GENDER & ADOLESCENCE: GLOBAL EVIDENCE

ENDLINE REPORT SERIES

Young people's health and nutrition in Jordan

GAGE endline findings

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Table of contents

Figures

Boxes

Tables

Introduction

Although Jordan boasts an advanced health care system, it is not on track to deliver on its commitment to the health-related Sustainable Development Goals (SDGs). The 2024 Sustainable Development Report states that major challenges remain regarding SDG 2 (no hunger), SDG 3 (good health), and SDG 6 (clean water and sanitation) (Sachs et al., 2024). Given that Jordan's population is very young (29% of all residents are aged 10–24), and given that adult health is shaped by the habits developed during adolescence, Jordan's ability to achieve the SDGs, and the goals laid out in its myriad health sector strategies,[1] will depend on whether it can address problems such as youth overweight and obesity and substance use (Department of Statistics and ICF, 2024; Khader et al., 2024; World Health Organization (WHO), 2024; United Nations Population Fund (UNFPA), 2025).

This report, on young people's physical health and access to health services, as well as a companion report on young people's sexual and reproductive health (see Presler-Marshall et al., 2025a), draws on mixed-methods data collected in 2024 and 2025 by the Gender and Adolescence: Global Evidence (GAGE) research programme. Both reports aim to contribute to the evidence base to inform the Government of Jordan and its development partners' strategies and actions to help meet national and international goals regarding young people's physical health. Designed to build on baseline (2018–2019) and midline (2022–2023) research, surveys were undertaken with nearly 3,000 Syrian, Jordanian and Palestinian adolescents and young adults living in Jordan. Surveys were also completed by caregivers. In addition, qualitative interviews were conducted with over 750 young people (206 of whom have been followed since baseline), nearly 200 caregivers (77 of whom have been followed since baseline) and 63 key informants.

The report begins with an overview of the Jordanian context, focusing on the contours of the population and what is known about young people's physical health and their access to health services. We then describe the GAGE conceptual framework and methodology. We present our findings, including on nutrition and exercise, broader health and access to health services and substance use – focusing on differences by gender, age, nationality, location and marital and disability status. We conclude by discussing the key actions that are needed to accelerate progress and ensure that all young people living in Jordan have access to the nutrition, information and services they need to grow up healthy.

Mini market selling coffee, nuts and cigarettes © Nathalie Bertrams/GAGE 2025

1 The Ministry of Health's broader Strategic Plan is supported by plans and strategies that address substance use and mental health, nutrition and health information, among other issues.

Jordan context

Population

Jordan's population, estimated at 11.7 million (up from only 6.9 million in 2010), is very young (Department of Statistics, 2024). One-fifth (20%) of residents are adolescents aged 10–19, and nearly a third (29%) are young people aged 10–24 (UNFPA, 2025).

Approximately one-tenth of Jordan's residents (1.3 million people) are Syrian (DoS, 2016). Of those, 427,000 were registered as refugees with the United Nations High Commissioner for Refugees (UNHCR) as of December 2025 (UNHCR, 2025a). Nearly 80% of Syrians live in Jordanian host communities; most of the remainder live in formal refugee camps run by UNHCR (Zaatari and Azraq), although 15,000 are estimated to live in informal tented settlements scattered throughout the countryside (ibid.). Since the fall of the Assad regime in Syria in December 2024, Syrian refugees have begun returning home. UNHCR (2025b) reports that over 170,000 Syrians left Jordan for Syria in the 12 months between December 2024 and December 2025.

There are also nearly 2.4 million Palestinian refugees registered with the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) living in Jordan as of 2024 (UNRWA, 2025). Of these, approximately three-quarters have Jordanian citizenship, have full access to government services and employment, and live in Jordanian communities (Amnesty International, 2019). The remainder (some 630,000 people) – who either entered the country in the 1960s or later or are descended from those who did – lack citizenship and its attendant rights. They are concentrated in one of 10 official camps run by UNRWA, one of which is Jerash camp (Amnesty International, 2019; UNRWA, 2025a).

In 2017, Jordan was reclassified from an upper-middle-income country to a lower-middle-income country. Since then, low economic growth, coupled with high population growth – alongside external shocks such as the Covid-19 pandemic and conflict in Ukraine and Gaza, and accompanying volatility of international aid – has resulted in an increase in poverty (World Bank, 2023; Hunaiti, 2024). Indeed, in 2023, it was estimated[2] that the poverty rate had reached 27%, up from 16% in 2017 (Economic and Social Commission for Western Asia (ESCWA), 2023). Refugees, who face legal restrictions on the type of employment they can do, are far more likely to be poor than Jordanians. UNHCR (2024) reports that in 2024, 67% of all refugee households under its remit were poor; American Near East Refugee Aid (ANERA, 2024) adds that the poverty rate that same year among Syrian households was 80%. Of Palestinians living in camps, it is estimated that 31% are poor (United Nations Children's Fund (UNICEF), 2021). The highest poverty rate is in Jerash camp, where 53% of households live below the poverty line (ibid.)

Adolescent health and access to health care

Adolescents' poor nutrition and inactivity are growing concerns in Jordan. Khader et al. (2024), drawing on a nationally representative sample of adolescents aged 12–18, found that only 21% eat at least three servings of fruit a day, and only 24% eat at least three servings of vegetables. The authors attributed this not only to the cost of fruit and vegetables, but also to adolescents' (and parents') food preferences. That same survey found that 39% of girls and boys do not engage in any form of light exercise over the course of a week, with Palestinian adolescents living in camps (44%) more likely to be inactive than their Jordanian (38%) and Syrian peers living in host communities (34%) or camps (31%). The authors speculate that UNRWA budget shortfalls have reduced recreational opportunities for Palestinian adolescents.

Unsurprisingly, rates of overweight and obesity have climbed in recent years, particularly for adolescent girls and young women due to restrictions on their movement, which intensify after the onset of puberty and even more so after marriage (Jones et al., 2019; Presler-Marshall et al., 2023a; Presler-Marshall et al., 2024a). Al-Qerem et al. (2025), drawing on a sample of adolescents aged 12–19, report that 33% of girls and 20% of boys were overweight or obese, and that the rates increased with adolescents' age. This trend is also evident in data from the Jordan Population and Family Health Survey (JPFHS). Of adolescent girls aged 15–19, 30% of Syrians and 36% of Jordanians were overweight or obese (Department of Statistics and ICF, 2024). Of young women aged 20–24, rates were 69% and 64% respectively.

2 The most recent Household Expenditures and Income Survey (HEIS) was conducted in 2017–2018; an update is expected in 2026.

