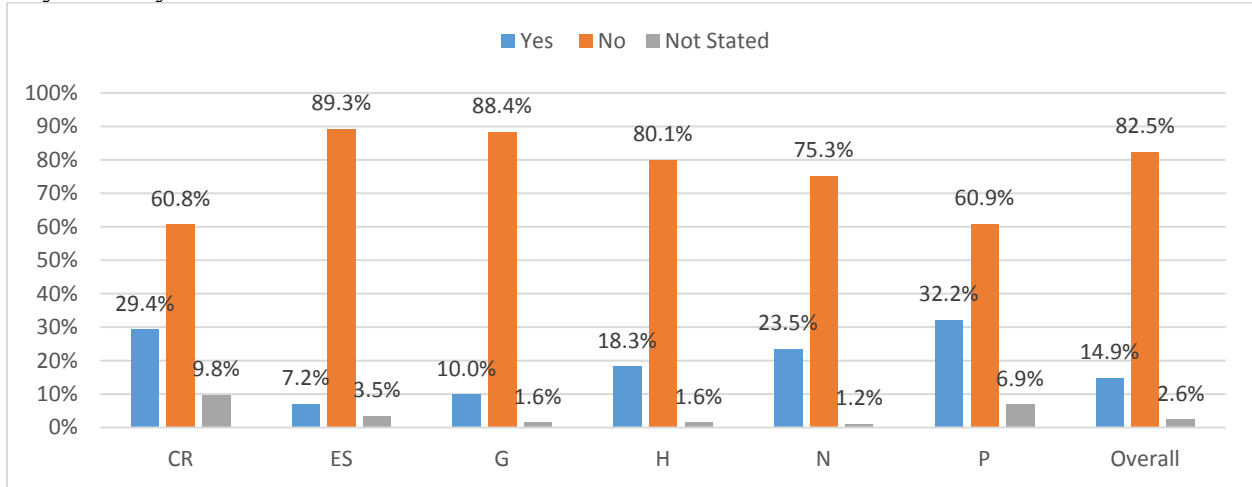


1 Questions: E67. In your main job, do you have access to a service for the prevention of occupational risks or general health?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 14.9% of respondents reported having a delegate, commission, or committee on safety and health or hygiene at their main work center, again with the greatest proportion of respondents who have a work safety commission reported in Panama (32.2%) and the lowest proportion in El Salvador (7.2%) (Figure C.6.19.). Commissions for work safety were reported in the secondary (18.2%) and tertiary (16.3%) sectors more than in the primary (10.1%) sector (Figure C.6.20.). Across industries, men reported having a commission for work safety and health at their main work center more than women (Figure C.6.21.).

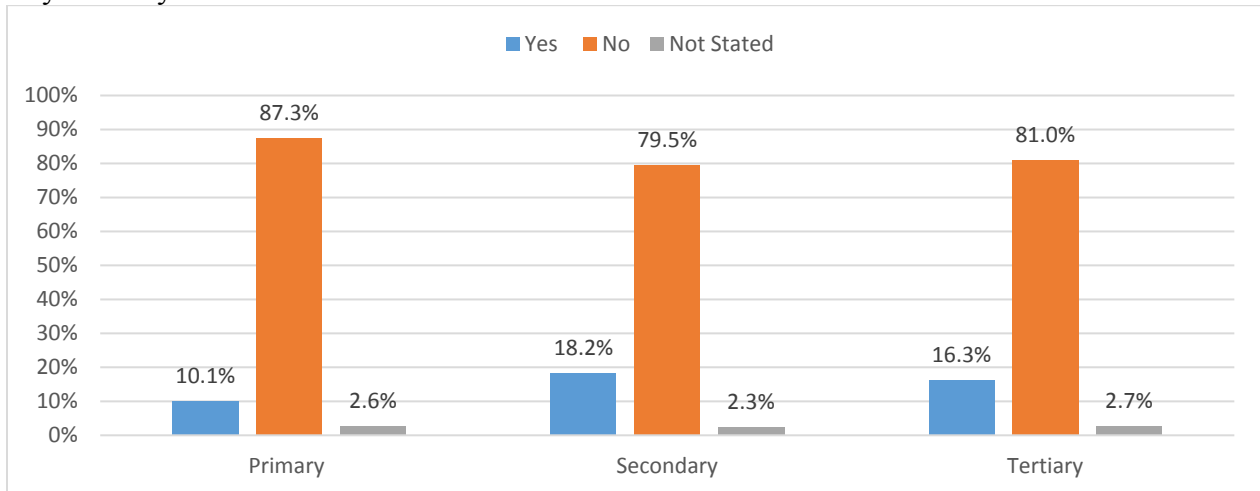
Figure C.6.19. Respondent with Commission for Work Safety and Health at Main Work Center by Country and Overall



1 Questions: E68. In your main work center, is there a delegate, commission or committee on safety and health or hygiene at work?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

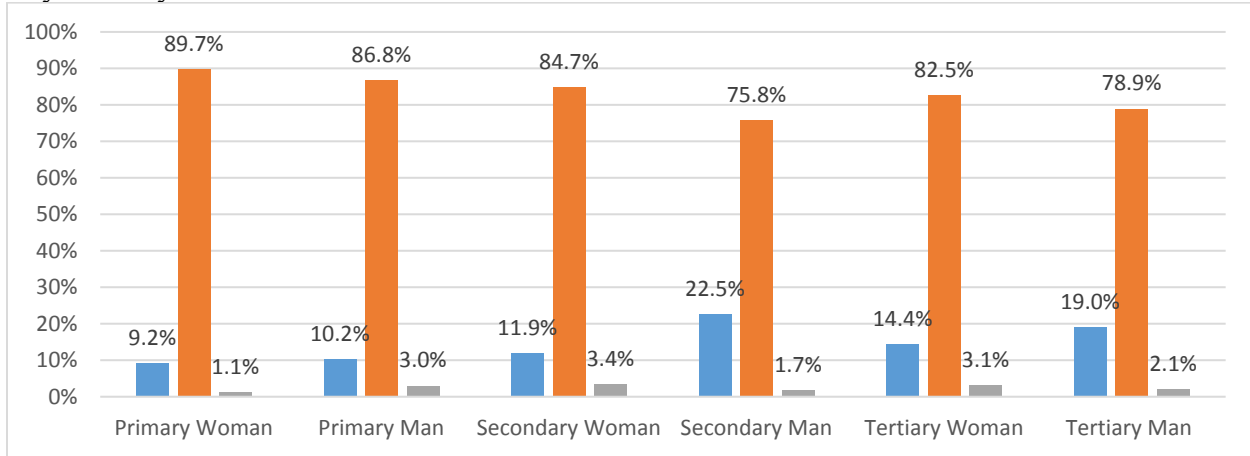
Figure C.6.20. Respondent with Commission for Work Safety and Health at Main Work Center by Industry



1 Questions: E68. In your main work center, is there a delegate, commission or committee on safety and health or hygiene at work?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.21. Respondent with Commission for Work Safety and Health at Main Work Center by Industry and Sex

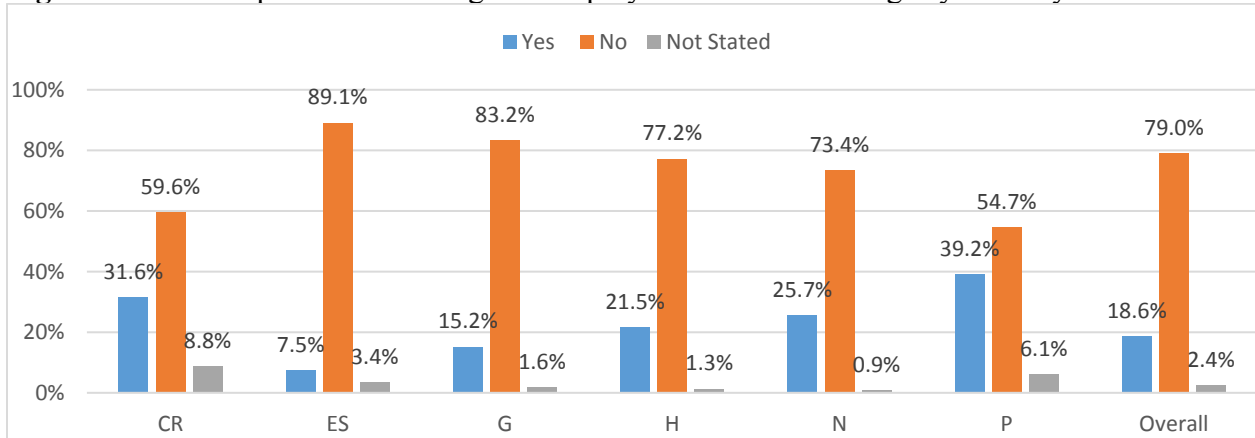


1 Questions: E68. In your main work center, is there a delegate, commission or committee on safety and health or hygiene at work?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 18.6% of respondents reported having regular meetings in which employees were able to express their views on what was happening in the company, business, or organization concerning health and safety at work. Again, the greatest proportion of regular employee concern meetings was reported in Panama (39.2%) and the lowest proportion in El Salvador (7.5%) (Figure C.6.22.). According to participants, regular employee concern meetings were held in the secondary (23.7%) and tertiary (20.7%) sectors more than in the primary (11.2%) sector (Figure C.6.23.). Across industries, men generally reported being offered regular employee concern meetings more than women, except for the primary sector (Figure C.6.24.).

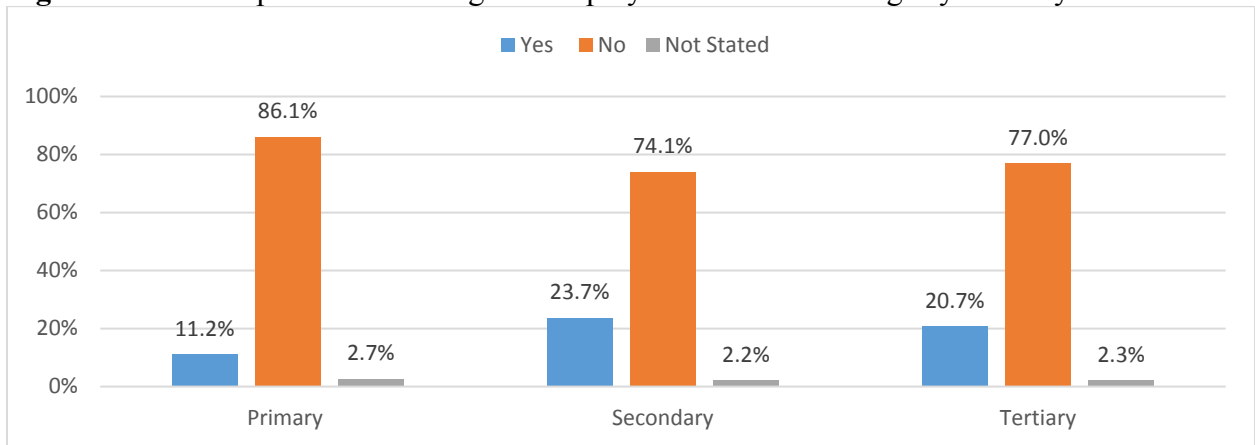
Figure C.6.22. Respondent with Regular Employee Concern Meetings by Country and Overall



1 Questions: E69. In your main center, are there regular meetings in which employees can express their views on what is happening in the company, business, or organization in relation to health and safety at work?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

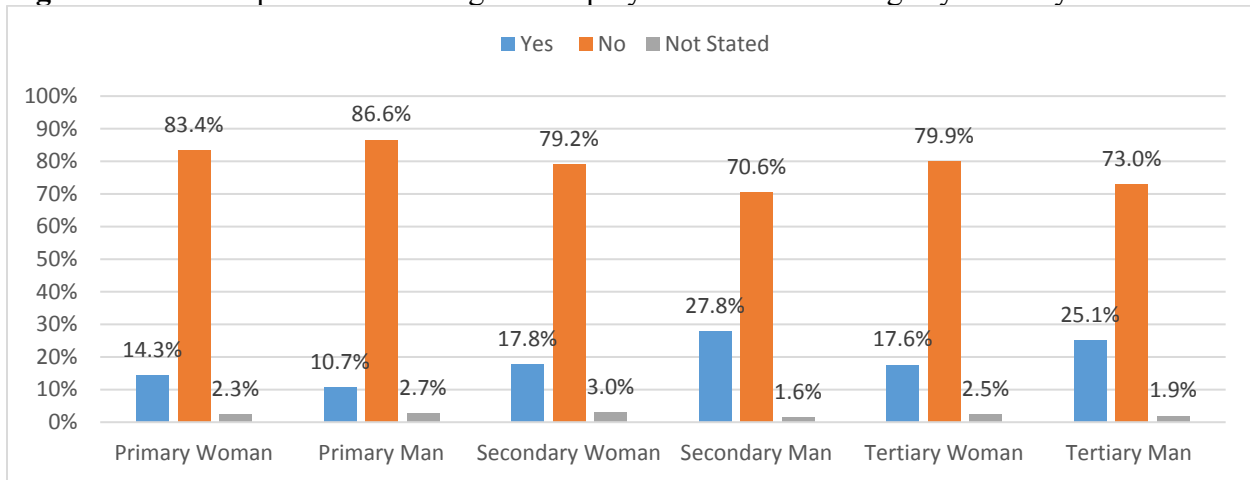
Figure C.6.23. Respondent with Regular Employee Concern Meetings by Industry



1 Questions: E69. In your main center, are there regular meetings in which employees can express their views on what is happening in the company, business, or organization in relation to health and safety at work?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.6.24. Respondent with Regular Employee Concern Meetings by Industry and Sex

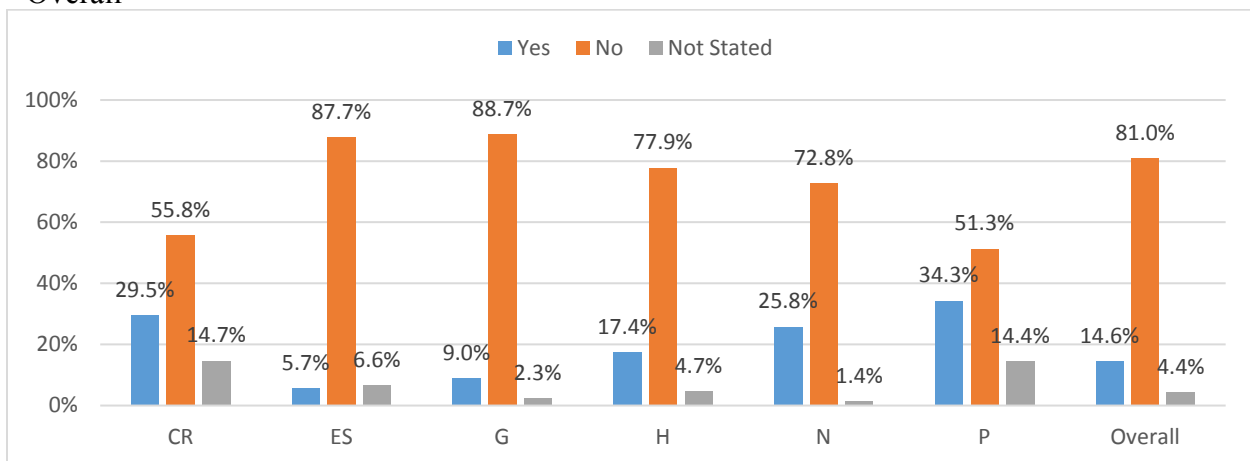


1 Questions: E69. In your main center, are there regular meetings in which employees can express their views on what is happening in the company, business, or organization in relation to health and safety at work?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 14.6% of respondents reported having a worksite labor inspection performed in the last 12 months. Again, the greatest proportion of worksite labor inspections was reported in Panama (34.3%) and the lowest proportion in El Salvador (5.7%) (Figure C.6.25.). According to participants, worksite labor inspections were held in the secondary (18.3%) and tertiary (15.7%) sectors more than in the primary (9.7%) sector (Figure C.6.26.).

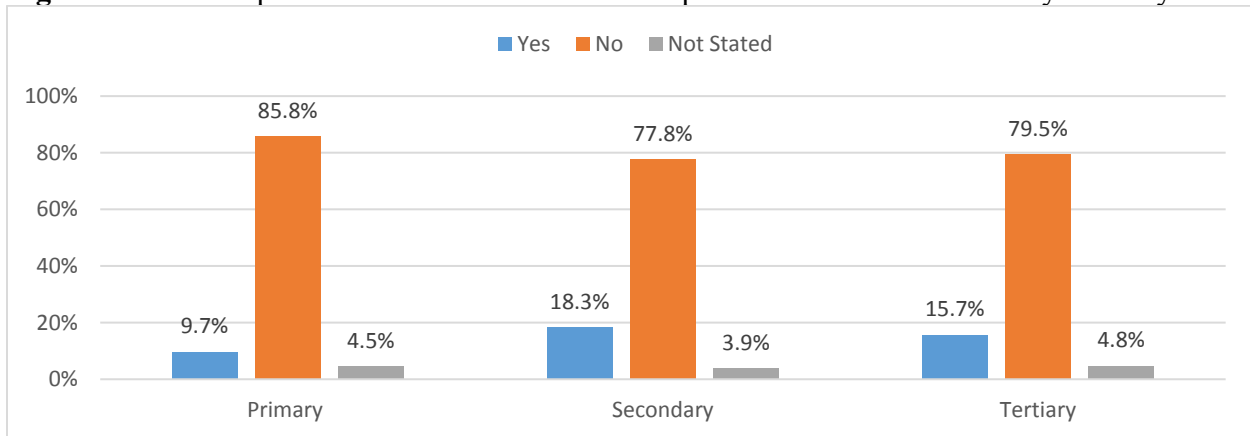
Figure C.6.25. Respondent with Worksite Labor Inspection in Last 12 Months by Country and Overall



1 Questions: E72. Are you aware of whether or not in the last 12 months a labor inspection has been conducted at your main worksite?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

Figure C.6.26. Respondent with Worksite Labor Inspection in Last 12 Months by Industry

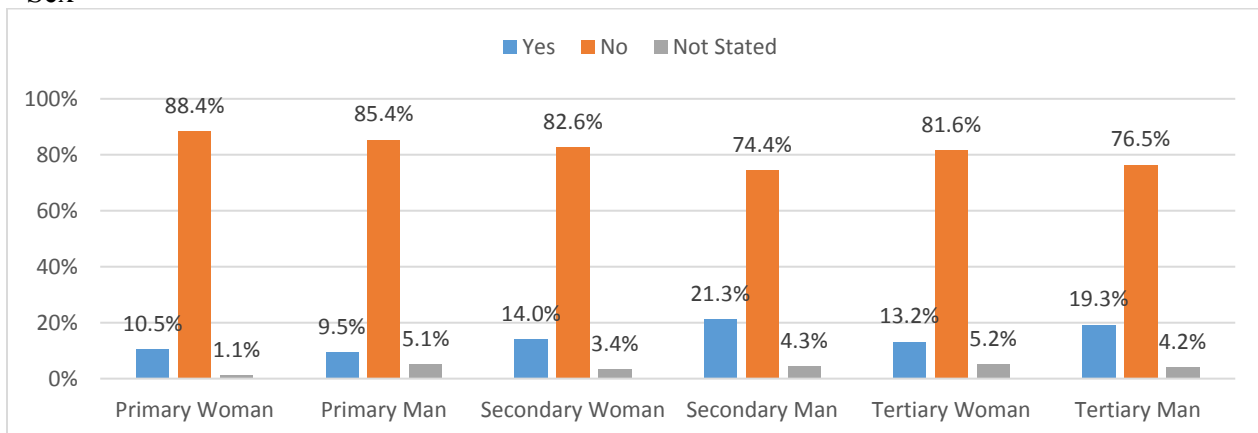


1 Questions: E72. Are you aware of whether or not in the last 12 months a labor inspection has been conducted at your main worksite?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Across industries, men again reported having worksite labor inspections more than women, except for the primary sector (Figure C.6.27.).