A 16-year-old Bani Murra boy picking grapes in Jordan © Marcel Saleh/GAGE 2025

Substance use is also a large and growing concern, particularly for boys and young men. Khader et al. (2024) found that 19% of adolescent girls and boys aged 12–18 have used tobacco with a water pipe, 15% have used electronic cigarettes, and 10% have used conventional cigarettes. Palestinians living in camps were markedly less likely to use any form of tobacco than their peers (7%, 10% and 7% respectively). The 2023 JPFHS reports on smoking by age group and gender. Of ever-married girls aged 15–19, 8% use any form of tobacco (Department of Statistics and ICF, 2024); the rate for boys the same age is 14%. Although young women's use (10%) is barely higher than the percentage for girls, this is not the case for young men – 50% of them use tobacco, and of those, nearly all are daily smokers (ibid.). Drug use is also a growing concern, due at least in part to the vast quantities of Captagon (an illicitly produced amphetamine) that have been produced in Syria and then exported across the region (Felbab-Brown, 2024). Abdulfattah et al. (2024), in their study of senior high and university students, found that 5% admitted to using the stimulant (see also Presler-Marshall et al., 2024a).

Health care is broadly available in Jordan. Jordanians and Syrians living in host communities primarily rely on services provided by the government. Syrians living in formal camps are provided with basic services by UNHCR; UNRWA provides the same for Palestinians[3] (Elnakib et al., 2024). That said, Syrian refugees are billed for non-UNHCR services at the non-insured Jordanian rate (and then only if they can present a valid UNHCR certificate[4]), and UNRWA's budget has been slashed in recent years (UNRWA, 2025b). This means that, given the high poverty levels, health care is unaffordable for many (El Arab and Sagbakken, 2018; UNRWA, 2023; Elnakib et al., 2024; UNHCR, 2025c).

3 This represents a reductionist view of primary care; tertiary care is (mostly) provided by government hospitals and then paid for by different entities.
4 Without this certificate, there is no discount for services.

Conceptual framework

Informed by the emerging evidence base on adolescent well-being and development, GAGE's conceptual framework takes a holistic approach that pays careful attention to the interconnectedness of what we call the '3 Cs' – capabilities, change strategies and contexts – in order to understand what works to support adolescents' development and empowerment, both now and in the future (see Figure 1). This framing draws on the three components of Pawson and Tilley's (1997) approach to evaluation, which highlights the importance of outcomes, causal mechanisms and contexts, though we tailor it to the specific challenges of understanding what works in improving adolescents' capabilities.

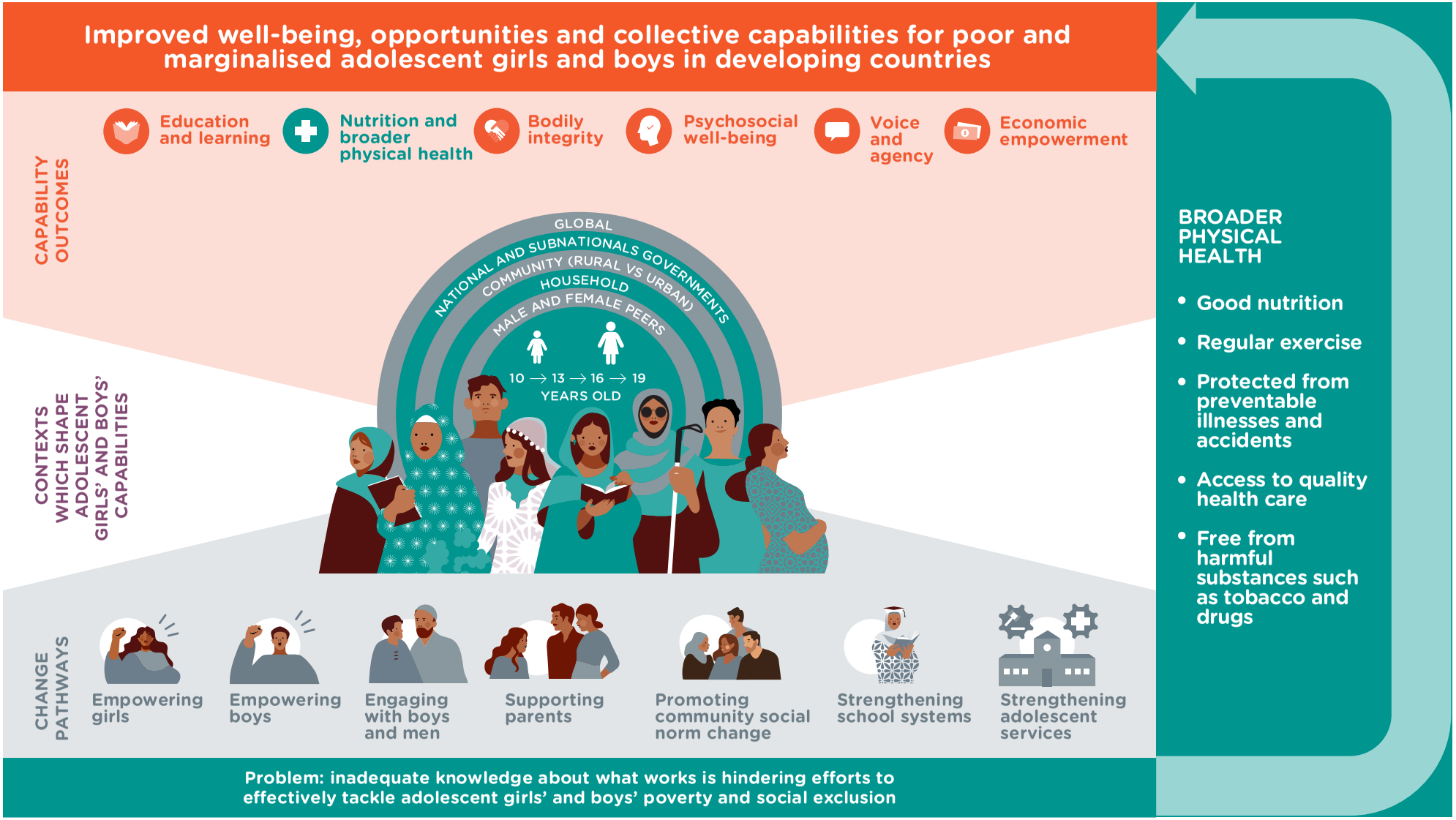
The first building block of our conceptual framework is capability outcomes. Championed originally by Amartya Sen (1985, 2004) and nuanced by Martha Nussbaum (2011) and Naila Kabeer (2003) to better capture complex gender dynamics at intra-household and societal levels, the capabilities approach has evolved as a broad normative framework exploring the kinds of assets (economic, human, political, emotional and social) that expand the capacity of individuals to achieve valued ways of 'doing and being'. At its core is a sense of competence and purposive agency: it goes beyond a focus on a fixed bundle of external assets, instead emphasising investment in an individual's skills, knowledge and voice. Importantly, the approach can encompass relevant investments in children and young people with diverse trajectories, including the most marginalised and 'hardest to reach', such as those with disabilities or those who were married as children. Although the GAGE framework covers six core capabilities, this report focuses on physical health, including: nutrition and exercise, broader health and access to health services, and substance use.

The second building block of our conceptual framework is context dependency. Our '3 Cs' framework situates young people socio-ecologically. It recognises that not only do girls and boys at different stages of the life course have different needs and constraints, but also that these are highly dependent on their context at the family/household, community, state and global levels.

The third and final building block of our conceptual framework – change strategies – acknowledges that young people's contextual realities will not only shape the pathways through which they develop their capabilities but also determine the change strategies open to them to improve their outcomes. Our socio-ecological approach emphasises that to nurture transformative change in girls' and boys' capabilities and broader well-being, potential change strategies must simultaneously invest in integrated intervention approaches at different levels, weaving together policies and programming that support young people, their families and their communities while also working to effect change at the systems level. As noted earlier, this report concludes with our reflections on what type or package of interventions could better support young people's physical health.

Pharmacy in Jordan © Nathalie Bertrams/GAGE 2025

Figure 1: GAGE conceptual framework



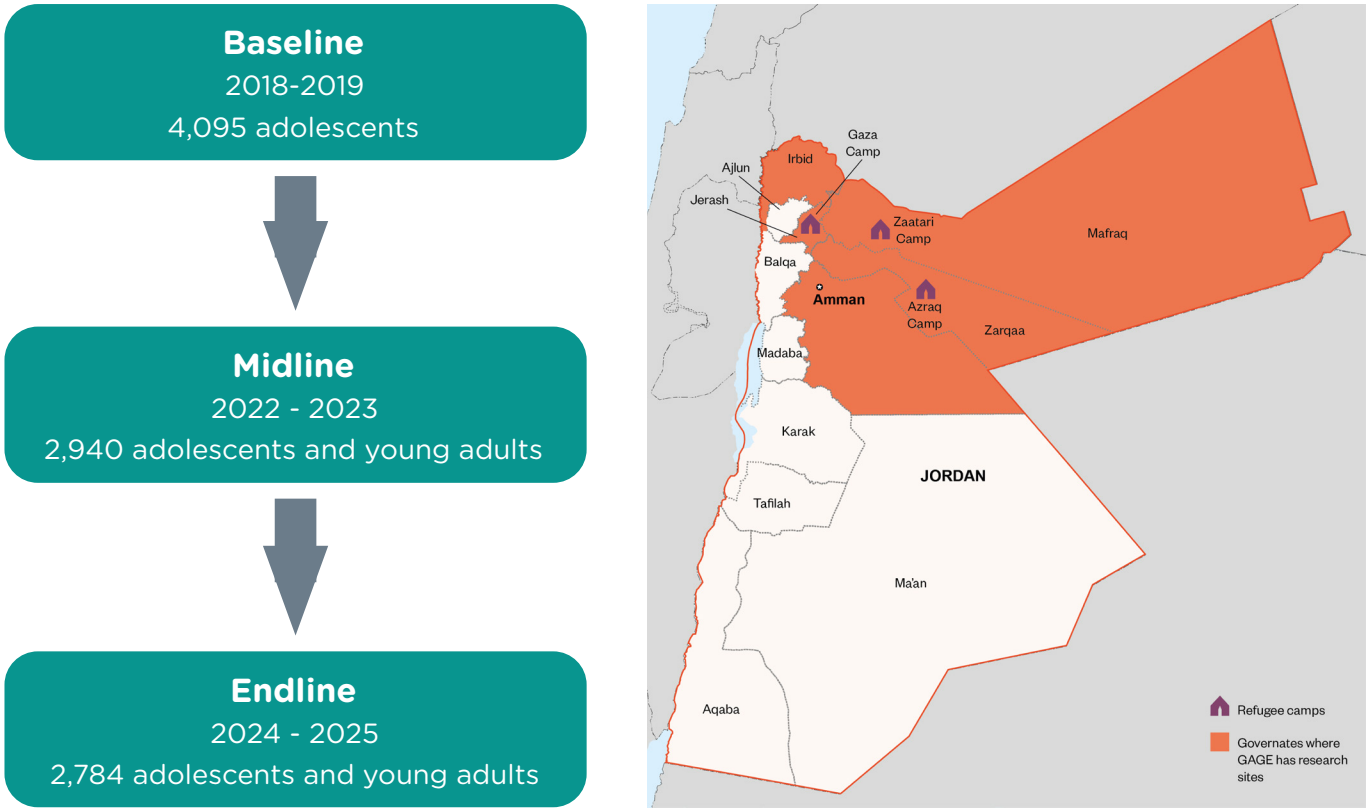
Sample and methods

This report draws on mixed-methods data collected in Jordan in 2024 and 2025, following up on two earlier rounds of research – at baseline (2018–2019) and midline (2022–2023)(see Figure 2). At baseline, the quantitative sample included adolescents from marginalised households across two cohorts (aged 10–12 years and 15–17 years, averaging 11.3 and 16.1 years respectively), with purposeful oversampling of adolescents with disabilities and those who were married prior to age 18 – recognised as particularly vulnerable groups. The baseline sample consisted of 4,095 adolescents in five governorates: Amman, Irbid, Jerash, Mafraq and Zarqa (see Figure 2). At midline, the GAGE sample included 2,940 young people (a 71% follow-up rate), with the two cohorts then averaging 15.0 years old and 20.0 years old.

The GAGE Jordan endline sample involved 2914 total participants. This included 2,784 young people from the original baseline sample (a 68% follow-up rate since baseline and 80% follow-up since midline, see Box 1), and 130 new participants who were not included in the baseline sample. These are: (1) 96 new young people who belong to either the Bani Murra or Turkmen ethnic minority groups[5] and (2) 34 new young people previously included only in qualitative research.[6]

This report focuses on the 2,838 participants who were living in Jordan at the time of the endline survey and surveyed after the pilot (see Table 1). This omits the 43 young people surveyed as part of the pilot and the 33 young people who had moved internationally at endline but completed an abbreviated survey over the phone. Of these 2,838 participants, nearly three-quarters (72%) are Syrian refugees (2,021), just over half of whom (51%) have lived in host communities consistently since baseline (1,031). Approximately 26% of Syrian respondents (523) have lived in refugee camps (Zaatari or Azraq) run by UNHCR since baseline, and 14% (293) have lived in informal tented

Figure 2: Timeline of GAGE research in Jordan, with the distribution of the original baseline sample



5 Turkmen and Bani Murra young people typically have Jordanian citizenship. Because the new Bani Murra and Turkmen participants were identified through a different sampling strategy and have fundamentally different lived experiences, they are presented separately and not included where overall averages are presented. There were 23 individuals in the original baseline sample who self-identifying as ethnic minorities at endline, the majority of whom were classified as Jordanian at baseline.