Figure C.6.27. Respondent with Worksite Labor Inspection in Last 12 Months by Industry and Sex



1 Questions: E72. Are you aware of whether or not in the last 12 months a labor inspection has been conducted at your main worksite?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

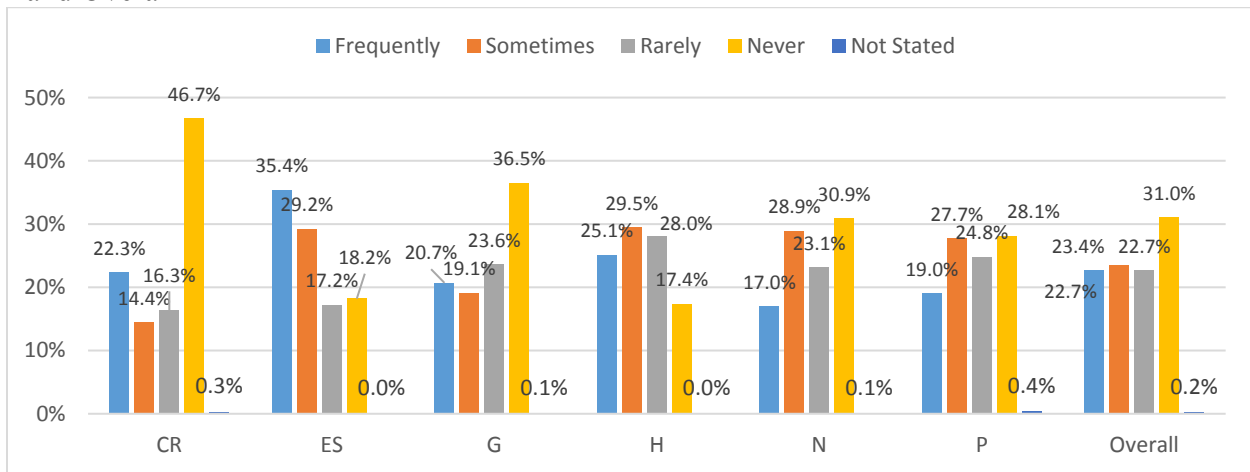
2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

C.7. Putative Risk Factors of Chronic Kidney Disease

In general, 22.7% of respondents reported being frequently exposed to high temperatures at work that made them feel uncomfortable over the last 12 months, with the greatest proportion

frequently exposed in El Salvador (35.4%) and the lowest proportion in Nicaragua (17%) (Figure C.7.1.). The primary (30.1%) sector respondents reported being frequently exposed to high temperatures the most in contrast to the secondary (22.1%) and tertiary (16.3%) sectors (Figure C.7.2.). Across industries, men reported being frequently exposed to high temperatures more than women (Figure C.7.3.).

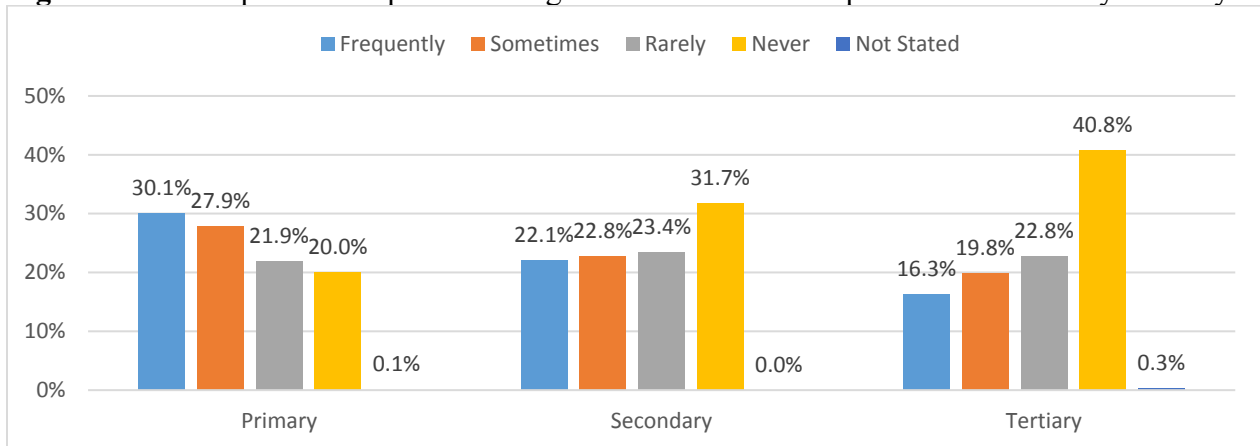
Figure C.7.1. Respondent Exposure to High Uncomfortable Temperatures at Work by Country and Overall



1 Questions: G96. Over the last 12 months, how often were you exposed, in your job, to high temperatures that made you feel uncomfortable?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

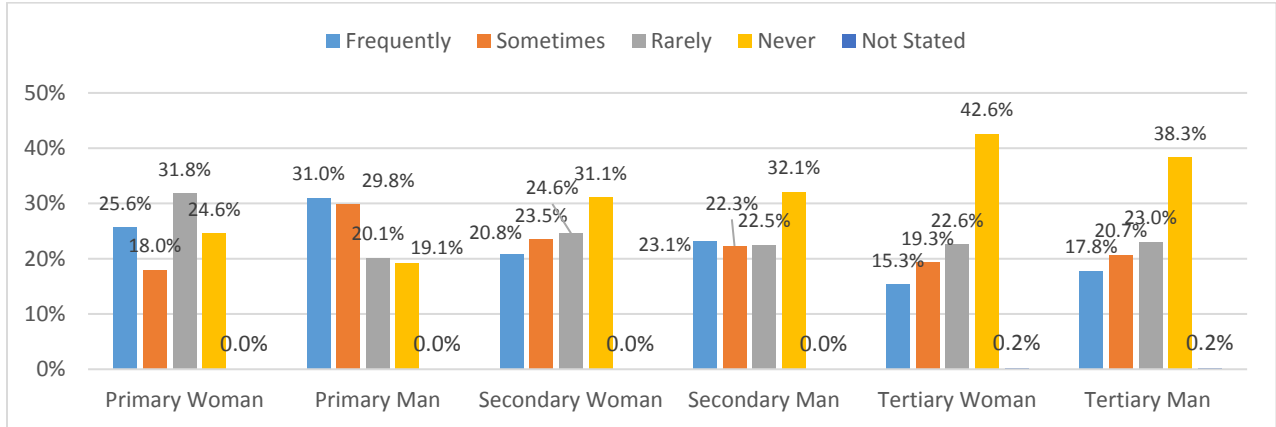
Figure C.7.2. Respondent Exposure to High Uncomfortable Temperatures at Work by Industry



1 Questions: G96. Over the last 12 months, how often were you exposed, in your job, to high temperatures that made you feel uncomfortable?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

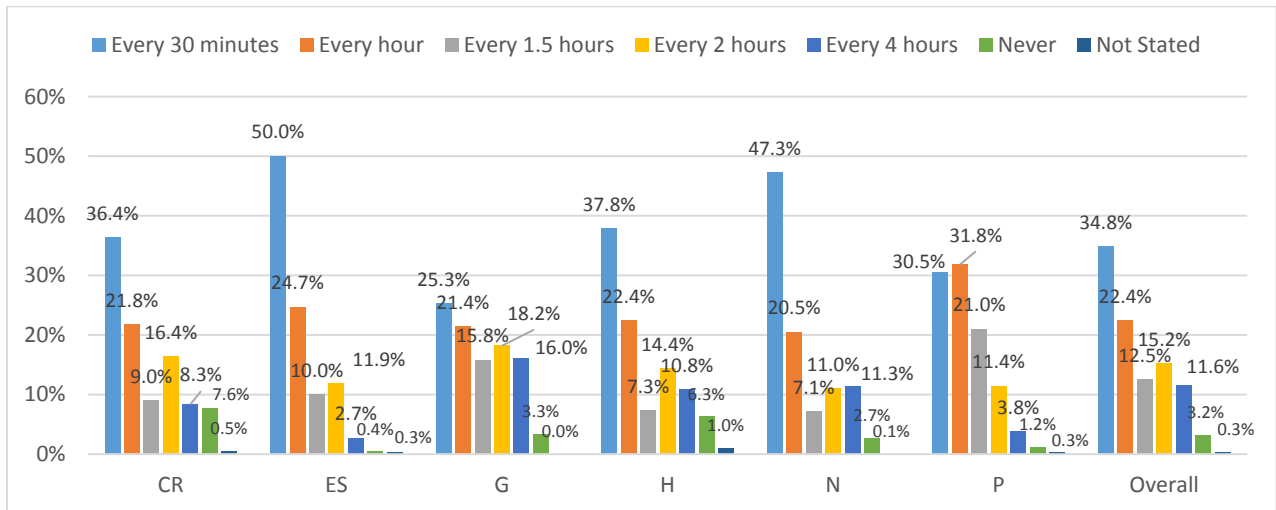
Figure C.7.3. Respondent Exposure to High Uncomfortable Temperatures at Work by Industry and Sex



1 Questions: G96. Over the last 12 months, how often were you exposed, in your job, to high temperatures that made you feel uncomfortable?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

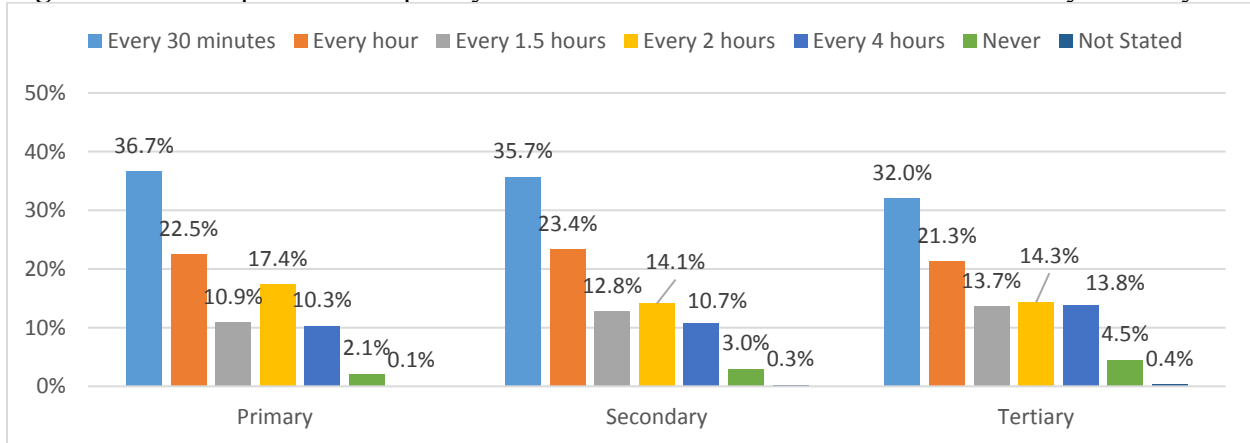
Overall, water breaks were taken by respondents at least every 30 minutes in 34.8%, every hour in 22.4%, every 90 minutes in 12.5%, every two hours in 15.2%, every four hours in 11.6%, and never in 3.2% (Figure C.7.4.). Water breaks were taken similarly across industries, with slightly greater frequency in the primary sector (Figure C.7.5.). No substantial differences were reported across industries by sex, except for the primary sector, where men generally reported being offered more frequent water breaks than women (Figure C.7.6.).

Figure C.7.4. Respondent Frequency of Water Breaks at Work in the Last Week by Country and Overall



1 Questions: G98. How often did you drink water at your job last week?
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

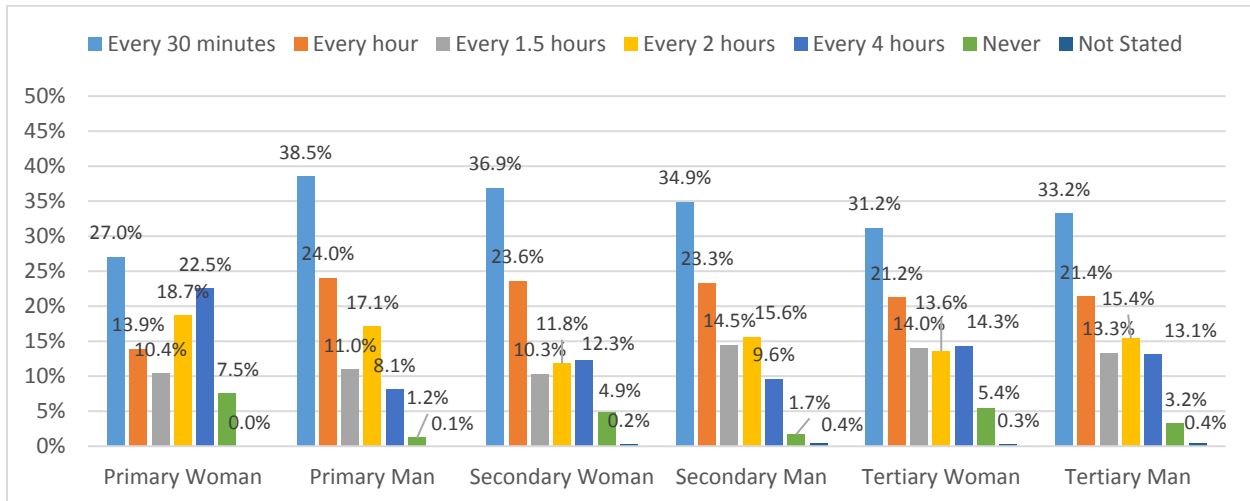
Figure C.7.5. Respondent Frequency of Water Breaks at Work in the Last Week by Industry



1 Questions: G98. How often did you drink water at your job last week?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.7.6. Respondent Frequency of Water Breaks at Work in the Last Week by Industry and Sex



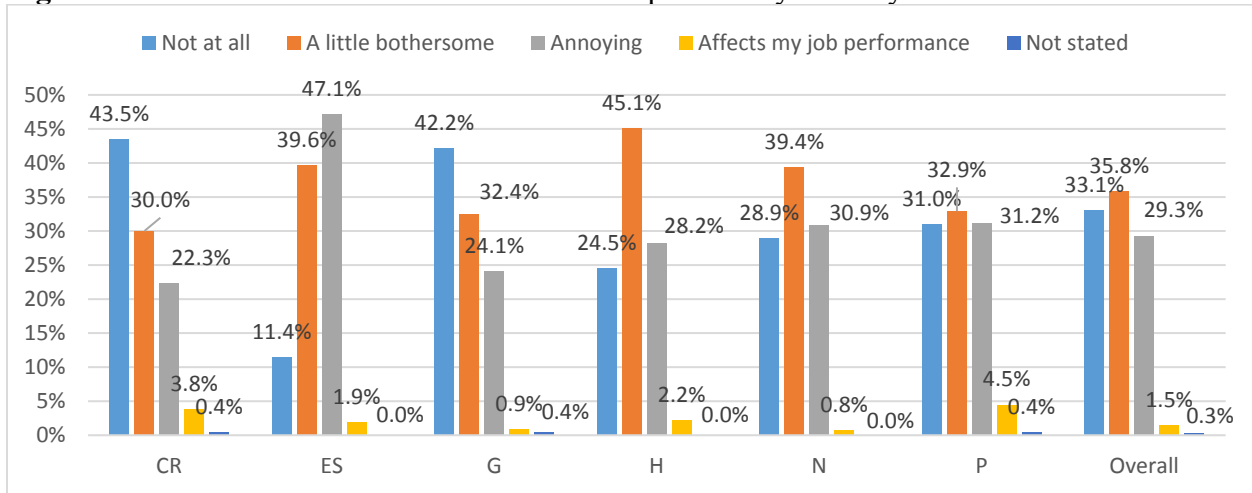
1 Questions: G98. How often did you drink water at your job last week?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Heat at work was considered annoying or affecting job performance by 30.8% of respondents overall. The greatest proportion of bothersome heat at work was reported in El Salvador (49%) and the least in Guatemala (25%) (Figure C.7.7.). Heat at work was also most annoying or affecting job performance among respondents in the primary (42.1%) sector and the least in the tertiary

(22.2%) sector (Figure C.7.8.). Across industries, heat at work was generally more annoying or affecting job performance among men than women, except for workers in the secondary sector (Figure C.7.9.).