6 These 34 individuals were included in the quantitative baseline sampling frame but were unable to be surveyed at baseline due to a variety of reasons, namely difficulties locating and scheduling interviews with the household within the baseline study period. They were intended to be surveyed at midline but due to an error were not.

Box 1: Attrition over time

Minimising attrition, or loss-to-follow up, is a key challenge for longitudinal studies where the goal is to understand changes over time. This challenge is acutely felt with the GAGE Jordan sample because many participants are migratory, including refugees leaving Jordan to return to their country of origin (especially Syrians returning to Syria after the fall of the Assad regime in December 2024), those living in Informal Tented Settlements (ITS) moving for seasonal agricultural work, young adult males leaving their communities to seek out paid work, and newly married females leaving their natal household to move into their husband's household. Further, the mandatory secondary school exam and Ramadan fell within the endline survey timeframe, creating logistical challenges with scheduling interviews. Difficulties extending the permits needed to enter the UNHCR refugee camps created additional logistical challenges at endline.

Several mitigation strategies were implemented at endline to minimise attrition:

- Offered in-person participants incentives for their time (monetary for those in host communities, ITS, or Jerash camp and snacks for Syrians in refugee camps due to UNHCR gift restrictions).
- Offered virtual phone interviews, including outside of the typical working hours, to reach young males engaged in paid work, as well as Syrians in camps.
- Created an intensive tracking protocol that utilised the qualitative team for intensive tracking to capitalise on their rapport with participants.

With these mitigation strategies in place, 68% of the original baseline sample from 2018-2019 and 80% of those surveyed at midline in 2022-2023 were re-surveyed at endline. This attrition is in-line with another longitudinal research study on Syrian refugees conducted in a similar timeframe (2019-2024), where they retained 63% of their sample, highlighting the challenges with tracking migratory samples (Alrababah et al., 2025).

settlements (ITS) at any point since baseline[7]. A minority of Syrian refugees (174, or 9%) have moved between host communities and camps in the time between the baseline and endline surveys. The remainder of the endline sample are Jordanians (425), Palestinians (273), and a small group of individuals (23) that identified as another nationality (denoted 'other', these include Iraqi and Egyptian respondents). Almost all Palestinians in the GAGE sample live in Jerash camp, which is located in Jerash governorate and is informally known as Gaza camp because most of its residents are ex-Gazans who were displaced during the 1967 Arab–Israeli war and who lack Jordanian citizenship and its attendant benefits. Due to the sample size, the 'other' nationality group is not included in comparisons by nationality, but is included in all other demographic group disaggregation, such as gender and age cohort.

Just over half (53%) of the endline sample are female. Although the baseline sample was approximately equally split between the two age cohorts (53% younger [10-12 at the time] and 47% older [15-17 at the time]), the older cohort were more likely than younger cohort to be lost to follow-up between baseline and endline (62% follow-up for the older cohort versus 73% follow-up for the younger cohort, $p<0.01$). Because of this, the younger cohort is

Table 1: Quantitative sample

	Nationality				Sub-sample of Bani Murra and Turkmen	Sub-sample of those with disability	Sub-sample of those married <18	Total
	Syrian	Jordanian	Palestinian	Other				
Females	1,043	263	150	9	50	149	307	1,515
Males	978	162	123	14	46	135	3	1,323
Younger cohort	1,119	250	174	14	69	173	93	1,626
Older cohort	902	175	99	9	27	111	217	1,212
Total	**2,021**	**425**	**273**	**23**	**96**	**284**	**310**	**2,838**

7 In the seven years between baseline and endline, a minority of young people moved location. This was most common among Syrians (18%). The bulk of movement was between UNHCR-run camps and Jordanian host communities. Because of this movement, young people are classified as 'always camp' dwellers if they were living in a UNHCR-run camp at baseline, midline, and endline. They are classified as movers if they moved from a camp to a host community, or from a host community to a camp, in the years between baseline and endline. They are classified as 'ITS' if they were living in an informal tented settlement at either baseline, midline or endline.

over-represented in the endline sample. Older cohort males were especially likely to be lost to follow-up (57% follow-up), and as such are the most under-represented at endline. At endline, on average, younger cohort adolescents were aged 17.2 years, and are referred to in this paper as adolescent girls and adolescent boys; the older cohort had transitioned to young adulthood (average age of 22.1) and are referred to as young adult women and young adult men. Where both cohorts are discussed simultaneously, they are referred to as young people. Where adolescent boys and young men are discussed together, they are called young males; where adolescent girls and young women are discussed together, they are called young females.

Because GAGE's sample includes the most marginalised adolescents and young adults, about a sixth of young people in our quantitative sample have any functional disability[8] (479). Among those, 284 report having functional difficulties even if they have an assistive device (such as glasses, hearing aids, or a mobility device). Our sample also includes adolescent girls and young adult women who were married prior to age 18. Of the 527 evermarried females, 307 married prior to 18.

The majority of the 206 young people in the qualitative sample were selected from the larger quantitative sample deliberately oversampling the most disadvantaged individuals in order to capture the voices of those at risk of being 'left behind' (see Table 2). The qualitative sample also included 84 caregivers (almost all parents) and 24 key

Table 2: Quantitative sample

		Syrian	Jordanian	Palestinian	Bani Murra/ Turkmen	Mixed nationality	Sub-sample of those with disability	Sub-sample married < age 18	Total
Individual interviews with young people	Girls	8	8	46	5		26	41	67
	Young women	6	8	36	1				51
	Boys	4	2	29	7		27	3	42
	Young men	7	8	26	5				46
Total		25	26	137	18		53	44	206
Group interviews with young people	Females	9	5	21	4	4			43 groups (306 people
	Males	6	5	18	2	5			36 groups (244 people)
Total		65	62	313	42	9			
									756 young people
Individual interviews with caregivers	Mothers	6	5	36	0				47
	Fathers	5	6	19	0				30
Total		11	11	55	0				77
Group interviews with caregivers	Mothers	3	1	3	1				8 groups (59 people)
	Fathers	2	1	5	1				9 groups (59 people)
Total		5	2	8	2				17 groups (118 people)
									195 care-givers
Key informants		25	6	24	8				**63 key informants**

8 Determined by using the Washington Group on Disability Statistics Questionnaire, which was filled out by caregivers at baseline: www.washingtongroup-disability.com/question-sets/wg-short-set-on-functioning-wg-ss/

informants (government officials, community and religious leaders, and service providers).

Quantitative survey data was collected in face-toface interviews[9] by enumerators who were trained to communicate with marginalised populations. With the exception of never-married adolescent boys, enumerators were typically the same sex as the respondent: all female respondents were interviewed by female enumerators and the majority of young men/ever-married males were interviewed by male enumerators. Surveys were broad (see Luckenbill et al., 2025) and included modules reflecting the GAGE conceptual framework. Analysis of the quantitative data focused on a set of outcomes related to education and learning (data tables are available on request). Statistical analysis was conducted using Stata 18.0. Importantly, where we present endline survey findings, we include the 2,838 young people (2,708 from the original baseline sample who were not part of the pilot or moved internationally and 130 new participants, detailed above) who completed the endline survey. Where we present change over time, however, we restrict our sample and include only the 2,289 young people who completed baseline, midline and endline surveys.[10] These are referred to as the panel sample. For change over time for any given outcome, we also restrict to the sample who have answered that question at all rounds to ensure a consistent sample across all survey rounds.

Qualitative tools, also employed by researchers carefully trained to communicate sensitively with marginalised populations, consisted of interactive activities such as timelines, body mappings and vignettes, which were used in individual and group interviews (see Jones et al., 2025). Preliminary data analysis took place during daily and site-wide debriefings. Interviews were transcribed and translated by native speakers and then coded thematically using the qualitative software analysis package MAXQDA.

The GAGE research design and tools were approved by ethics committees at the Overseas Development Institute and George Washington University. For research participants in refugee camps, permission was granted from the UNHCR National Protection Working Group. For research participants in host communities, approval was granted by Jordan's Ministry of Interior, the Department of Statistics and the Ministry of Education. Consent (written or verbal as appropriate) was obtained from caregivers and married adolescents; written or verbal assent was obtained for all unmarried adolescents under the age of 18. There was also a robust protocol for referral to services, tailored to the different realities of the diverse research sites.

An 18-year-old Syrian girl washing her hands at school, Jordan © Marcel Saleh/GAGE 2025

9 A small number of surveys (81) were completed over the phone, because respondents were unable to be interviewed in person.

10 There are exceptions to this rule, because some questions were not asked at baseline or were asked of only adolescents over the age of 15. These exceptions are carefully noted in the text.

Findings

Our findings are organised in line with the GAGE conceptual framework (see page 4). We begin with nutrition and exercise, and then turn to broader health and access to health services, before concluding with findings on substance use. In each case, we first present endline survey findings, using the full endline sample, highlighting differences between groups where they are significant. When we use the word 'significant', we are referring to statistical significance at least at the 5% significance level, unless otherwise indicated with an asterisk (*) to signify a significant difference at the 10% significance level. For some indicators, we then present change over time, restricting the quantitative sample to only those young people in the panel sample. In each section, we present qualitative findings after the survey findings.

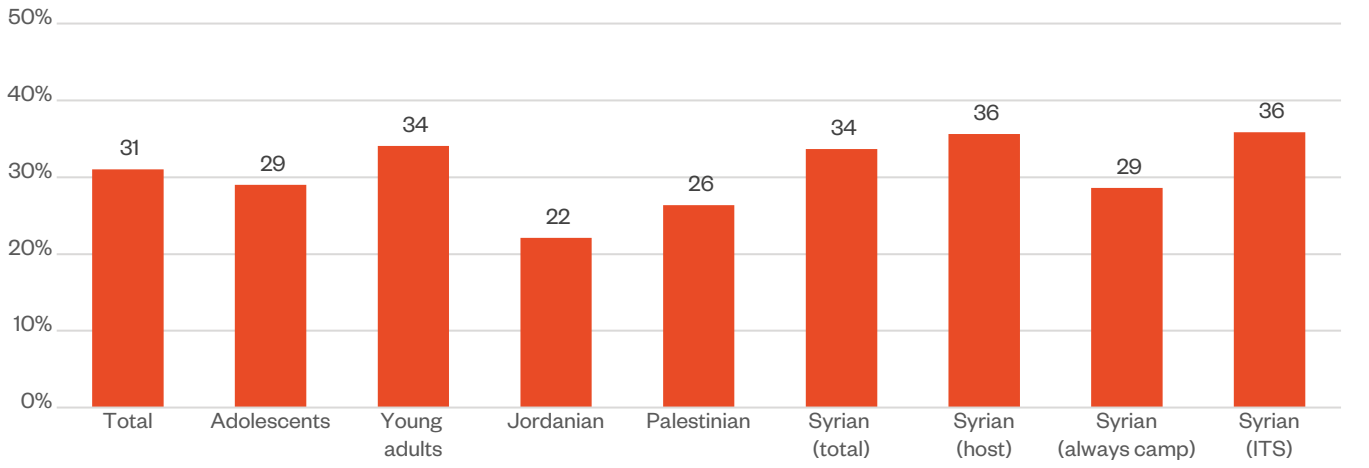
Nutrition and exercise

The endline survey found that approximately one-third (31%) of households were severely food insecure[11] (see Figure 3). Cohort differences were significant; young adults – who were more likely to be married (see Presler-Marshall et al., 2025b) and to live in more resource-constrained households (see Presler-Marshall et al., 2025c) – were more likely to be living in food-insecure households than adolescents (34% versus 29%). Nationality and location differences were also significant. In line with household poverty rates, Jordanians (22%) and Palestinians (26%) were less likely to be living in food-insecure households than Syrians (34%). Syrians living in formal camps (29%), where housing is provided for free, were less likely to be food insecure than their peers living in host communities (36%) and informal tented settlements (36%). Syrian young adults living in host communities were the most likely to be food insecure: 39%.

In aggregate, 27% of young people reported on the endline survey that they had felt hungry in the past month (see Figure 4). Cohort differences were significant. Reflecting their greater likelihood of marriage and poverty, young adults were more likely to report hunger than adolescents (29% versus 25%). Nationality differences were also significant, with better-resourced Jordanians (16%) far less likely to report hunger than their Palestinian (25%) or Syrian (29%) peers.

Although there were limited differences in the number of meals that young people had consumed the day prior to the survey (mean of 2.1), there were significant differences by cohort, gender and nationality in the quality of those meals. In terms of cohort and gender, young adult men (85%) were more likely to have consumed protein than adolescents (78%) and young adult women (72%) (see Figure 5). In terms of nationality, and in line with findings on household food insecurity, Jordanians (84%) and Palestinians (82%) were more likely to have consumed protein than Syrians (76%). Syrians living in informal tented settlements, where households have the fewest resources (see Presler-Marshall et al., 2025c), were the least likely to have consumed protein the day prior to the survey (69%). Syrian young females living in informal tented settlements, who are the sample most likely to be married (see Box 1), were the least likely to have consumed protein (64%).