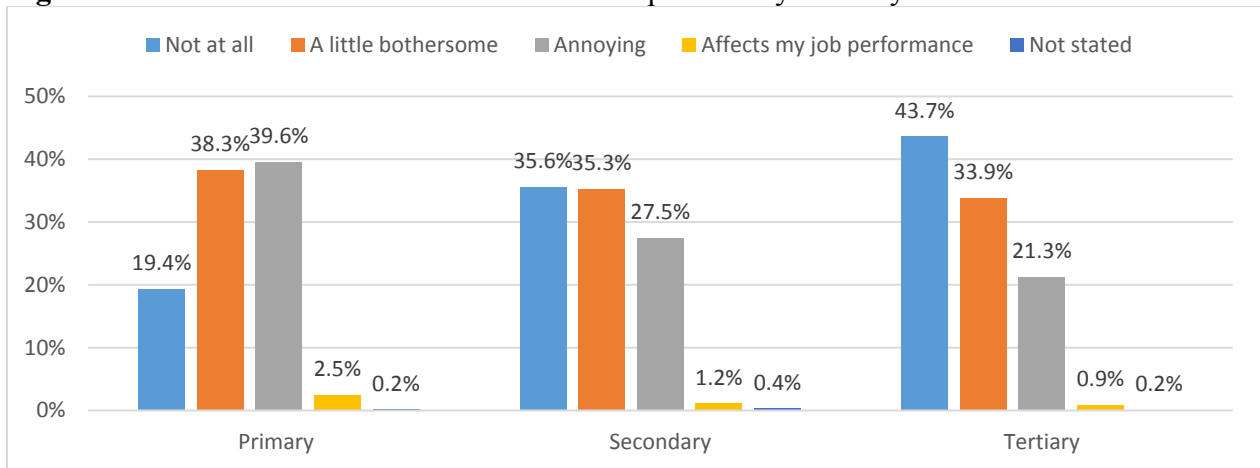
Figure C.7.7. Heat at Work Is Bothersome to Respondent by Country and Overall



1 Questions: G101. How much does the heat at your work bother you?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

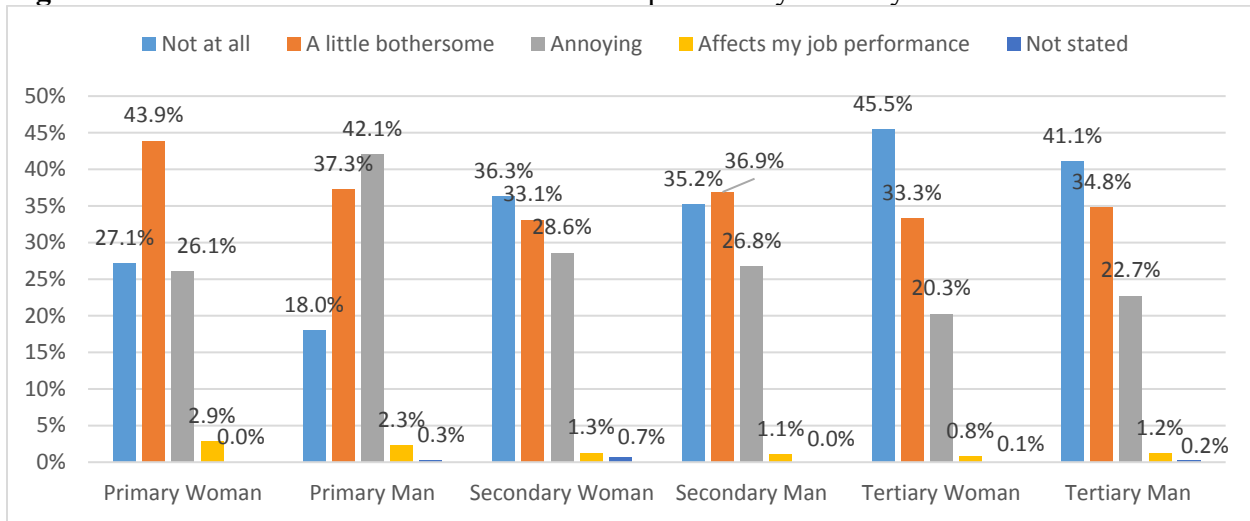
Figure C.7.8. Heat at Work Is Bothersome to Respondent by Industry



1 Questions: G101. How much does the heat at your work bother you?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

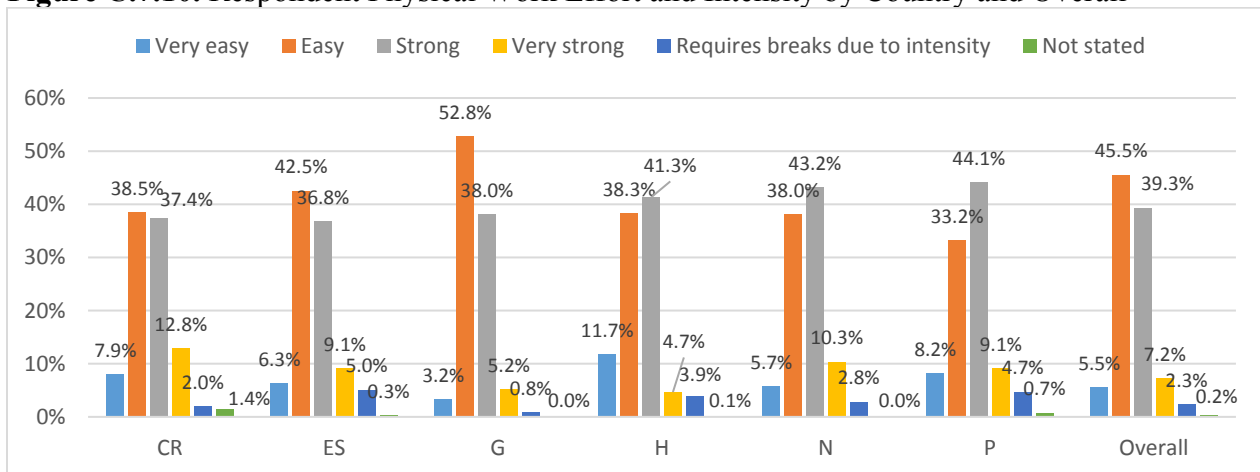
Figure C.7.9. Heat at Work Is Bothersome to Respondent by Industry and Sex



1 Questions: G101. How much does the heat at your work bother you?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

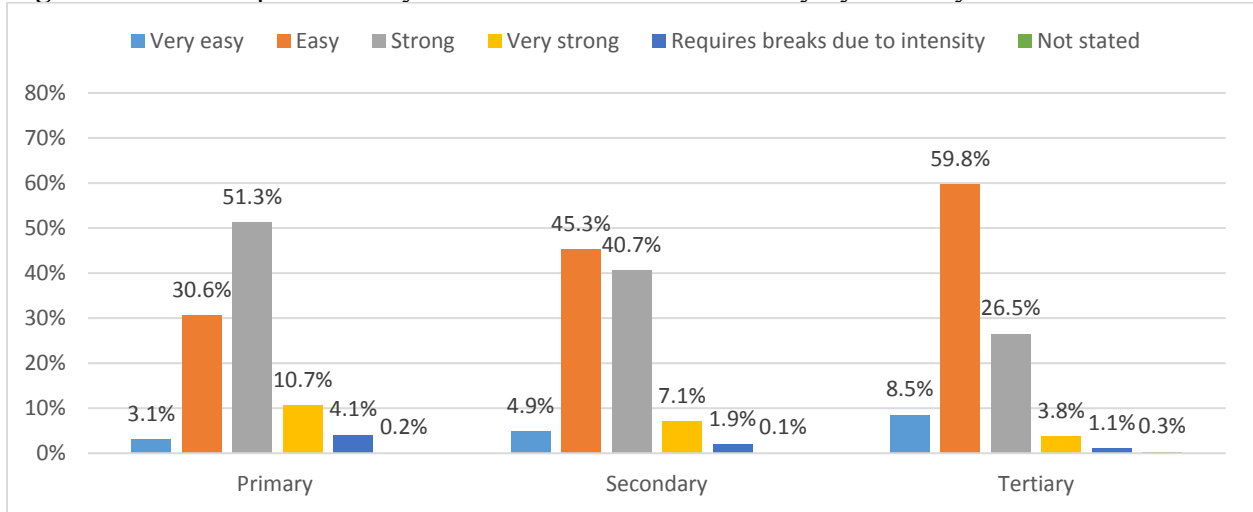
Physical work effort and intensity were described as strong, very strong, or requiring a break by 48.8% of respondents overall (Figure C.7.10.). The primary (66.1%) sector respondents reported the greatest proportion of those requiring work effort that was strong, very strong, or requiring a break compared to the secondary (49.7%) and tertiary (31.4%) sector respondents (Figure C.7.11.). Across industries, men reported greater physical work effort and intensity than women (Figure C.7.12.).

Figure C.7.10. Respondent Physical Work Effort and Intensity by Country and Overall



1 Questions: G102. When you are at work, which of the following situations is more similar to the physical effort or the work intensity that you are carrying out?
 2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

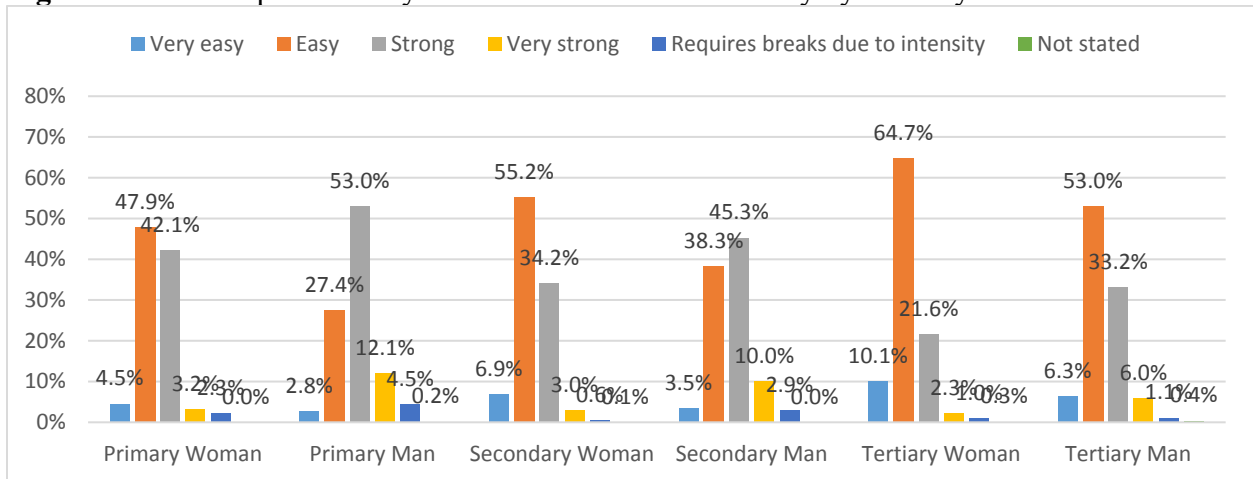
Figure C.7.11. Respondent Physical Work Effort and Intensity by Industry



1 Questions G102. When you are at work, which of the following situations is more similar to the physical effort or the work intensity that you are carrying out?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.7.12. Respondent Physical Work Effort and Intensity by Industry and Sex



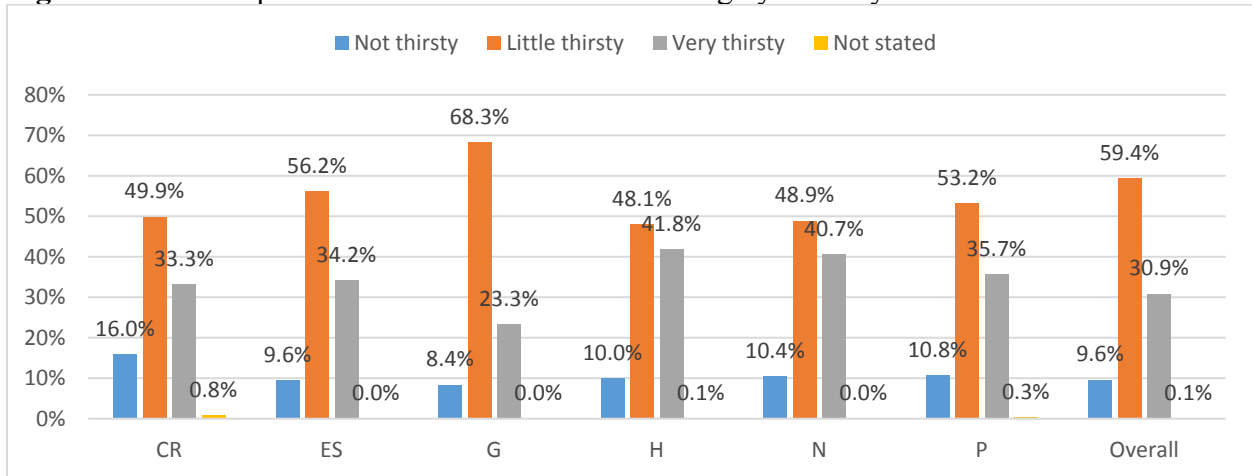
1 Questions G102. When you are at work, which of the following situations is more similar to the physical effort or the work intensity that you are carrying out?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Overall, 30.9% of respondents reported being very thirsty while working, with those in Honduras (41.8%) reporting the greatest proportion of being very thirsty compared to Guatemala (23.3%) with the lowest proportion (Figure C.7.13.). Those in the primary (39.7%) sector reported

being very thirsty the most, followed by those in the secondary (31.1%) and tertiary (22.4%) sectors (Figure C.7.14.). Across industries, men reported being very thirsty while working more than women (Figure C.7.15.).

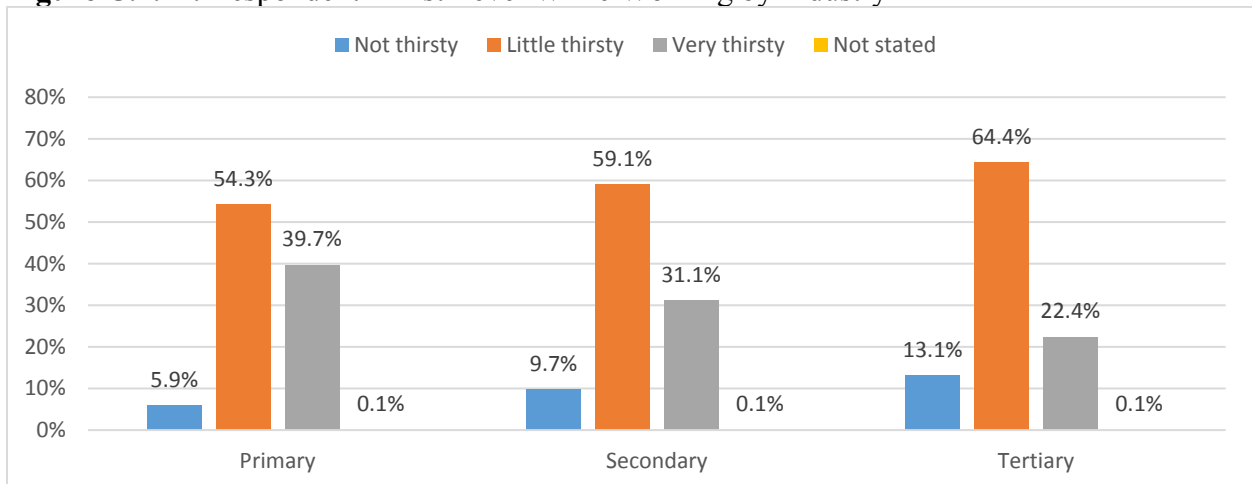
Figure C.7.13. Respondent Thirst Level While Working by Country and Overall



1 Questions: G104. How thirsty do you get doing your job?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

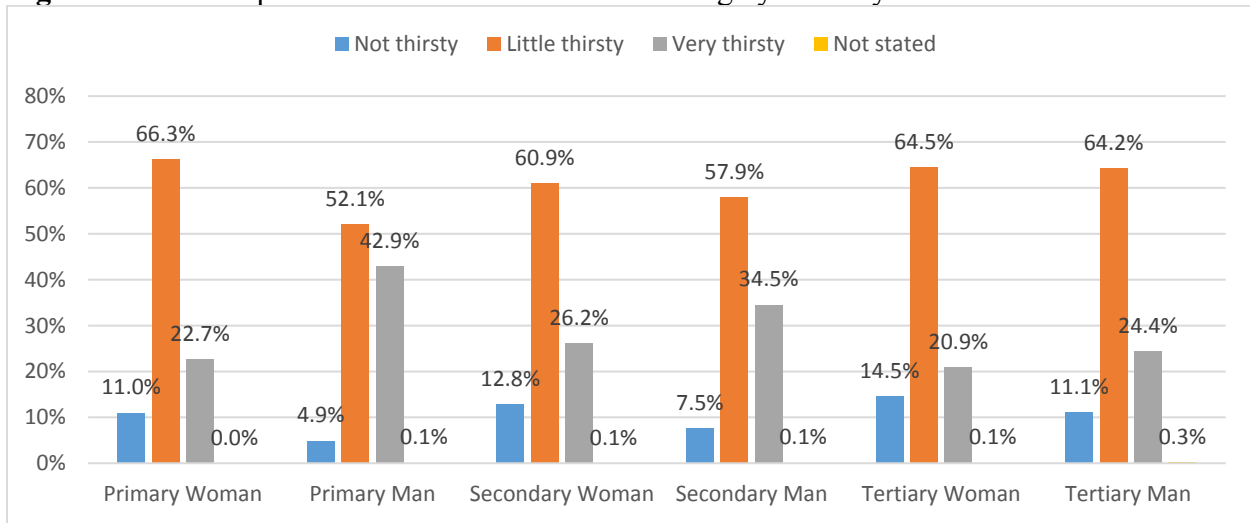
Figure C.7.14. Respondent Thirst Level While Working by Industry



1 Questions G104. How thirsty do you get doing your job?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.7.15. Respondent Thirst Level While Working by Industry and Sex

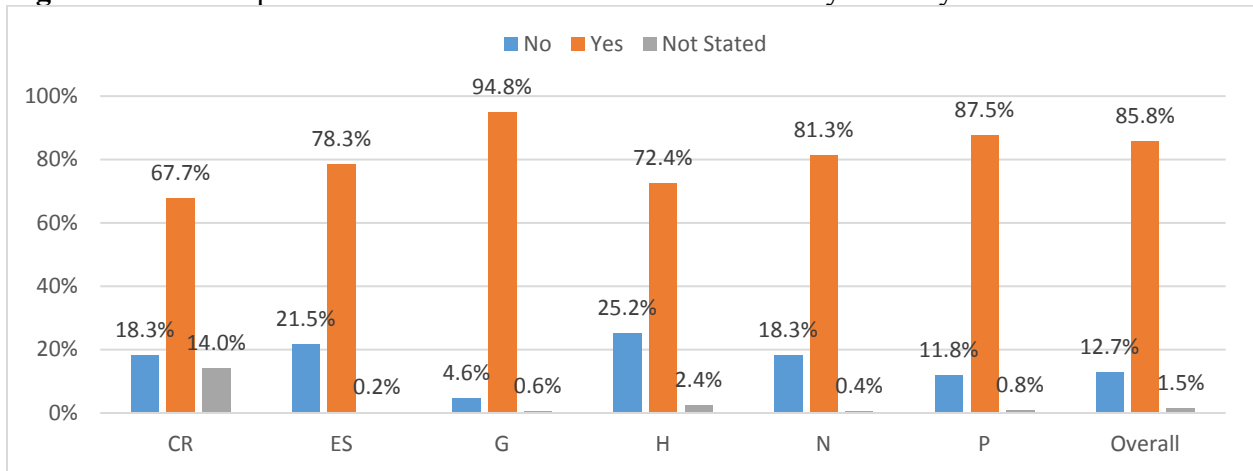


1 Questions G104. How thirsty do you get doing your job?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Nonsteroidal anti-inflammatory drugs (NSAIDS) were widely used. Nearly 86% of respondents reported using NSAIDS in the last week, with the greatest proportion of NSAID usage reported in Guatemala (94.8%) and the lowest proportion in Costa Rica (67.7%) (Figure C.7.16.). Substantial differences in NSAID usage were not noted among respondents in different industry sectors (Figure C.7.17.). Across industries, men reported slightly greater NSAID usage than women (Figure C.7.18.).

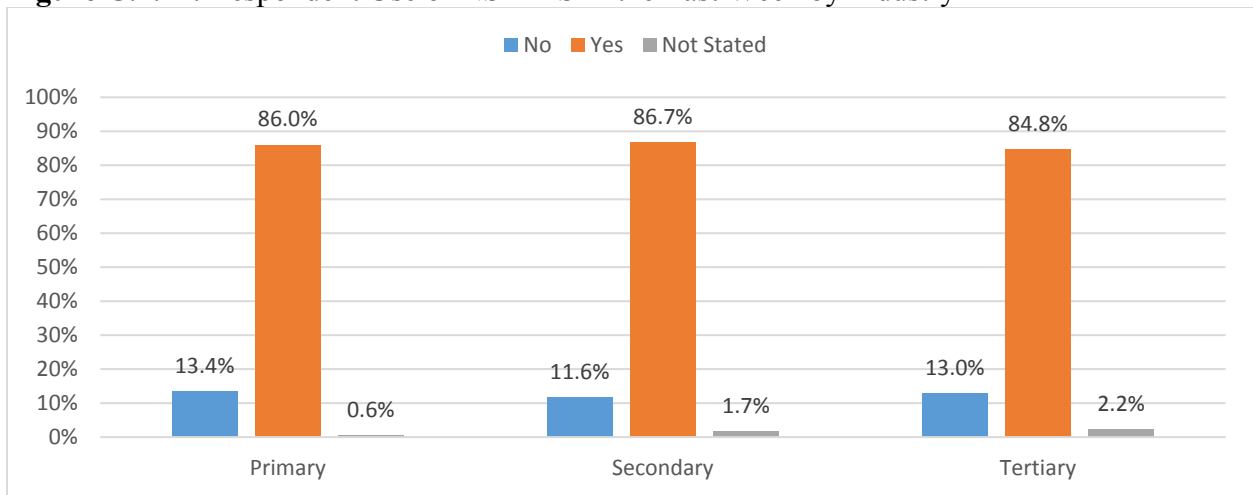
Figure C.7.16. Respondent Use of NSAIDS in the Last Week by Country and Overall



1 Questions: G107. Which one of the following medications did you take over the last week? (Combined for NSAID choices)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

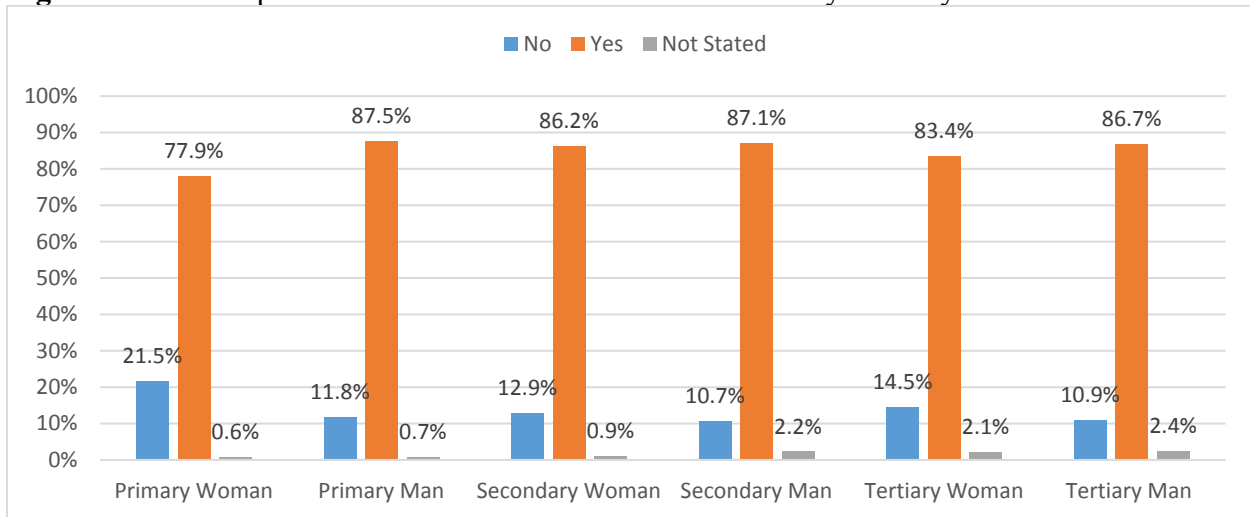
Figure C.7.17. Respondent Use of NSAIDS in the Last Week by Industry



1 Questions G107. Which one of the following medications did you take over the last week? (Combined for NSAID choices); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

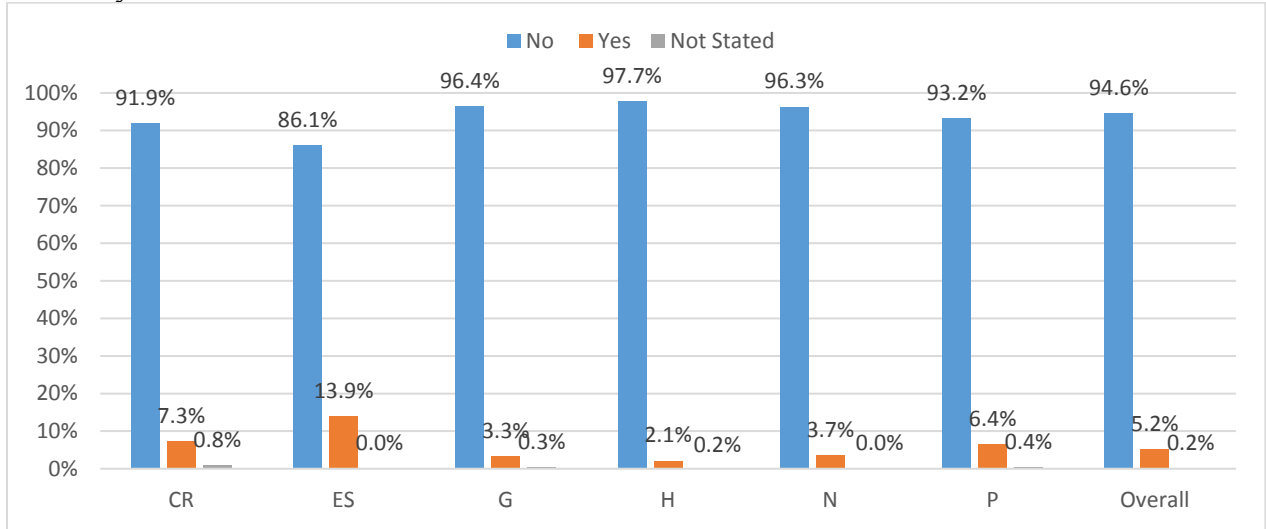
Figure C.7.18. Respondent Use of NSAIDS in the Last Week by Industry and Sex



1 Questions G107. Which one of the following medications did you take over the last week? (Combined for NSAID choices); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?
 2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Direct contact with agrochemicals at work in the last 12 months was reported among 5.2% of respondents overall. The greatest proportion of direct contact with agrochemicals was reported in El Salvador (13.9%) and the lowest proportion in Honduras (2.1%) (Figure C.7.19.). Most of the respondents reporting agrochemical exposure worked in the primary (14.9%) sector compared to the secondary (0.4%) and tertiary (0.8%) sectors (Figure C.7.20.). Men (16.9%) in the primary sector reported the greatest proportion of direct contact with agrochemicals overall (Figure C.7.21.).

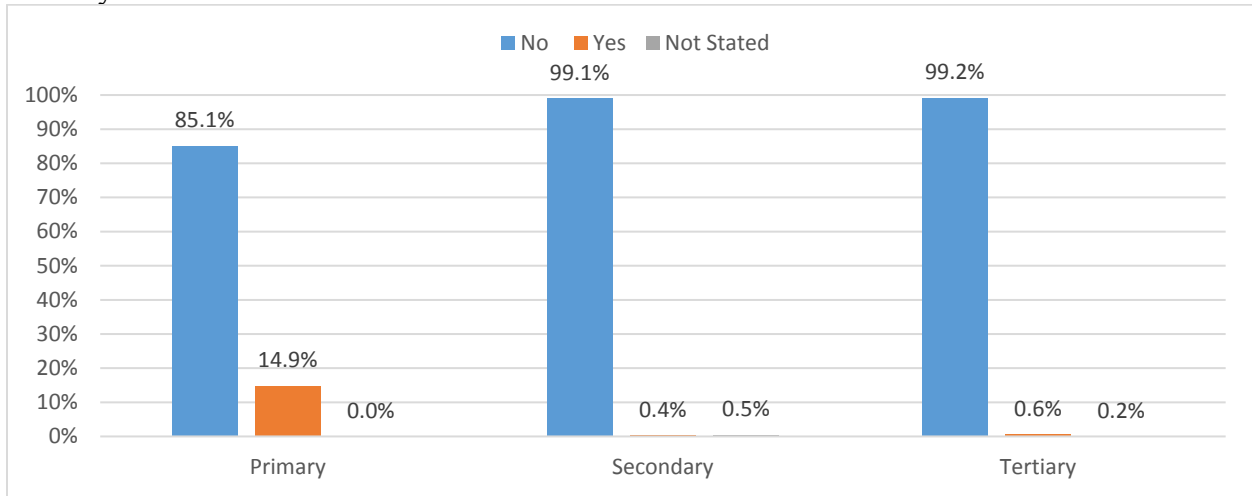
Figure C.7.19. Respondent Direct Contact with Agrochemicals at Work in Last 12 Months by Country and Overall



1 Questions: G108. Over the last 12 months, have you used or have you had direct contact with agrochemicals at your job?

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama

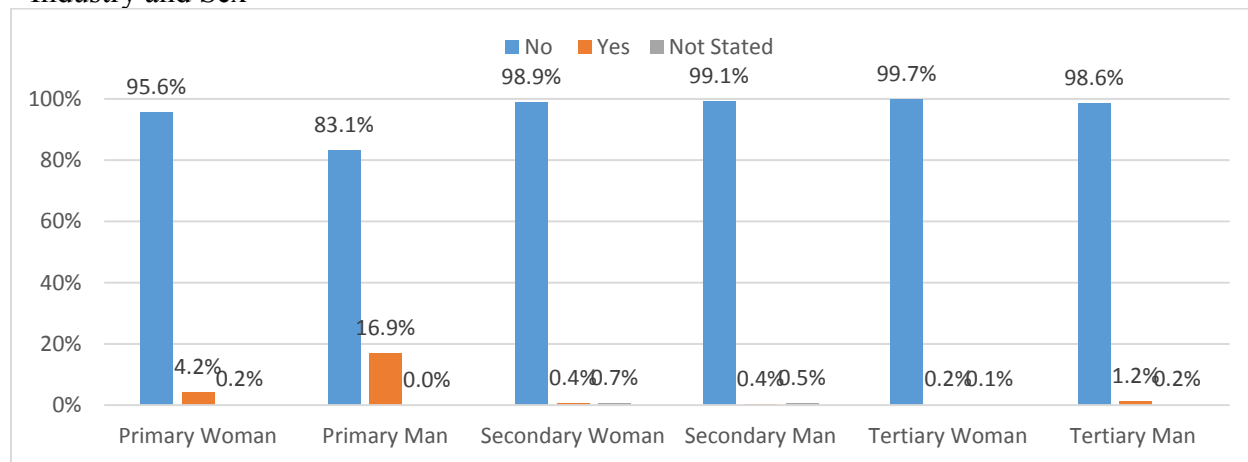
Figure C.7.20. Respondent Direct Contact with Agrochemicals at Work in Last 12 Months by Industry



1 Questions: G108. Over the last 12 months, have you used or have you had direct contact with agrochemicals at your job?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

Figure C.7.21. Respondent Direct Contact with Agrochemicals at Work in Last 12 Months by Industry and Sex



1 Questions: G108. Over the last 12 months, have you used or have you had direct contact with agrochemicals at your job?; B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?; F79. What is the sex of the person interviewed?

2 Industry sectors: Primary – mainly agricultural; Secondary – mainly manufacturing and construction; Tertiary – mainly services.

C.8. Work-Related Violence

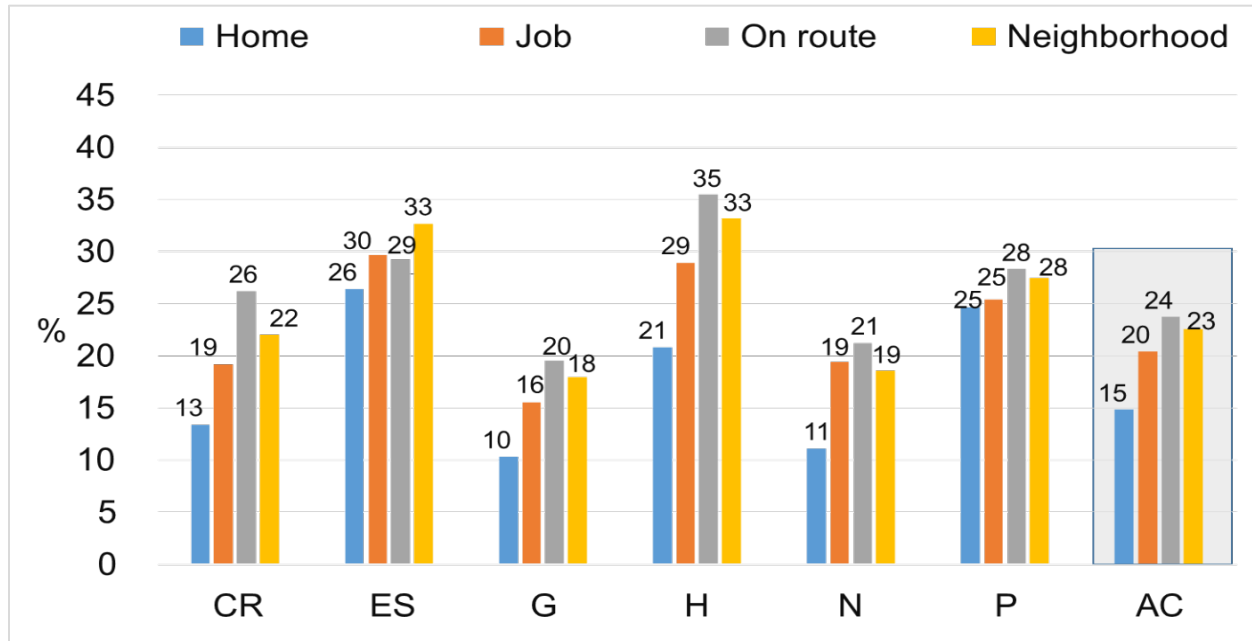
Overall, respondents reported feeling unsafe (insecurity) at home (15%), at work (20%), on route to work (24%), and in the neighborhood (23%) (Figure C.8.1). El Salvadoran respondents reported the greatest proportion of home (26%), work (30%), and neighborhood (33%) insecurity, while Hondurans reported the greatest proportion of route (35%) and neighborhood (33%, tied with El Salvador) insecurity (Figure C.8.1). Guatemalans reported the lowest proportions of insecurity across all categories (Figure C.8.1).

Insights from the Focus Groups

Salvadoran FG participants described and commented on several types of violence at length. They identified structural or systemic violence that remained from the civil war, which reached such levels during that time that, in their views, violence became “normal.” The FG participants consistently linked their responses to situations of violence and workplace abuse, suggesting that the presence of generalized violence may be a driver of views and attitudes for this group. Compounding this violence was a perceived lack of support by authorities, which they believed also contributed to marginalization and violence.

Focus group participants from Honduras also clearly indicated widespread violence as one of their main concerns. They described its pervasiveness as an underlying element in any activity, and as a potential threat to job performance. They said that, although violence permeates all levels of society, it affects certain regions or sectors to a greater degree.