Figure 3: Household is severely food insecure (by cohort and nationality/location)



11 Food insecurity was measured using the Household Food Insecurity Access Scale (HFIAS). See: https://www.fantaproject.org/sites/default/files/resources/HFIAS_ENG_v3_Aug07.pdf

Figure 4: Proportion of young people who felt hungry in the past month because there was no food in the house (by cohort and nationality)

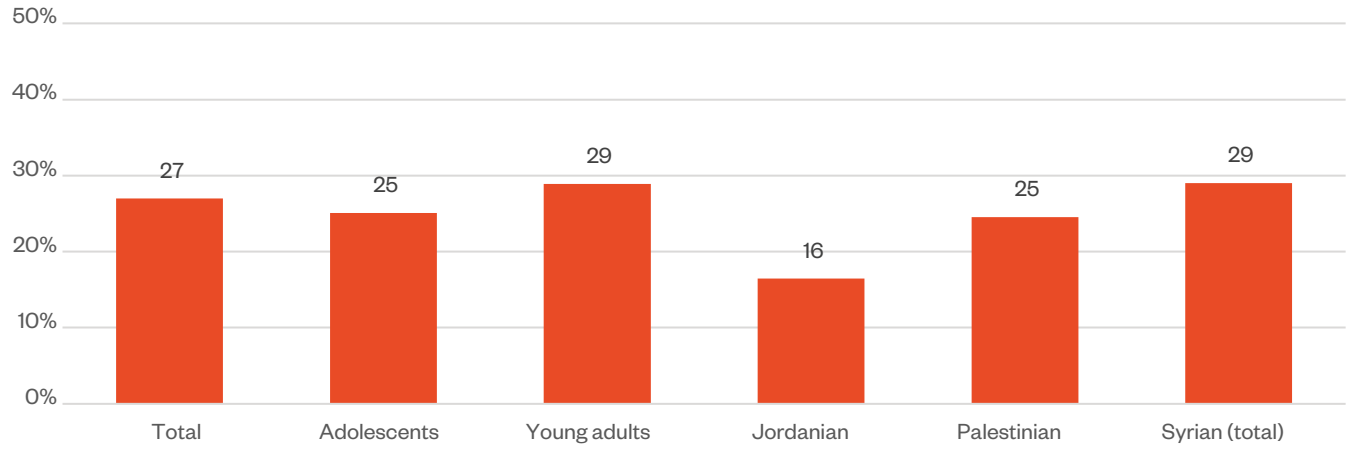
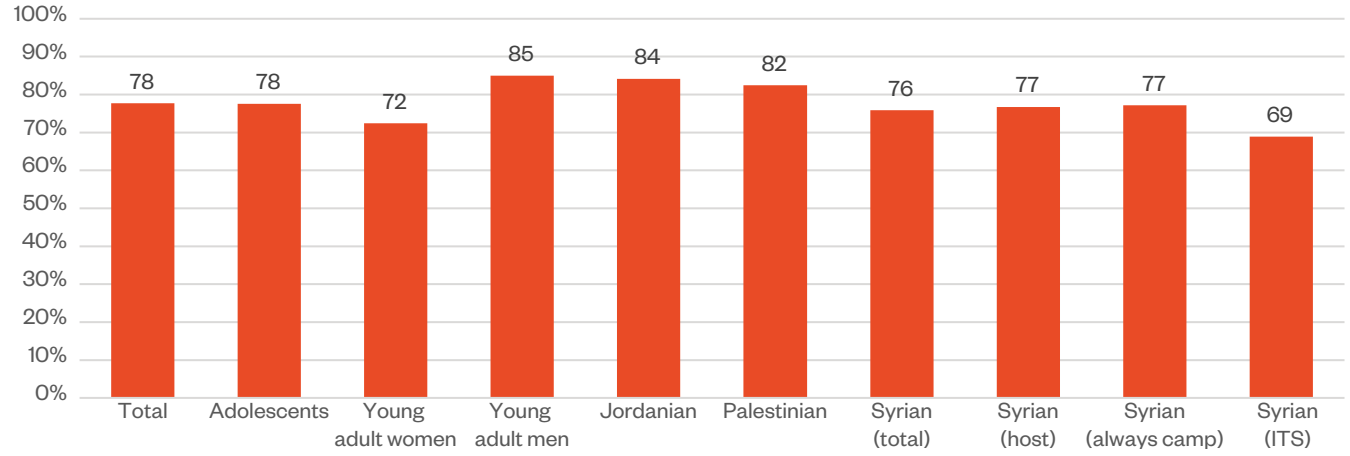


Figure 5: Proportion of young people who consumed animal or plant protein the day prior to the survey (by cohort, gender and nationality/location)



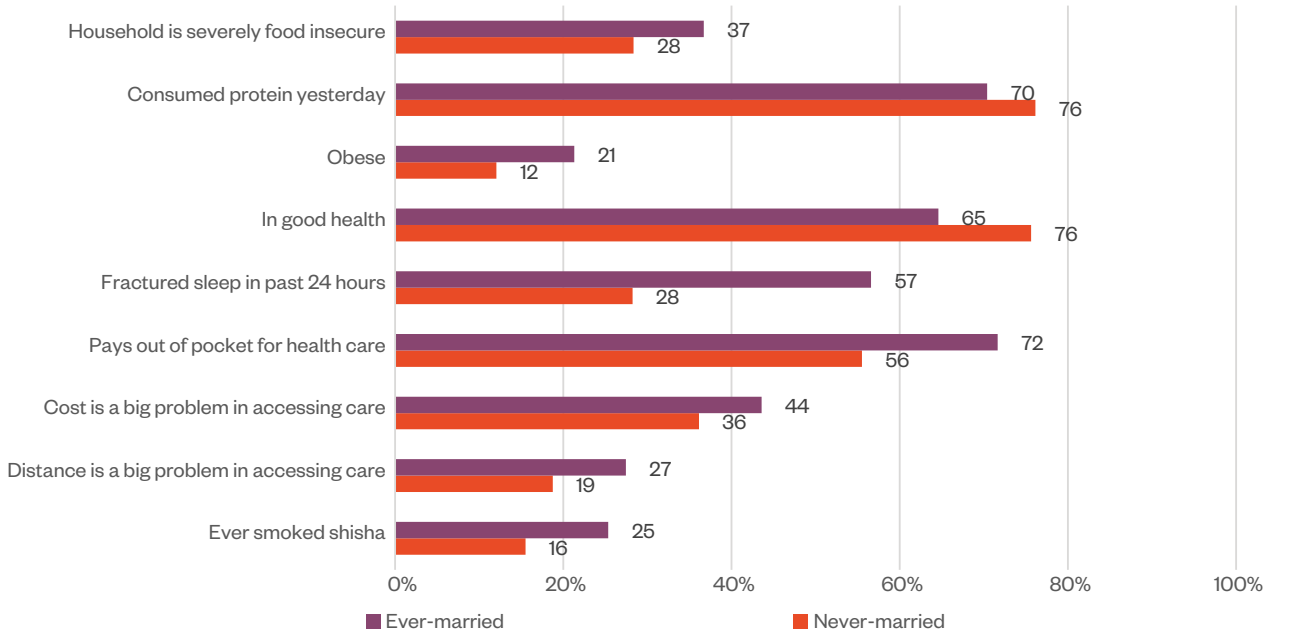
Adolescent boys playing football © Marcel Saleh/GAGE 2025