Figure C.8.1. Insecurity by Country

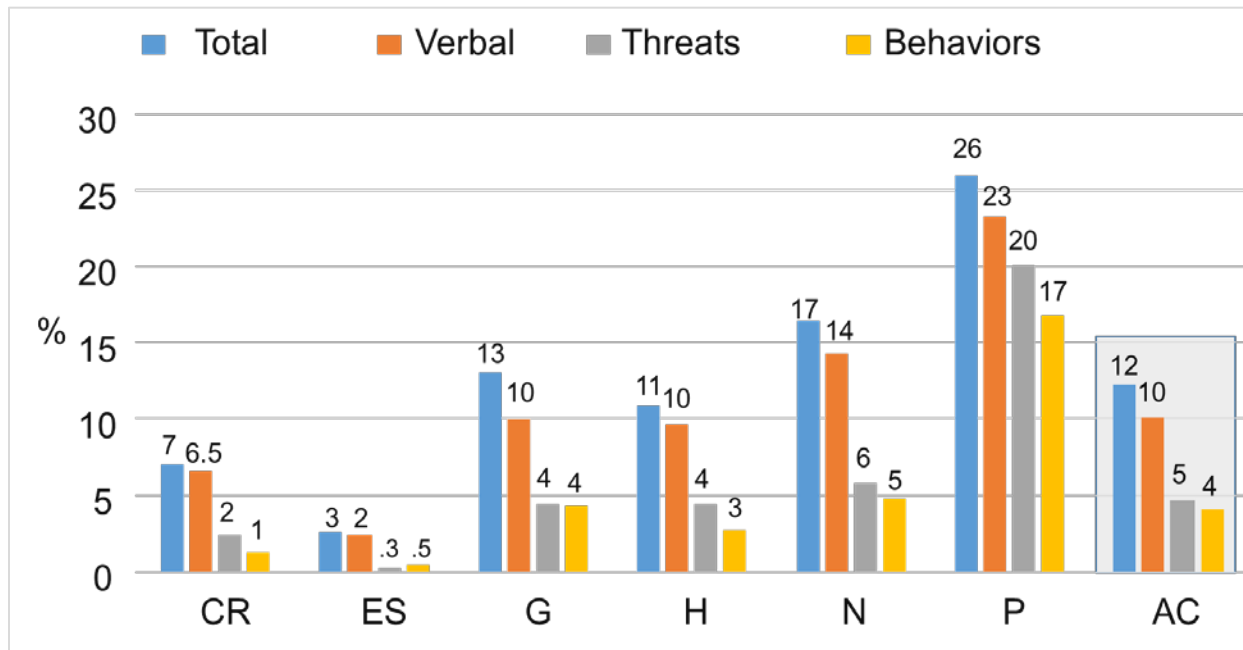


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At home; at work or in the neighborhood or area where you work; on your way to or from work; in any other neighborhood or area where you spend most of the time doing your common daily activities (Dichotomized as yes/no)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama; AC, All Countries

In general, experiencing non-sexual work-related violence was reported by 12% of respondents, with 10% experiencing verbal insults, shouting or yelling, and inappropriate or hostile comments; 5% experiencing harassment or threats of physical or job-related harm, such as threats of job demotion, firing, or shaking a fist, weapon, or another object; and 4% experiencing behaviors, including pushing, hitting, slapping, kicking, and attacking with a weapon or otherwise (Figure C.8.2.). Across all non-sexual work-related violence categories, Panamanian respondents reported the greatest proportions of each category, while El Salvadorans reported the least (Figure C.8.2.).

Figure C.8.2. Work-Related Violence (Non Sexual) by Country

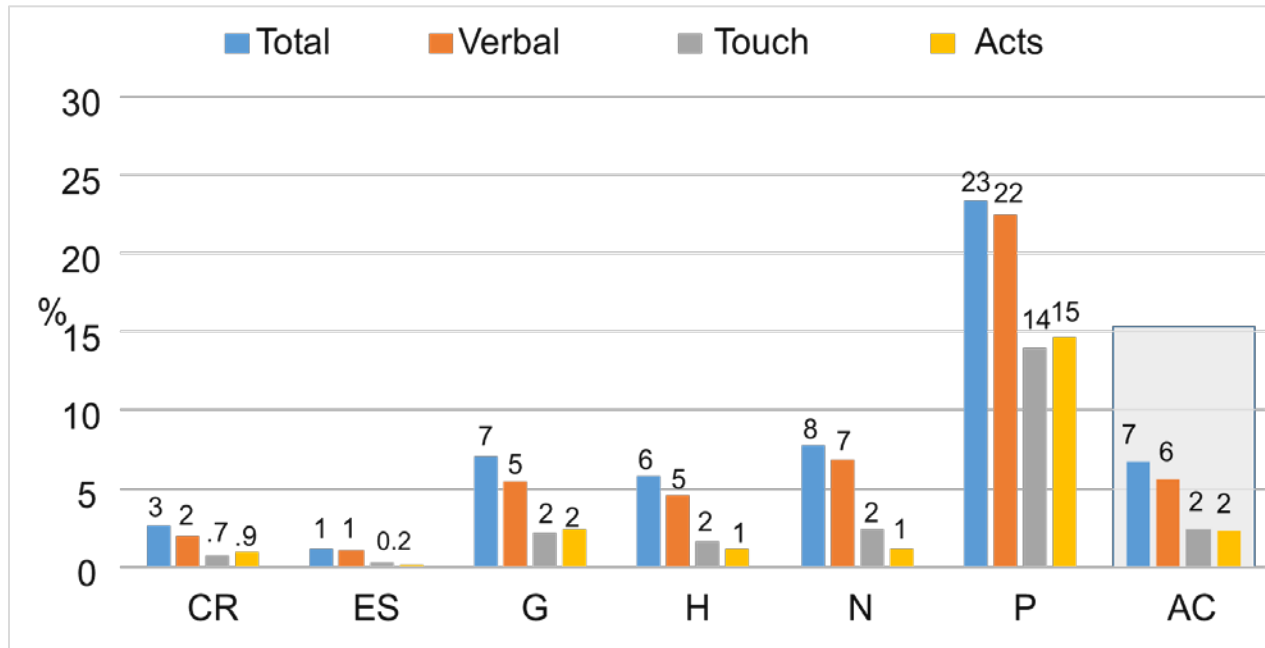


1 Questions: H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama; AC, All Countries

Overall, experiencing sexual work-related violence was reported by 7% of respondents, with 6% experiencing verbally obscene sexual words directed at them, stares, whistles, “cat-calling” sounds, and humiliating or insulting comments about their bodies or appearances; 2% experiencing unwanted touching of a sexual nature or threats of sexual harm against them or someone close to them; and 2% experiencing unwanted sex or humiliating sexual acts by physical force or by being afraid of what the person would do if they were uncooperative (Figure C.8.3.). Across all sexual work-related violence categories, Panamanian respondents again reported the greatest proportions of each category, while El Salvadorans reported the least (Figure C.8.3.). Women reported the greatest proportions of insecurity associated with feeling unsafe overall, while men reported slightly greater proportions of non-sexual and sexual work-related violence overall (Figure C.8.4.).

Figure C.8.3. Work-Related Violence (Sexual) by Country



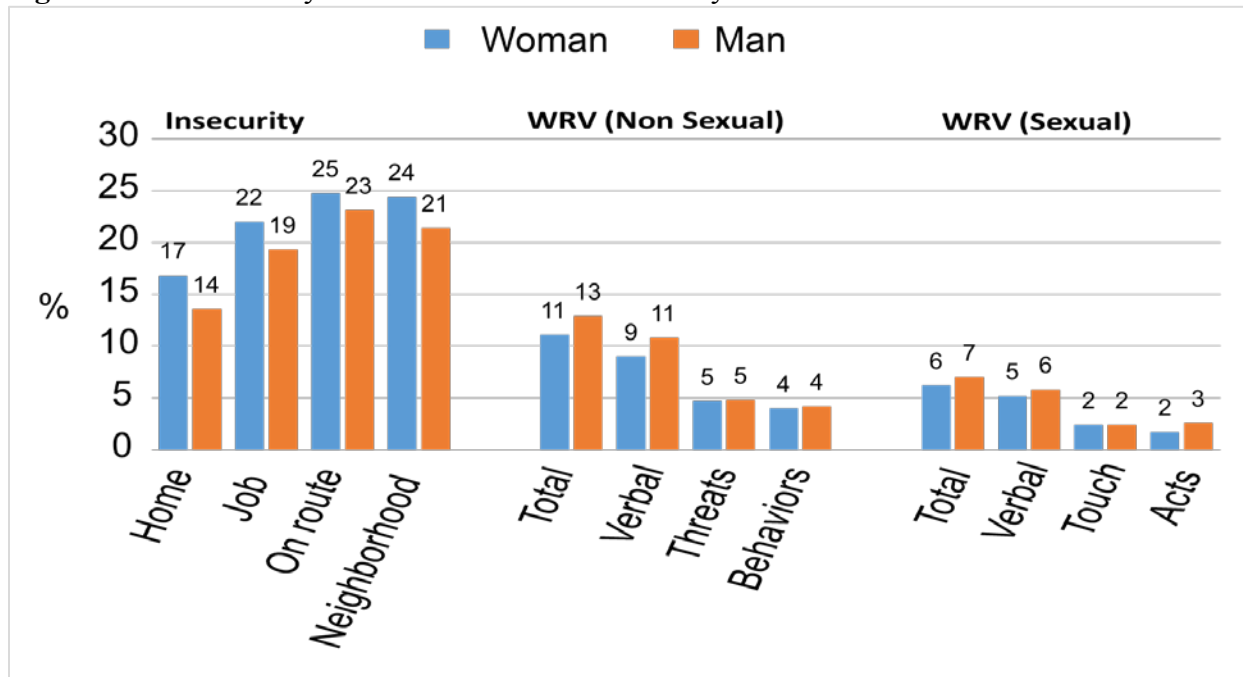
1 Questions: H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no)

2 Abbreviations: CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama; AC, All Countries

Insights from the Focus Groups

Sexual harassment was one of the most frequent forms of gender-related abuse reported in the men's Nicaragua FG. It included the practice of offering a job to women based upon their perceived attractiveness, or asking for sexual favors in exchange for certain job positions. They believed favored women had better working situations – better equipment, better vehicles, better incentives – but then risked being discriminated against by their co-workers for this special treatment. The participants suggested that, in the maquilas, sexual harassment occurred for men as well. Participants attributed this to the large number of personnel in maquilas, which they believed favored promiscuity. Finally, they believed that additional forms of discrimination, such as against older workers, also affected gender relations, especially for women.

Figure C.8.4. Insecurity and Work-Related Violence by Sex

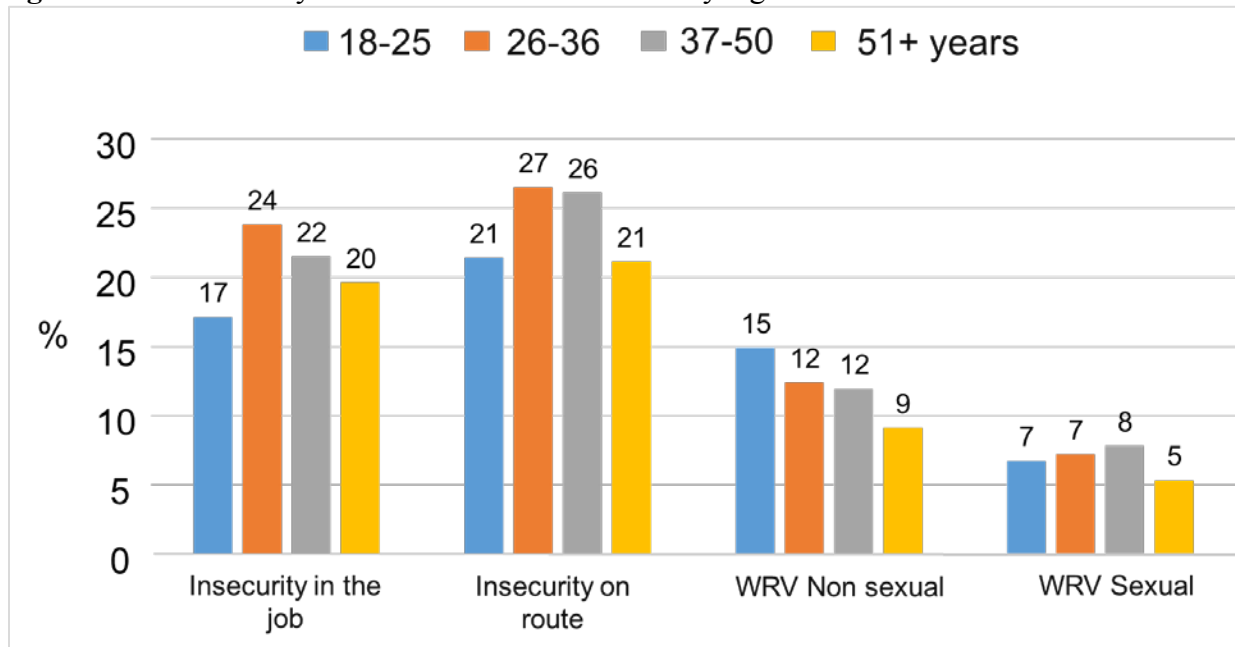


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At home; at work or in the neighborhood or area where you work; on your way to or from work; in any other neighborhood or area where you spend most of the time doing your common daily activities (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); F79. What is the sex of the person interviewed?

2 Abbreviations: WRV, Work-Related Violence

Insecurity due to unsafe feelings at work and while on route to work were reported in greatest proportions by respondents aged 18 – 25 (17%, 21%) and 26 – 36 (24%, 27%) (Figure C.8.5.). Non-sexual (15%) work-related violence was most frequently reported by workers aged 18 – 25, while sexual work-related violence was most frequently reported by those aged 37-50. However, younger groups showed a similar frequency (7%), and only respondents aged 51 and older reported lower frequency (5%) (Figure C.8.5.)

Figure C.8.5. Insecurity and Work-Related Violence by Age

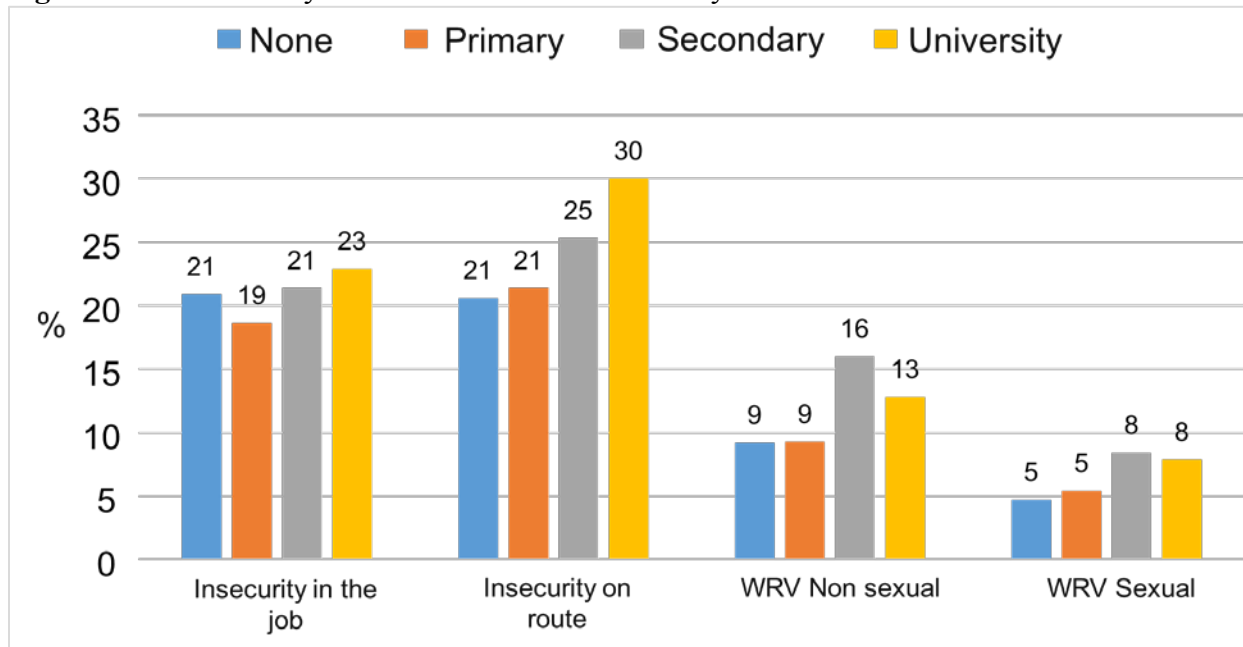


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); PF1. How old are you in years?

2 Abbreviations: WRV, Work-Related Violence

Respondents with a university education reported the greatest proportions of insecurity for feeling unsafe in the job (23%) and while on route to work (30%). Non-sexual work-related violence was most frequently reported by respondents with secondary education (16%), and sexual work-related violence was equally reported by respondents with secondary or university education (8%) (Figure C.8.6).

Figure C.8.6. Insecurity and Work-Related Violence by Education Level

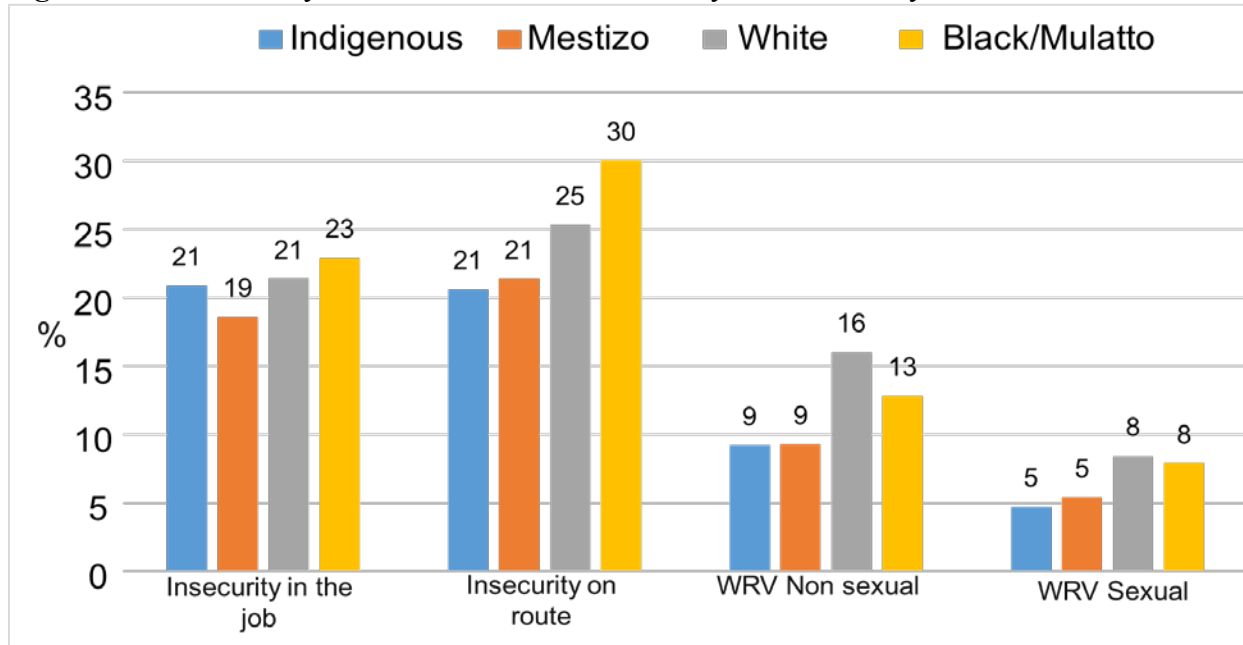


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); F80. What is the last year or grade level or level of education that you passed or completed?

2 Abbreviations: WRV, Work-Related Violence

Blacks/mulattos respondents reported the greatest proportions of insecurity due to feeling unsafe in the job (23%) and while on route to work (30%), while whites reported the greatest proportions of non-sexual violence (16%). The sexual work-related violence was equally reported by whites and blacks/mulatto (8%) (Figure C.8.7.).

Figure C.8.7. Insecurity and Work-Related Violence by Race/Ethnicity

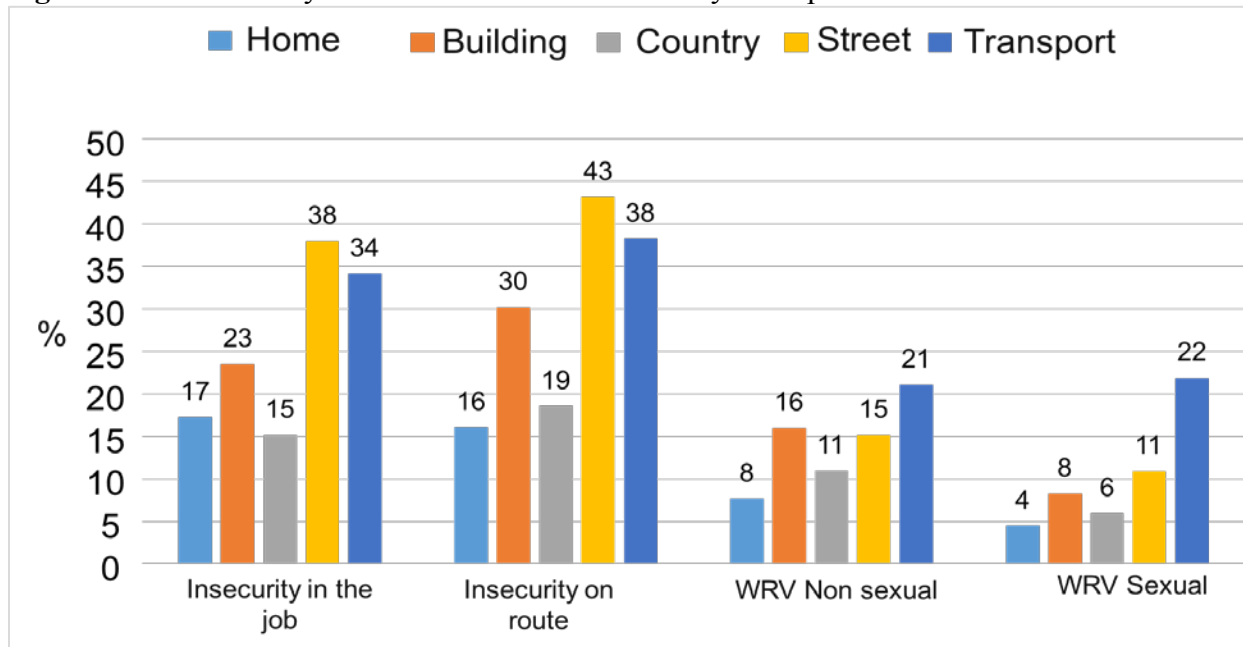


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); F83. Which ethnic group do you belong to?

2 Abbreviations: WRV, Work-Related Violence

Respondents working in a street workplace reported the greatest proportions of insecurity due to feeling unsafe in the job (38%) and while on route to work (43%). In comparison, respondents working in transport reported the greatest proportions of non-sexual (21%) and sexual (22%) work-related violence (Figure C.8.8.).

Figure C.8.8. Insecurity and Work-Related Violence by Workplace

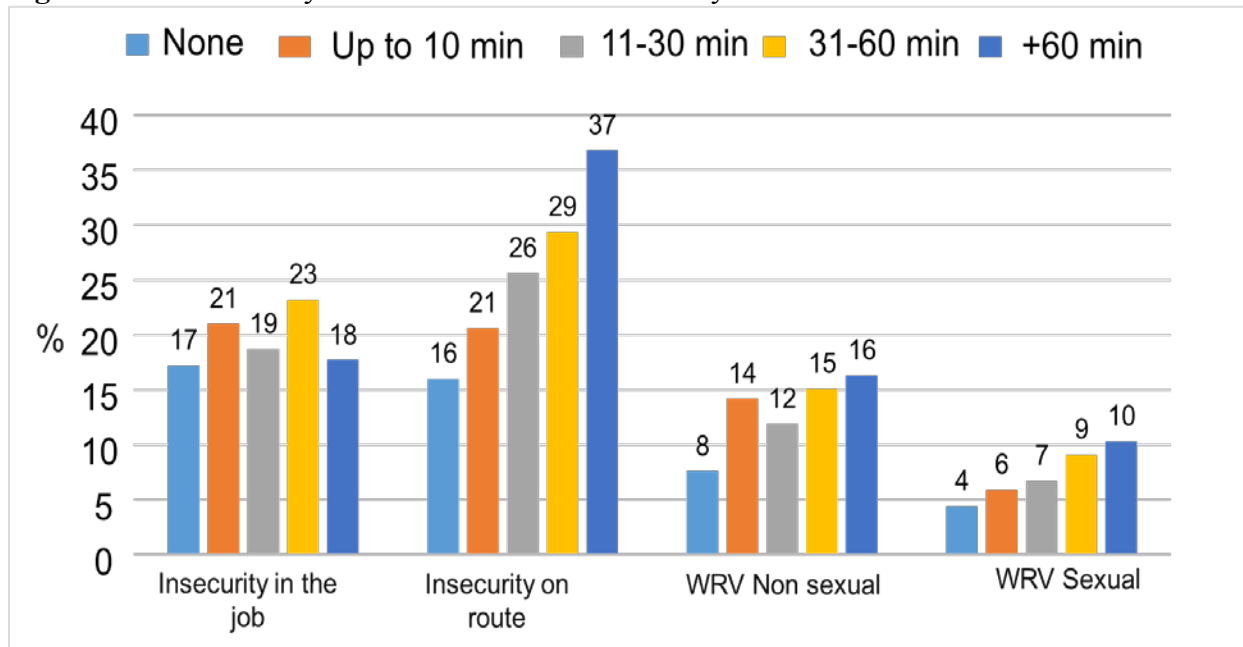


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); B27. Where is your main job located?

2 Abbreviations: WRV, Work-Related Violence

Respondents with the longest commute times to work of between 31 and 60 minutes reported the greatest proportions of insecurity due to feeling unsafe in the job (23%), while respondents with commute times greater than 60 minutes reported the greater proportion of insecurity on route to work (37%) and of non-sexual 16%) and sexual (10%) work-related violence (Figure C.8.9.).

Figure C.8.9. Insecurity and Work-Related Violence by Time on Route

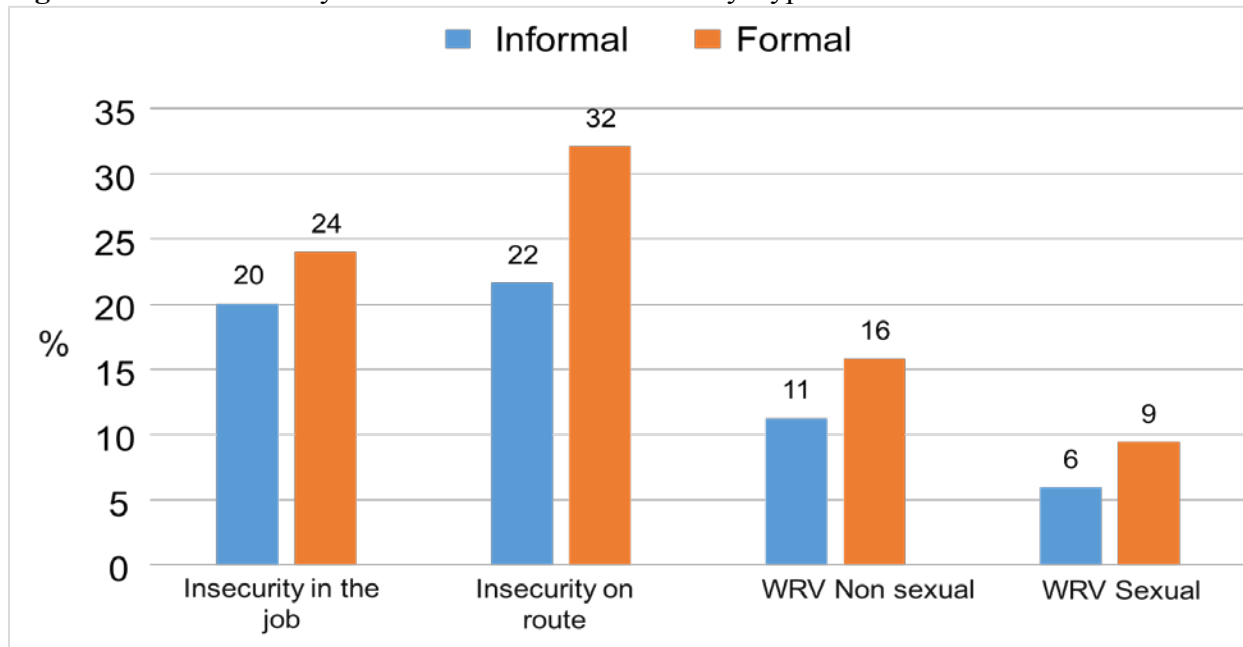


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); B28. On a typical working day, how long does it approximately take for you to go from your house to your job and vice versa?

2 Abbreviations: WRV, Work-Related Violence

Respondents working in formal work arrangements reported the greatest proportions of insecurity for feeling unsafe in the job (24%) and while on route to work (32%), and of non-sexual (16%) and sexual (9%) work-related violence (Figure C.8.10.).

Figure C.8.10. Insecurity and Work-Related Violence by Type of Work

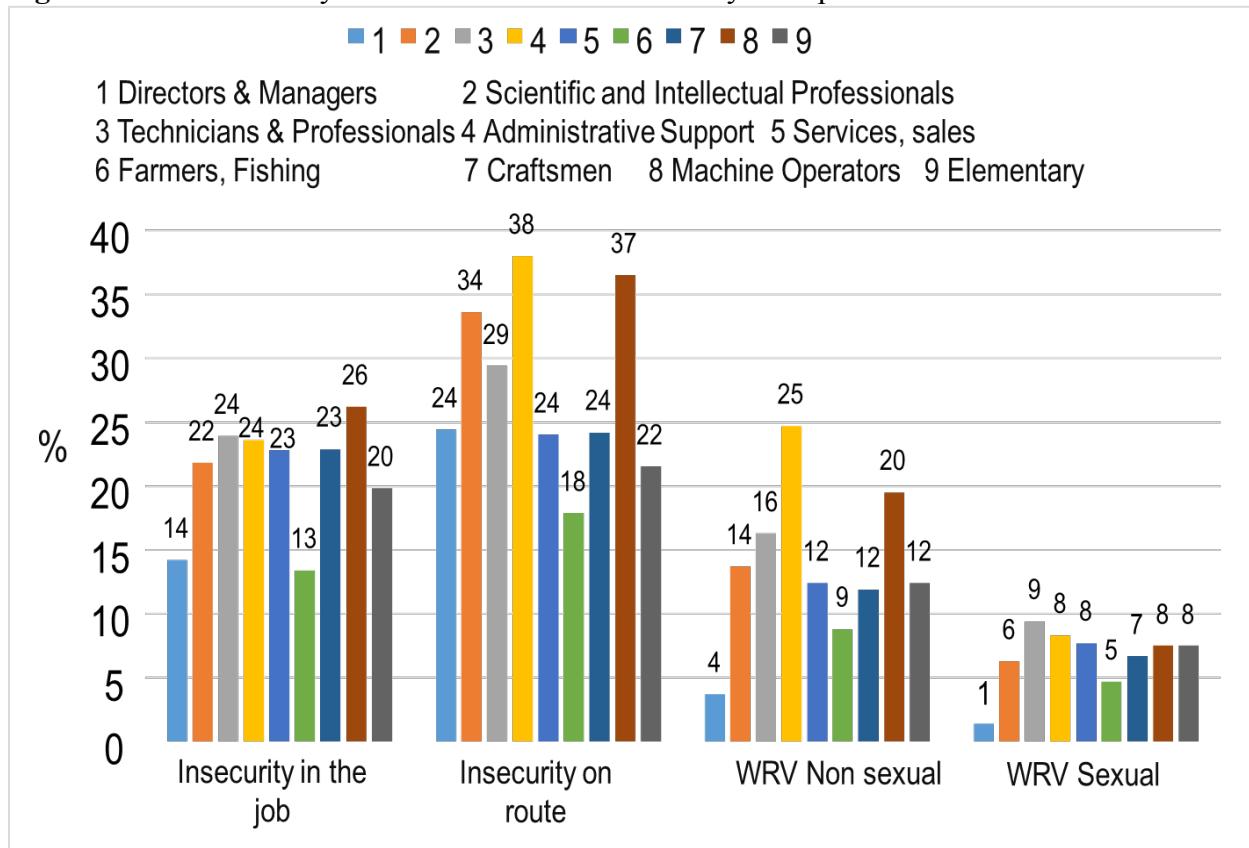


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); A5. Are you currently contributing, affiliated, registered or have a discount on some retirement, unemployment or disability insurance or social security or insurance system?

2 Abbreviations: WRV, Work-Related Violence

Machine operators (26%) reported the greatest proportions of insecurity due to feeling unsafe in the job, while administrative support (38%), followed by machine operators (37%) reported the greatest proportion of feeling unsafe on route to work (Figure C.8.11.). Administrative support (25%) reported the greatest proportion of non-sexual work-related violence. Regarding sexual work-related violence, while technicians and professionals (9%) reported the greatest proportion, other occupational groups showed almost the same proportion (8%): Technicians and professionals, administrative support, machine operators, and elementary occupations (Figure C.8.11.).

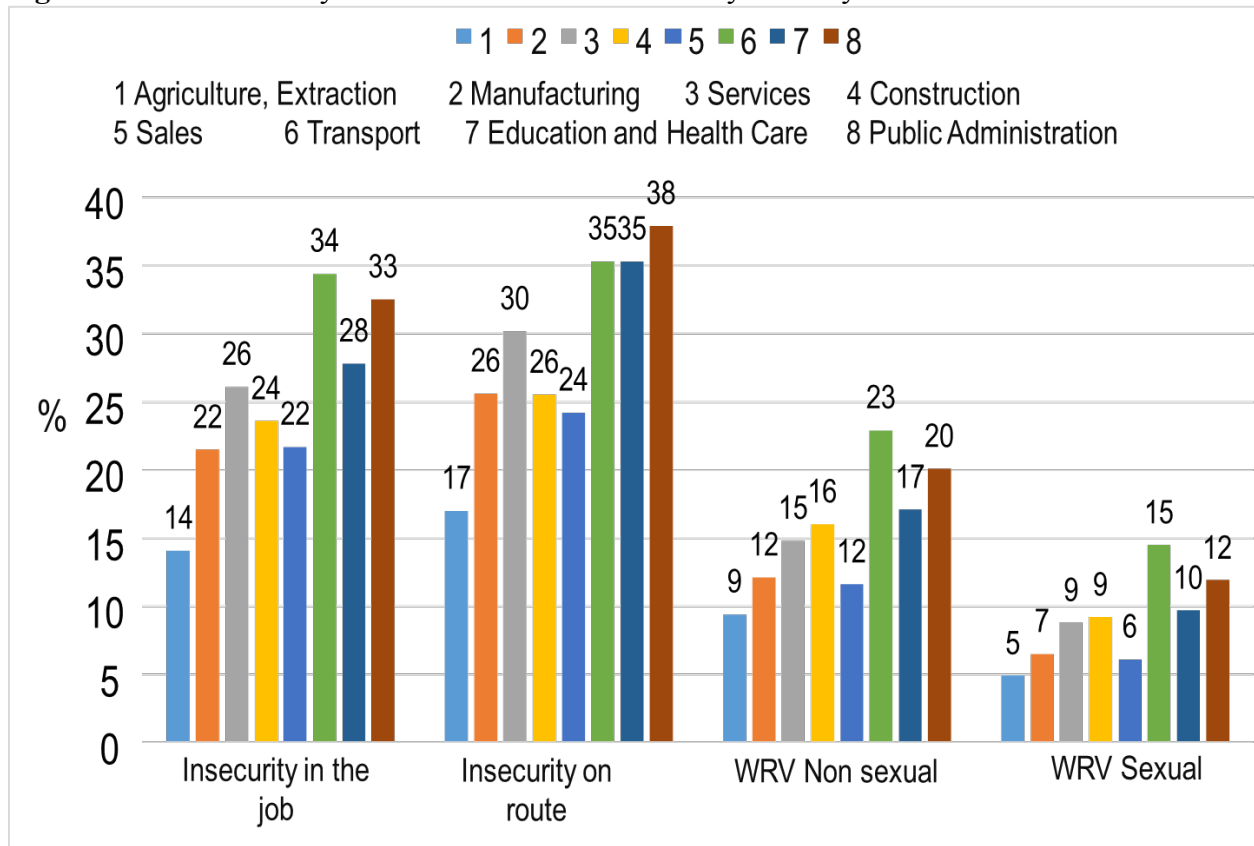
Figure C.8.11. Insecurity and Work-Related Violence by Occupation



1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); A2. What occupation, trade, job task or duties do you usually perform in your main job?
 2 Abbreviations: WRV, Work-Related Violence

Transport (34%) and public administration (38%) reported the greatest proportions of insecurity due to feeling unsafe in the job and of feeling unsafe on route to work, respectively (Figure C.8.12.). Respondents from these same groups, transport and public administration, reported the greatest proportions of non-sexual (23%, 20%) and sexual (15%, 12%) work-related violence, respectively (Figure C.8.12.).