Box 2: Marriage, especially child marriage, has myriad negative impacts on girls' and young women's physical health

Endline research found that adolescent girls and young adult women who have been married face multiple health challenges compared to their peers who have never married, in part because their households are poorer (see Presler-Marshall et al., 2025c). For example, married young females were significantly more likely to live in households that are severely food insecure (37% versus 28%) and significantly less likely to have consumed protein the day prior to the survey (70% versus 76%) (see Figure 5). Compared with their unmarried peers, married females were also significantly less likely to report being in good health (65% versus 76%), more likely to report having had fractured sleep in the past 24 hours (57% versus 28%), and more likely to report that cost (44% versus 36%) and distance (27% versus 19%) are 'a big problem' in accessing health care. Young married females were also significantly more likely than their unmarried peers to have ever smoked shisha (25% versus 16%) and to be obese (21% versus 12%).

For some variables, the age at which a young bride marries shapes her health outcomes. For example, young brides who married prior to age 18 were significantly more likely than those who married as adults to live in a severely food-insecure household (44% versus 27%). Child brides were also more likely than adult brides to report having had a serious health condition in the past year (16% versus 10%).

Figure 6: Young females' health indicators (by marital status)



During qualitative interviews, many married young females – especially those who were already mothers – reported that although marriage and pregnancy had increased their health-related risks, those transitions had deprived them of the time and money required to take care of themselves. A 21-year-old Syrian mother from Azraq summed it up, saying, '*I look after my children's health, but not my own.*' Many young brides reported poor nutrition. In some cases, this was because the household was poor. A 22-year-old Turkmen girl explained, '*I mean, the house expenses, it is not enough, I swear! I sleep hungry.*' In other cases, this was because young mothers do not have time to eat nutritiously. A 20-year-old Syrian mother from Zaatari camp stated, '*Honestly, food never crosses my mind!*' Young brides also reported exhaustion, due to relentless housework and childcare (including overnight), and that too little money and too little time keep them from accessing health care. An 18-year-old Syrian mother from an informal tented settlement stated, '*When I am sick, I do not go to the doctor.*'

Quite a few married girls and young women taking part in qualitative research explained that they had begun smoking shisha after marriage. In some cases, this is because young brides smoke with their husband. In other cases, it is because husbands – who will not allow their wife to leave home (see Presler-Marshall et al., 2025d) – provide her with a hookah to distract her from boredom. A 21-year-old Syrian young woman from a host community explained, '*I smoke hookah as long as I'm sitting down… Once I finish my tasks, I smoke it… My husband prepared all the hookah products, so I didn't go out.*' This same immobility contributes to young brides' higher rates of obesity.

Few young people reported on the endline survey that they get regular physical exercise. Indeed, 60% reported that there was not a single day in the past week when they were physically active for at least 30 minutes (see Figure 7). Gender differences were significant, with young females (66%) (whose mobility is tightly restricted, see Presler-Marshall et al., 2025d) more likely to report inactivity than young males (52% – not shown). For young males, cohort differences were also significant, with young adult men (56%) – who have begun to assume adult roles (see Presler-Marshall et al., 2025c) – significantly more likely to be physically inactive than adolescent boys (50%). For Syrians, location differences were also significant: those living in informal tented settlements (66%), where tents are tightly clustered, were more likely to report being inactive than their peers in formal camps (62%) and host communities (55%), even though the survey specifically includes agricultural work as a form of activity. Syrian females living in informal tented settlements (71%) were the most likely to report being physically inactive. However, the gender gap was largest among Jordanians: 46% of males but 68% of females reported no activity in the past week (not shown).

Based on body mass index (BMI) scores, 35% of young people were overweight or obese at endline (see Figure 8). Cohort and gender differences were significant: young adults were more likely to be overweight or obese than adolescents (39% versus 32%, not shown), and young females were more likely to be overweight or obese than young males (40% versus 29%). Young adult women (46%) were most likely to be overweight or obese; adolescent boys (27%) were least likely to be. Nationality and location differences were also significant and best interpreted together, as Jordanians (39%) and Syrians living in host communities (38%) were more likely to be overweight or obese than all other groups.

Young people's nutrition and physical activity levels have broadly worsened over time. Of those who completed

Figure 7: Proportion of young people reporting no days of sustained activity in the previous week (by cohort, gender and nationality/location)