Figure C.8.12. Insecurity and Work-Related Violence by Industry

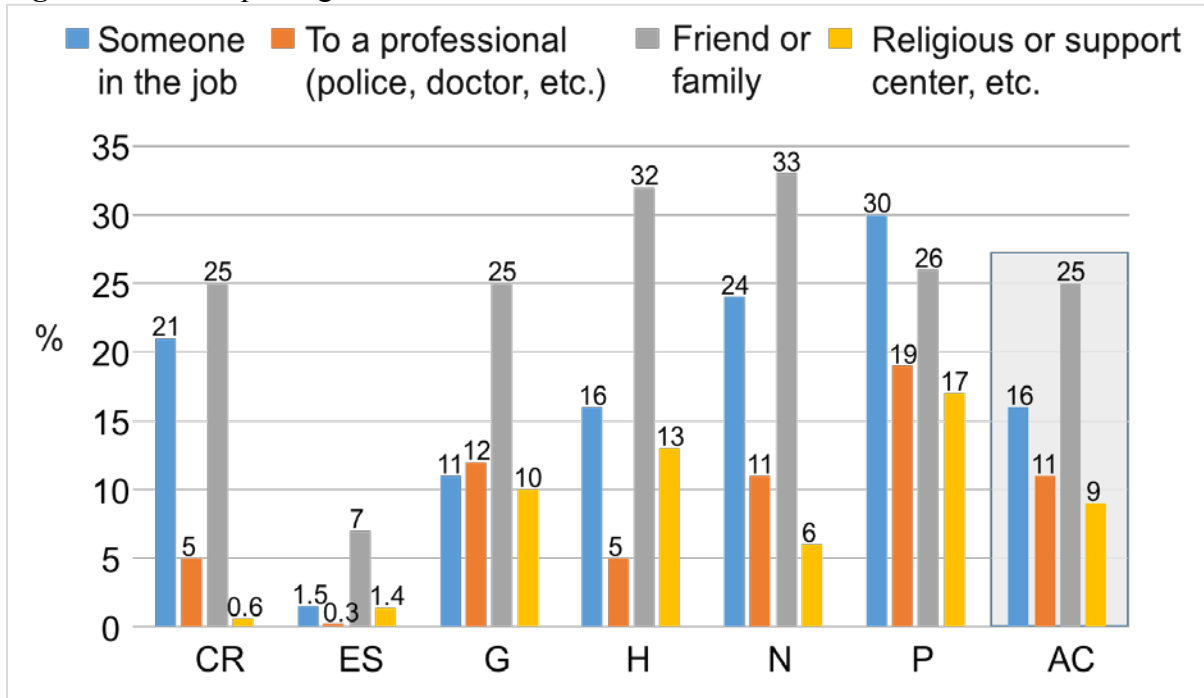


1 Questions: H109. Can you tell me how often you feel unsafe in the following circumstances? At work or in the neighborhood or area where you work; on your way to or from work (Dichotomized as yes/no); H110. Can you tell me how often you have experienced or witnessed a work-related violence event that was verbal or physical, but not sexual in nature, as follows? (Dichotomized as yes/no); H111. Can you tell me how often you have experienced or witnessed a work-related violence that was sexual in nature, as follows? (Dichotomized as yes/no); B23. In your main job, what is the main economic activity of the company, business, institution, or organization where you work or of the job you do?

2 Abbreviations: WRV, Work-Related Violence

Respondents predominantly reported work-related violence to a friend or family member (25%) overall and across all countries, except Panama, where respondents primarily reported work-related violence to someone in the job (30%) (Figure C.8.13.).

Figure C.8.13. Reporting of Work-Related Violence



1 Questions: H120. Did you report the events you experienced or witnessed to any of the following?

2 Abbreviations: WRV, Work-Related Violence; CR, Costa Rica; ES, El Salvador; G, Guatemala; H, Honduras; N, Nicaragua; P, Panama; AC, All Countries

C.9. Examples of Research Analysis with the II ECCTS data

Example of Analysis of Labor Rights Items

Background

The United States-Dominican Republic-Central America Free Trade Agreement (CAFTA-DR; which entered into force for the U.S., El Salvador, Guatemala, Honduras, and Nicaragua in 2006, for the Dominican Republic in 2007, and Costa Rica in 2009) and the U.S.-Panama Trade Promotion Agreement (PTPA; entered into force for the U.S. and Panama in 2012) again highlighted certain labor rights and instruments that had long primacy in international law and policy. The main instrument was the 1998 ILO Declaration on Fundamental Principles and Rights at Work and its Follow-Up. Those rights are the right to association; the right to organize and bargain collectively; a prohibition on the use of forced or compulsory labor; a minimum age for the employment of children and the prohibition and elimination of the worst forms of child labor; and acceptable conditions of work concerning minimum wages, work hours, and occupational safety and health. Both Agreements prescribed cooperative and remediating actions that could be taken to promote the observance of the rights highlighted, and to remediate actions that suppress them in a manner that affects trade between the parties. Some of those labor rights highlighted in the CAFTA-DR and PTPA were examined in the Second Central American Survey of Working Conditions and Health (II ECCTS), including earnings that met minimum wage requirements, freedom to associate, and acceptable working hours. The ECCTS provides insight into working conditions experienced by representative national samples of workers in Central America. Importantly, while all the countries included in the ECCTS recognize labor rights directly related to the internationally recognized labor rights, their application and enforcement may have not been fully realized.

Methods

Descriptive analyses were for the whole sample and for a series of different strata: by job formality (informal/formal), by participant location in the Northern Triangle (El Salvador,

Guatemala, Honduras) or the Southern Triangle (Costa Rica, Nicaragua, Panama), by industry sector (primary, secondary, or tertiary) and by business export status (exporting/non-exporting). Post-survey weighting was applied to all analyses. We studied sociodemographic variables and variables related to employment, such as access to different forms of leave or time off, if minimum wage was paid, and the prevalence of labor inspections in the previous 12 months

Main Findings

Among workers in our data, 40% reported that they did not earn at least the minimum wage. The issue was more widespread among workers in the Northern Triangle where 44% did not make at least the minimum wage, compared to workers in the Southern Triangle where the comparable figure was 29%. Only 9% of those in formal jobs did not earn at least the minimum wage compared to 47% of workers in informal employment.

Rights to freedom of association and collective bargaining facilitate the formation and functioning of trade unions. Unionized workplaces and workers' perception that a union would be possible at their workplace was far more common among workers in formal employment and among those employed in exporting businesses. Among workers in formal employment, 27% reported their workplace was unionized, and 14% of those who did not have a union in their workplace believed that it would be possible to form a union. One-fourth of workers in exporting businesses reported that their workplace was unionized, compared to just 8% of workers employed in non-exporting businesses. Unionized workplaces were nearly three times more prevalent in the Southern Triangle (15%) than the Northern Triangle (4%).

Labor inspections are an indication of government efforts to promote or enforce compliance with labor rights. Among workers in formal employment, 43% had observed a labor inspection at their worksite in the past 12 months, compared to only 8% of workers in informal

employment. Labor inspections were more commonly reported in the Southern Triangle (28%) than in the Northern Triangle (9%).

Compliance with labor rights often requires that workers know their rights and how to seek relief when rights are suppressed. Self-reported knowledge of how to file a labor complaint (30%) was relatively low for all workers. Fewer workers in informal employment knew how to file a labor complaint (23%) compared to workers in formal employment (58%), and fewer workers located in the Northern Triangle knew how to file a labor complaint (25%) than those in the Southern Triangle (43%). Only 15% of workers who knew how to file a labor complaint had actually done so. The lowest percentage of workers who had filed a labor complaint was in the primary sector (13%), and the highest percentage were workers in exporting businesses (22%). Overall, 69% of all workers reported that they knew their labor rights “well”, “very well”, or “extremely well.” Among all the substrata of workers, workers in the primary sector had the lowest percentage who reported knowing their labor rights well, very well or extremely well (60%) and workers in informal employment had the highest (85%).

Discussion

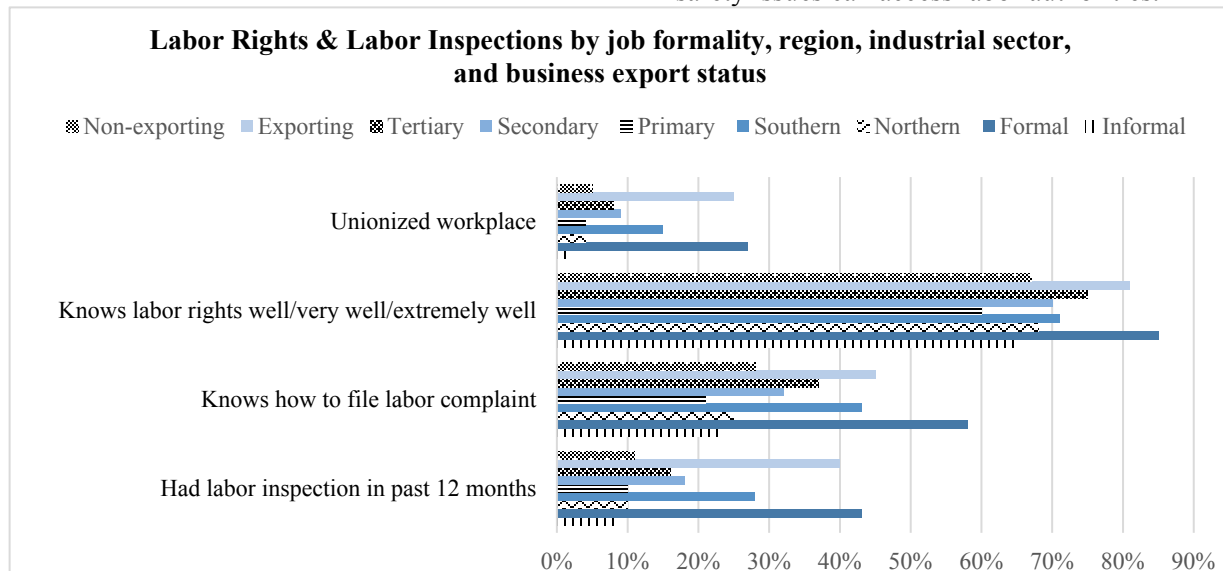
This research summarizes the findings on basic labor protections for nationally representative samples of working adults in Central America. Although most workers had access to various forms of leave and minimum wage, workers in

the Northern Triangle or those in informal employment, in non-exporting businesses, and in the primary sector had less access to labor protections. Improved policy and policy enforcement could improve working conditions and stabilize employment for vulnerable Central American workers.

Policy Implications

In line with what we know from other sources, the II ECCTS provides additional data to emphasize the need for more equitable access to basic labor protections, such as minimum wage, access to unions, and consistent labor inspections for workers in informal employment, in non-exporting businesses, in the primary sector, and for those working in the Northern Triangle. While improved application and enforcement of labor protections is needed for all workers in the region, the greatest disparities were observed among those subpopulations of workers.

Central American workers could benefit from increased education on how to file a labor complaint. A large majority of workers did not know how to file a labor complaint, even though the majority of workers reported that they knew their labor rights well. This suggests that the process of filing a labor complaint may be difficult or inaccessible for many workers, and improvements to this process along with education could help ensure that workers experiencing labor rights violations or health and safety issues can access labor authorities.



Example of Analysis of Chronic Kidney Disease Related Items

Background

This study estimated the prevalence and geographic distribution of self-reported work-related chronic kidney disease of undetermined origin (CKDu) and potential CKDu risk factors by industry sector in the six Spanish-speaking countries of Central America. Our findings supplement the prior literature, demonstrating a high prevalence of self-reported work-related CKD among 30 to 49-year-old mestizo males who worked in the primary (mainly, agricultural) and secondary sectors (mainly, manufacturing and construction), and had physically demanding jobs.

In Central America, CKDu is hypothesized to be associated with occupational and environmental exposures mainly affecting young men working in lowland agricultural settings. It is more prominent in men who have worked in such settings for two or more seasons, are between 20 and 50 years old, and are asymptomatic for cardiovascular or metabolic diseases. Cases for CKDu are increasing and presenting in specific disease hotspots, most often located in rural agricultural communities. However, there exist other undescribed industries that share similar risk factors could conceivably also harbor CKDu. Thus, there is a great need for standardized tools to estimate potential kidney disease prevalence in these types of occupations.

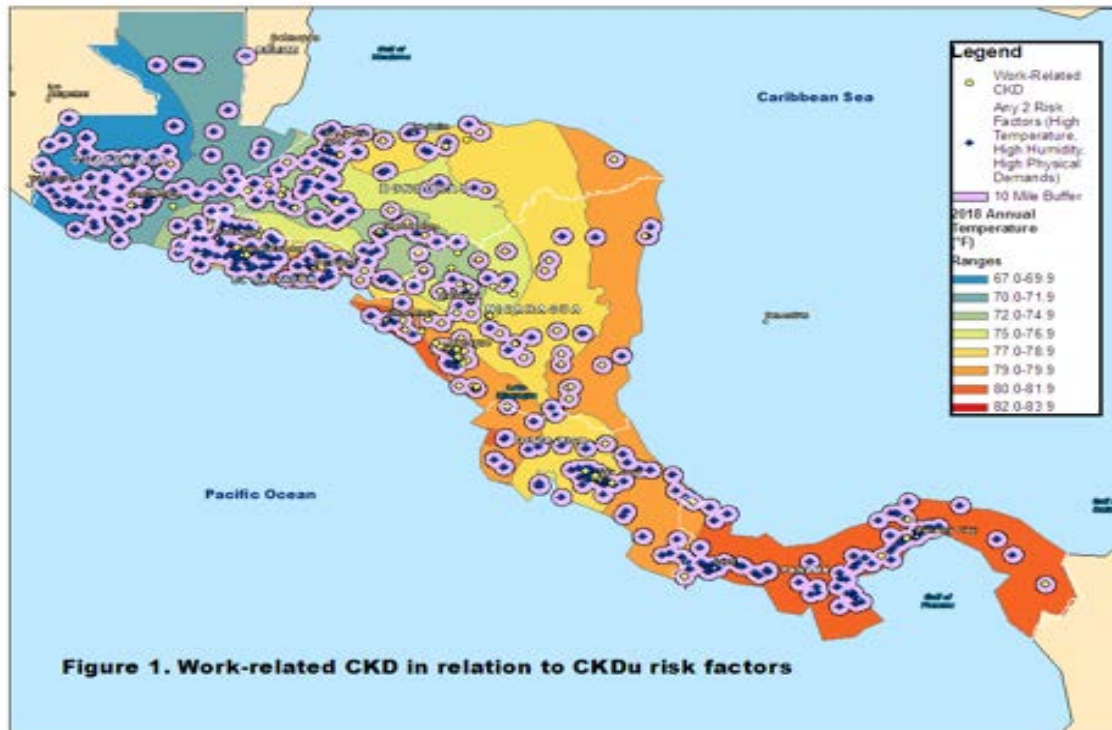
Methods

We linked survey data to their geographic location, including meteorological data, to add an element of validation to self-report as well as provide supplemental information on the identification and distribution of possible clusters of CKDu and its risk factors. Thus, using data from the Second Central American Survey of Working Conditions and Health (II ECCTS by its Spanish acronym) II ECCTS and GIS linkages, we estimated the prevalence and geographic distribution of CKD and work-related CKD as well as suspected CKDu risk factors and mapped the geographic variations of temperature patterns in relation to CKDu in Central America.

The outcome of CKD was measured by a Yes/No response to the question on CKD. If answered yes, participants were asked about whether or not they thought their disease was work-related (i.e., self-attributed work-related CKD). Suspected risk factors included the following: physical demands of work: measured by asking about the physical effort or the work intensity carried out at work; exposures to heat and humidity; water intake; being highly thirsty at the jobsite; use or direct contact with agrochemicals; and use of analgesics. Logistic regression models were used to estimate the association of CKD and work-related CKD with other variables. Static GIS weather maps were also created to show the link of weather patterns with work-related CKD and geographic buffer zone location of the workplace reported by the participants.

Main Findings

The primary and secondary industry sectors showed the highest prevalence of males, suspected CKDu risk factors, and work-related CKD. Age (group 30-49: OR, 2.38, 95% CI 1.03 to 5.51), ethnicity (mestizo: OR, 7.44, 95% CI 2.14 to 25.82), and exposure to high physical demands (OR, 2.45, 95% CI 1.18 to 5.09) were significantly associated with work-related CKD. The majority of work-related CKD GPS coordinates were located in the western parts of Honduras and Nicaragua, while risk factors for CKDu were more commonly reported in Guatemala, El Salvador, and Honduras, and along coastal areas. Most work-related CKDu overlapped with areas with a high density of CKDu risk factors, with a few exceptions in central Nicaragua. Finally, there were areas that clustered CKDu risk factors without any work-related CKD points, mainly in the western part of Guatemala. Annual average temperatures in 2018 were cooler in the northern parts of Central America (67.0°F–74.9°F), while the highest annual average temperatures (79.0°F–83.9°F) were along the coastal regions of Nicaragua and Panama. Most work-related CKD coordinates were located in warm temperature regions, although suspected CKDu risk factors were present across all temperature ranges (Figure 1).



Discussion

Geographically, most work-related CKD was concentrated in the central to western region of Central America associated with warm temperatures and also overlapped with persons reporting two or more CKDu risk factors. Moreover, there were several geographic areas of CKDu risk factors with no reported work-related CKD in our study. Further research is needed to identify if locations with CKDu risk factor clusters represent industries and sectors not currently associated with the risk of CKDu.

Our study results merely provide a bird's eye view of population-based prevalence of chronic kidney disease and its associations with putative occupational risk factors. Findings from our GIS analysis are more aligned with an ecological design, and thus serve more as hypothesis-generating, identifying opportunities for more targeted and more rigorously designed studies. Next steps in this direction could include studies that couple survey results with objective, blood-

based measurement of renal function, such as obtaining baseline levels of estimated glomerular filtration rates (eGFR).

Policy Implications

To our knowledge, this represents the first epidemiological large-scale, population-based study of CKDu and its risk factors in Central America. Young men without common risk factors or underlying conditions leading to CKD but who work in physically demanding jobs under conditions of high heat and humidity are at high risk of CKDu. Expanding this study and incorporating other epidemiological models could help research in detecting industry sectors, other than agricultural, that may share a similar prevalence of potential CKDu risk factors, harboring as yet undetected disease. Detection of new disease is the first step in identifying opportunities for the design of preventive interventions aimed at reducing the burden of CKDu in these workers.

Example of Analysis of Work-related Violence Items

Background

Many societies consider work-related violence (WRV) a major public health issue due to the increase in its reported prevalence since the end of last century. Despite this, the existing literature is scarce and mainly carried out in industrialized countries and the health sector. Honduras, Guatemala, and El Salvador make up what is known as the Northern Triangle, which is consistently classified among the most violent in the world. In 2010 Honduras had the highest homicide rate in Central America (77.5 per 100,000 inhabitants), a phenomenon attributed to political instability, inequality, corruption, and an increase in organized criminal groups (“*maras*”) or gangs. Occupational health information in Central America is sparse, in part due to low adherence to labor and workplace safety laws, limiting accurate characterization of a problem and the design of preventive interventions. This lack of information extends to WRV in Central America, where cases of violence are usually few and underreported, likely reflecting only the tip of the iceberg of the greater problem that WRV represents. Concurrently, the determinants of WRV in Central America have been seldom studied, as there are few indicators, records or interventions to protect health and safety at work. Political decisions for improving safety and protection of workers are often undertaken using incomplete or inaccurate basic data. This study aimed to describe the prevalence of WRV and work-related fear (WRF) by sex in Central America.

Methods

WRF was classified into WRF and WRF while commuting to and from work (CWRF). WRV was classified into non-sexual violence (including insults, threats, and physical aggression) and sexual violence (including sexual harassment, sexual touching or threats and unwanted sex). Responses were combined so that "Every day", "At least once a week", "Sometimes a month" and "Only once" to indicate "Yes." "Never" was coded as "No." Independent variables included selected socio-demographics

and employment variables. Multivariate adjusted odds ratios (aOR) and 95% confidence intervals. All analyses were performed separately by sex.

Main Findings

Figure 1 summarizes the distribution of the four violence outcomes by sex and country, based on final model's findings. Panama had the highest prevalence of WRV (non-sexual and sexually-related) for both sexes, being slightly higher among males. These differences, as compared to the remaining countries, were marked. For fear (both WRF and CWRF), the highest prevalence levels were in Honduras and El Salvador. Honduras had the highest rates of CWRF for both sexes, being slightly higher for women. The difference in prevalence levels between experiencing fear and actually having witnessed or experienced violence was greatest for El Salvador (i.e., very high levels of fear, but low levels of violence), as compared to the remaining countries. Guatemala had the lowest prevalence of fear, whether at work or CWRF, of all six countries. For Nicaragua, the proportions of both types of WRV were second only to Panama, although still much lower, and slightly higher for men. Lastly, Costa Rica had one of the lowest proportions for both types of WRV (after El Salvador), with lesser differences between sexes. There was a greater difference between sexes in terms of fear, with higher levels in men.

The final models were adjusted for those sociodemographic characteristics significantly associated with both WRV or WRF, primarily education level and ethnicity. Several findings were consistent across both sexes, for one or more of the four violence outcomes. Thus, increasing education level, was associated with an increased prevalence, although in the final models this effect persisted only for WRV, both non-sexual (university education: aOR=1.83; 95% CI:1.35 – 2.48) and sexual WRV (aOR=1.71; 95% CI:1.14-2.58). The prevalence varied by ethnic group and type of WRV, being slightly highest for black/mulatto women (and WRV and, in black/mulatto men, for all four outcomes (e.g., for sexual WRV, it was aOR=2.03; 95% CI 1.39-2.97 for women and aOR=2.26; 95% CI: 1.66-

3.00 for men. Occupational class had a lesser effect, with only non-manual unskilled men having a higher risk of WRF (both at work and CWRV); the effect of occupation did not persist in women or any of the other outcomes in men. Compared to agriculture, working in the manufacturing or the services sector carried a higher prevalence of WRV in women, and WRF and WRV in men. This was highest for women in the services sector for sexually-related WRV (aOR=6.0; 95% CI: 1.41-25.42). Employers had higher prevalence of both fear and violence, and for workers with a formal job, especially for WRV in both sexes. Night shift work remained a statistically significant factor concerning WRV (non-sexual aOR=1.95; 95% CI: 1.40-2.73; sexual aOR=2.02; 95% CI: 1.33-3.10). In the final model, the effect of working more than 40 hours only remained for women and WRV. The pattern of a low monthly income being protective for WRF but a risk factor for WRV remained significant for both sexes. Increasing commuting time remained strongly associated with all forms of WRF and WRV.

Discussion

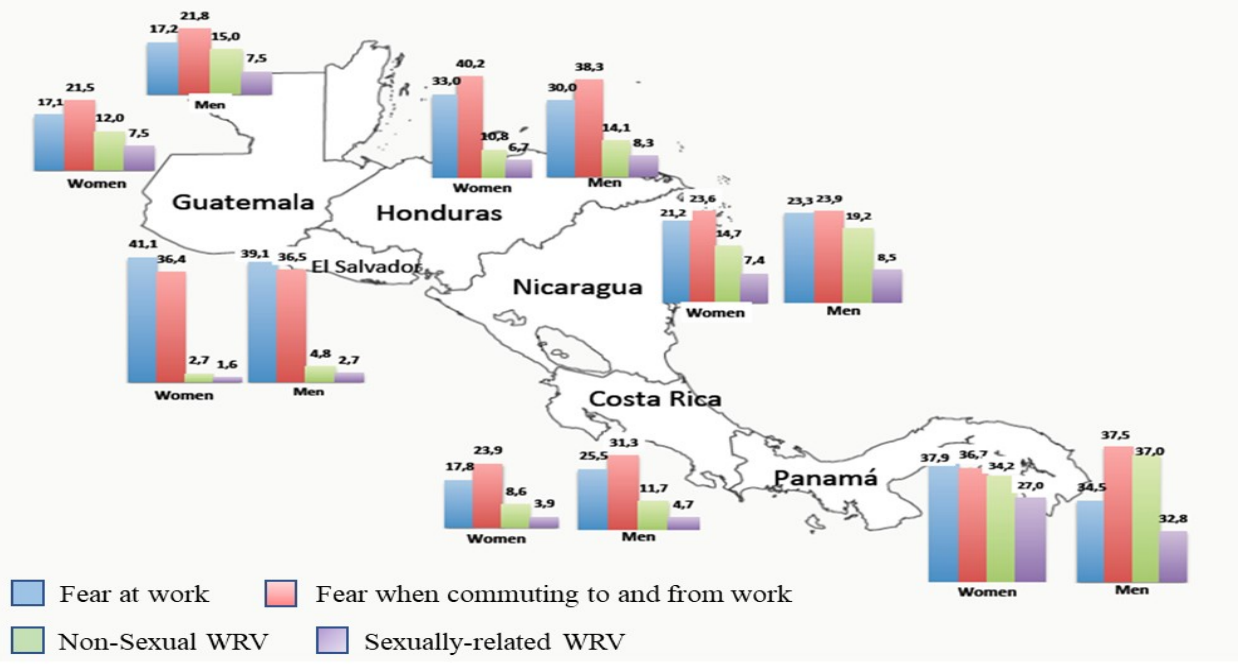
We found large differences in the prevalence of work-related fear and violence in Central

America. As expected, fear was more prevalent than actually witnessing or experiencing violence. Fear while commuting was more prevalent than fear at work. Non-sexual violence was more common than sexually-related violence. In general, men and women followed similar trends insofar as prevalence of the outcomes and in the general direction of many of the determinants. Greater likelihood of reporting WRV was reported by higher educated workers, workers of black/mulatto ethnicity, workers in non-agricultural sectors, employers, formal workers, workers working nights shifts, workers with low monthly income, and workers with longer commutes.

Policy Implications

The reported findings support the need to address generalized violence, beyond what may occur related to work. In addition, some of the findings (e.g., highly educated and formally employed are more likely to report violence or fear) seems a bit surprising in light of prior literature about where violence might be expected. Thus, further research is needed to explore why this may be the case, if these groups are actually experience violence, or if they do feel more empowered to report it.

Figure 1. Distribution of the adjusted prevalence of WRF and WRV in six Central American countries of Central America by gender. II ECCTS.



Example of Analysis of Combined items: Job Precariousness and Health

Background

Previous literature indicates that job precariousness harms workers' health. Multidimensional approaches to job insecurity may improve the understanding of how job precariousness is associated with health, and the underlying causal mechanisms. The relation with poor health seems to be higher among women, related to prevalent gender inequalities within the labor market. To continue delving into the study of the prevalence of job precariousness and its relationship with the deterioration of workers' health, mainly in lower-middle-income countries, we explored whether or not workers exposed to more job precariousness in Central America report worse general health than workers with more job security. We conducted separate analyses by gender and for different types of employment.

Methods

The main outcome was self-reported general health. Responses fair, poor and very poor were categorized as "bad" health, and responses excellent and good were categorized as "good" health. The main independent variables were modeled according to the Employment Precariousness Scale (EPRES) to measure job insecurity, grouping 16 items to construct four dimensions: temporality, salary, exercise of benefits and vulnerability. Temporality was measured by asking, "How long have you been working in your main job?" Salary was measured by asking "What has your average monthly income been during the last three months?" Exercise of job benefits was measured by asking about whether or not the person could take paid vacations, receive a retirement pension, take holidays or weekly rest days, take medical leave, leave or rest when need it, take time off work to go to the doctor when they need it without losing pay, obtain permission for family or personal reasons, and make use of maternity or paternity leave. We constructed a dichotomous indicator (i.e., exercise any of those benefits vs. none) for Vulnerability. Vulnerability was measured by

asking how often the person can decide when to take a break, can leave their job for at least an hour for a personal or family matter, without having to ask for special permission. Also, the extent to which the person was concerned about tasks changed against their will; salary variations such as that it is not updated, it's lowered, or the pay is in kind; or that the schedule, the shift, the days of the week, the hours of entry and exit change against will. Additionally, participants were asked how often they were treated unfairly. The answer options for all the questions were dichotomized into "yes" (always; many times, and sometimes), and "no" (very few times and never). We created an indicator variable (i.e., any of the items vs. none). We calculated prevalence ratios (PR, or the ratio of the prevalence in one group vs. the group treated as the reference) and corresponding 95% confidence intervals. Models were adjusted for sociodemographics (age, sex, country), health-related behaviors (smoking, physical activity), and working conditions (safety, hygiene, ergonomics and psychosocial).

Main findings

Table 1 shows the results of the relationship of the job precariousness indicators with poor health, separately by sex and type of job employment. For instance, among women, workers that have been in temporal jobs between 6 to 10 years have a prevalence of poor health of 22.3%, which is lower (PR = 0.65, 95% CI: 0.44-0.96) than workers who have been more than 10 years in temporal jobs.

Employees: About 41% of women reported a duration of ≤ 2 years in the main job, and 42% reported an average monthly income of \leq \$ 300; 69% of the wage earners could not exercise their benefits and 83% reported vulnerability; 37% of the men reported a duration of ≤ 2 years in the main job and 40% reported an average monthly income of $>$ \$ 500; 71% of men could not exercise their benefits, and 83% reported vulnerability. Female employees who had been in temporal jobs between 6 to 10 years were less likely to report poor health. In addition, workers

reporting vulnerability were more likely to report poor health. In contrast, wage earners in job with duration between 2 and 6 years were less likely to report poor health.

Owners: About 30% of the women had a duration of ≤ 2 years in the main job; most reported average monthly income $\leq \$ 300$; 92% could not exercise their benefits and 50% reported vulnerability. About 43% of men had been > 10 years in their job; 49% reported an average monthly income of $\leq \$ 300$ and the majority declared themselves incapable of exercising their benefits; they also reported vulnerability. Owners reporting vulnerability were more likely to report poor health. After adjusting for covariates, some associations increased and others decreased.

Self-employed: About 35% of women had a duration of ≤ 2 years in the main job; 71% reported an average monthly income of $\leq \$ 300$. The majority could not exercise their benefits while 48% reported vulnerability. Most of the men had been in their main job >10 years, and 53.4% reported a monthly income of $\leq \$ 300$. Most could not exercise their benefits and reported vulnerability. As wages decreased, poor

health increased. Reporting of vulnerability was associated with poor health. After adjusting for covariates, some associations increased.

Discussion

We observed the highest prevalence of precariousness indicators in self-employees, followed by owners, and then employees. With exceptions, by and large, there was no clear association between three indicators of job precariousness (i.e., temporality, salary, or exercise of rights) and poor health. The indicator of vulnerability was the most frequently and clearly associated with poor health, but not among employees.

Policy Recommendations

Societies and policymakers may have a variety of reasons for, and goals from, addressing job precariousness. However, the data analyzed here suggests that Central Americans should not expect marked improvements in worker health from targeting precariousness. If improved worker health is a goal, other policy levers must be identified.

Table 1. Adjusted prevalence and prevalence ration of precariousness indicators with poor health by gender and employment type.

	Employees		Prev.	Owners		Self-employees	
	Prev.	PR (95% CI)		PR (95% CI)	Prev.	PR (95% CI)	
Women							
Temporality (>10 years)	39.0	1	35.3	1	44.5	1	
6 to 10 years	22.3	0.65 (0.44 - 0.96)	35.5	1.12 (0.69 - 1.80)	44.1	1.10 (0.82 - 1.37)	
> 2 to < 6 years	24.2	1.10 (0.73 - 1.61)	32.3	0.96 (0.63 - 1.46)	25.0	0.80 (0.56 - 1.06)	
2 years or less	17.5	0.75 (0.49 - 1.14)	34.3	1.14 (0.74 - 1.76)	28.5	0.90 (0.70 - 1.20)	
Salary > \$ 500	21.2	1	30.6	1	33.9	1	
\$ 301 to \$ 500	14.5	0.91 (0.54 - 1.53)	12.1	0.59 (0.29 - 1.23)	25.2	0.89 (0.56 - 1.42)	
\$ 300 or less	27.2	1.60 (0.97 - 2.48)	37.9	1.73 (0.91 - 3.21)	36.1	1.27 (0.84 - 1.92)	
Exercise rights (Yes)	25.2	1	22	1	12.5	1	
Cannot exercise rights	22.0	1.06 (0.76 - 1.47)	34.8	1.42 (0.56 - 3.50)	34.4	3.02 (1.27 - 7.16)	
Vulnerability (None)	12.9	1	24.6	1	34.9	1	
Greater experience	24.4	2.12 (1.42 - 3.16)	46.2	1.66 (1.16 - 2.37)	33.2	0.92 (0.75 - 1.12)	
Men							
Temporality (>10 years)	33.1	1	45.2	1	38.0	1	
6 to 10 years	21.9	0.68 (0.41 - 1.12)	21.6	0.74 (0.38 - 1.29)	31.4	0.87 (0.62 - 1.23)	
> 2 to < 6 years	16.9	0.57 (0.37 - 0.87)	39.1	1.14 (0.75 - 1.71)	26.0	0.88 (0.59 - 1.30)	
2 years or less	19.3	0.69 (0.45 - 1.05)	35.6	0.93 (0.61 - 1.41)	31.4	0.90 (0.66 - 1.22)	
Salary > \$ 500	19.2	1	31.3	1	19.1	1	
\$ 301 to \$ 500	22.2	1.18 (0.76 - 1.82)	22.7	0.84 (0.48 - 1.47)	27.2	1.84 (1.17 - 2.91)	
\$ 300 or less	21.8	1.13 (0.71 - 1.79)	45.3	1.42 (0.90 - 2.24)	37.1	2.30 (1.56 - 3.38)	
Exercise benefits (Yes)	18.8	1	16.1	1	24.8	1	
Cannot exercise	22.0	1.08 (0.70 - 1.65)	40.2	2.30 (0.99 - 5.35)	33.4	1.48 (0.55 - 3.98)	
Vulnerability (None)	20.4	1	34.1	1	30.9	1	
Greater experience	21.7	0.93 (0.63 - 1.36)	45.6	1.40 (1.03 - 1.9)	35.2	1.30 (1.03 - 1.67)	

D. CONSIDERATIONS

Given there has been a historical lack of reliable and scarcely distributed information about occupational health in Central America, as in most of Latin America (Iunes 2002; Wesseling et al., 2002; Merino-Salazar 2015), the Central American Working Conditions and Health Survey, both its first round (Benavides et al. 2016) and the second round (described in this report), is an unique effort providing an overview of the nature, and possible health effects of working and labor conditions in the six Spanish-speaking countries of Central America. The use of a harmonized approach, i.e., using the same, consistent, methodological approach and survey questionnaire across the six countries included in the II ECCTS, based on validated international instruments, facilitates cross-country comparability and creates opportunities to inform stakeholders on decision making for the improvement of the health and well-being workers in Central America, not only within individual countries, but also at the regional level.

The II ECCTS interviewed a representative sample of 9,032 workers in the formal and informal sectors of Central America, supplemented by focus groups in each country that gathered a total of 137 participants. Workers were interviewed in their homes, and data collected on worker and family demographics, working and employment conditions, health status, access to labor rights and social protections, and preventive resources. In addition, the II ECCTS included two modules on suspected risk factors of chronic kidney disease and work-related violence. Additional focus groups were useful to supplement the survey study's findings by exploring specific aspects of the questions included in the questionnaire.

Among the most salient results, 81% of Central American workers in the II ECCTS reported not being covered by social security protections, which provides health care access and other benefits, although this varied widely, with a smaller proportion of workers in Costa Rica (40%) and Panama (53%) reporting not being covered, and a much larger proportion of workers in Guatemala (88%), Honduras (86%), El Salvador (85%) and Nicaragua (75%) reporting lack of social security coverage. Half of the participants did not have a formalized hiring agreement. Most of them did not receive written pay stubs with wages or salaries, and the possibility of exercising labor right differed widely between men and women industries. There was a high percentage of workers being exposed to hazardous working conditions, particularly regarding psychosocial work risk factors. In general, most participants considered their health status to be good or very good, except for Nicaragua and Honduras which had a higher percent of people considering their health

status to be fair. Having a union at the worksite or having had health evaluations, measurements, or controls of possible health risks taking place at work was uncommon. However, a large proportion of participants reported poor understanding of labor rights, with women reporting greater proportion.

Regarding the module on chronic kidney disease, heat at work was considered annoying or affecting job performance by a third of the participants, with only a small percentage of people reporting direct contact with agrochemicals. However, nonsteroidal anti-inflammatory drugs, a risk factor for chronic disease, were used by most participants. Finally, regarding work-related violence, women reported the greatest proportions of insecurity associated with feeling unsafe overall. In contrast, men reported slightly greater proportions of non-sexual and sexual work-related violence overall.

When interpreting the findings of the II ECCTS, readers need to keep in mind that the II ECCTS is a cross-sectional study and, as such, has a limited ability to address causal hypotheses; this is not its purpose. Also, like all surveys, the II ECCTS is based on self-reported data, which may suffer validity issues given potential participant's biases related to accurately remembering or recalling information, which can further be affected by recent contextual changes. Nevertheless, II ECCTS provides us with a snapshot in time of specific aspects of working conditions, health beliefs and behaviors included in the questionnaire. These pictures provide a benchmark for future surveys on health and working conditions in Central America. However, periodic rounds of the ECCTS, like this one, offer the opportunity to examine the status and change of working and employment conditions and potentially related health outcomes, which can lead to better policymaking. Also, the periodical repetition of the ECCTS could help identify opportunities for intervention or examining changes over time (e.g., labor agreements and regulations that may have an effect on the type and number of employment contracts; changes in social protection rights reflecting in job benefits).

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