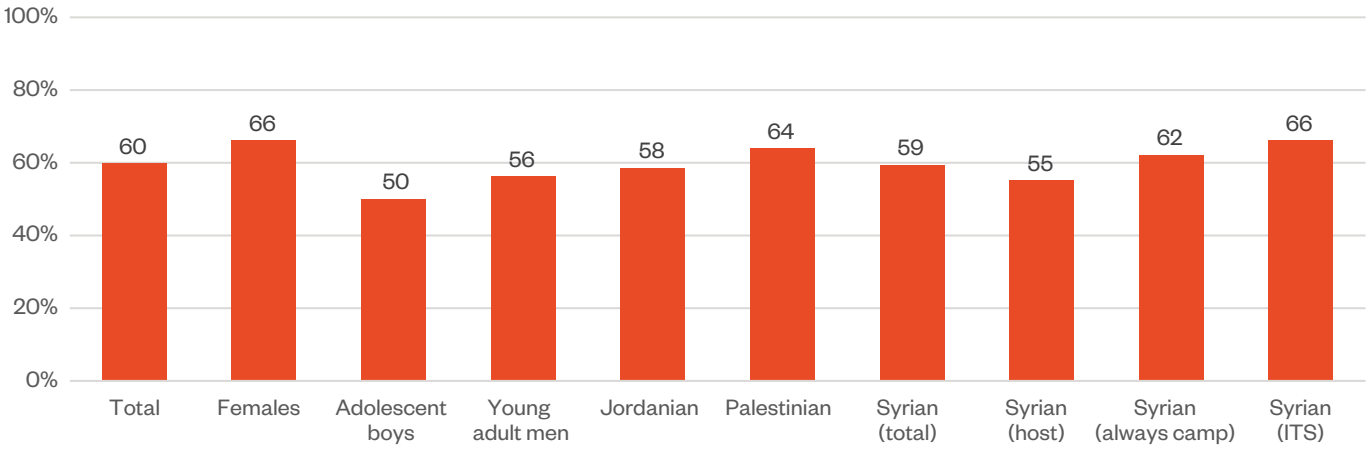
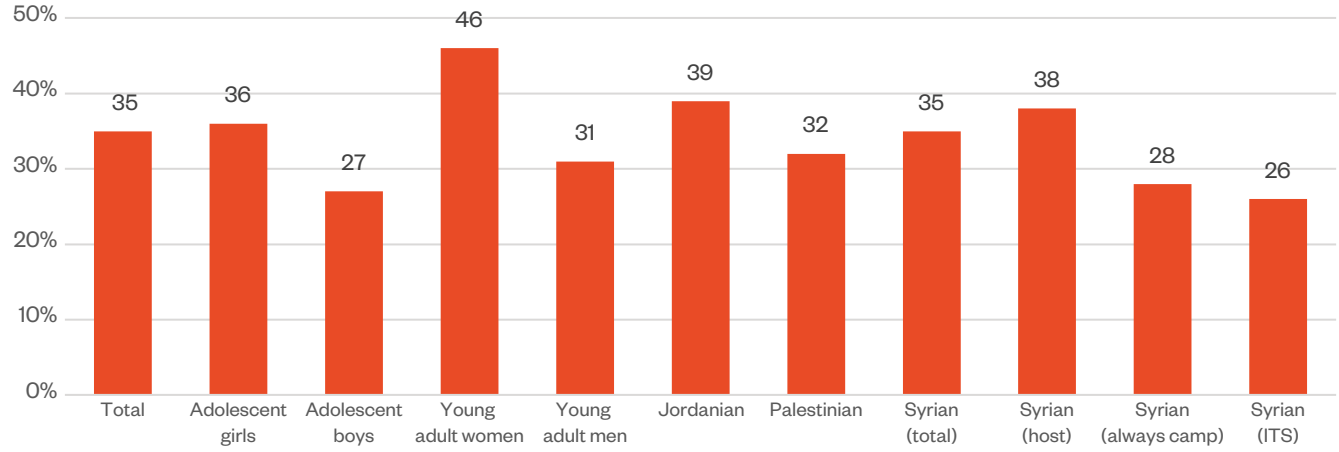


Figure 8: Proportion of young people who are overweight or obese (by cohort, gender and nationality/location)



all three survey rounds and did not have missing data on the variable of interest, the proportion reporting hunger in the past month rose significantly from 17% at baseline to 27% at endline. Worsening hunger was most severe among Syrians living in formal camps (12% at baseline to 29% at endline). Growing food insecurity is also evident in how often young people eat – which significantly declined from an average of 2.4 meals per day at baseline to an average of 2.1 meals per day at endline – and in the quality of food they eat. The number of daily meals containing animal protein slightly but significantly dropped from an average of 0.8 at baseline to 0.6 at endline. Young people are also becoming significantly more inactive over time. Of those who completed both midline and endline surveys,[12] the proportion who reported no sustained physical activity in the past week rose from 50% to 59%.

During qualitative interviews, respondents – especially refugees and ethnic minorities – spoke often of food insufficiency. A 17-year-old Turkmen boy stated, '*Honestly, sometimes we sleep hungry.*' A 21-year-old Syrian young man from a host community elaborated, '*We experienced this* [lack of food] *too much… We eat only two meals. We do not exceed this number. We do not eat three meals. This is the budget*.' Most respondents, however, reported that poor-quality food is a far larger problem than not enough food. Lack of protein was singled out by many respondents. A 21-year-old Palestinian young woman explained, '*Only one day a week do we eat protein, we cook chicken only on Friday, the rest of the week is without protein*.' Other respondents reported that fresh fruit and vegetables are hard to come by. A Syrian mother from Zaatari camp stated, '*Now we no longer bring vegetables*.'

Households have extremely limited access to social protection, including nutritional support (see also Presler-Marshall et al., 2025c). For Palestinians, lack of support is longstanding but has worsened since the cuts made to UNRWA's budget during the first Trump administration (2018). Indeed, few Palestinians reported receiving any sustained support. A 15-year-old Palestinian girl stated, '*We only take food aid in Ramadan… From the Islamic Centre.*' For Syrians, nutritional support has plummeted in the past two years as budget shortfalls have necessitated cutting both the number of beneficiaries and the value of food coupons. A 17-year-old Syrian girl from a host community stated, '*We used to receive financial aid… but it was cancelled*.' A boy the same age from Zaatari camp reported, '*Aid used to be 21 dinars per person… now, it is 15 dinars*.' A Syrian father living in a host community, who noted that his family's diet has become dire in recent months, added, '*I wish I could go back to the camp because the food and shelter are guaranteed*.'

Despite the fact that most young people are aware that too much sugar causes diabetes and that junk food is bad for their broader health, it was also common during qualitative interviews for young people to speak at length about their fondness for sweets and '*Western*' snacks. A 15-year-old Syrian girl from Azraq camp reported that breakfast is the most important meal of the day – and that her breakfasts are always sweet: '*I like to eat sweets, because the forbidden is always desirable… I don't like cheese, nor do I like oil, or thyme, or olives, or makdous* [an aubergine dish]*, or anything*.' A 17-year-old Syrian boy from Zaatari camp agreed, and added that sugar is consumed in large quantities, not only in food but also in tea: '*Sweets are appetising… They eat sweets and their sugar levels go up, it is due to tea and sugar*.' With the caveat that most young people have limited access to pocket money, because household budgets are so tight, many admitted that their favourite foods are the most unhealthy ones. A 15-year-old Bani Murra boy reported, '*I like to eat fast food, but it is harmful*.' A 21-year-old Syrian young woman from a host community was even more specific, saying, '*I am in love with French fries!*'

In line with survey findings, qualitative research found that young males are much more likely than young females to exercise on a regular basis. As some respondents explained, this is due to restrictive gender norms. A female Palestinian key informant explained, '*Exercise is allowed for males. They often play football and basketball, run in the mountains, and walk… It is impossible for girls*.' A 15-year-old Syrian boy from a host community elaborated, '*Girls are forbidden from exercising. If a girl exercises in the street and someone sees her, he will curse her family. A girl who exercises in the street brings shame on her family*.' Critical to understanding young females' inactivity, it is not only exercise that is limited for girls and young women, but movement in general. Many are effectively confined to home to protect their 'honour', and by association that of their family (see Presler-Marshall et al., 2025d). A 22-year-old Syrian young woman from Azraq camp stated, '*I am confined to these things in my home*.'

12 This question was not asked at baseline.

Qualitative research found that boys and young men may get more exercise than survey results suggest. Some – disproportionately Jordanians (who are better off) and Syrians (who have better access to non-governmental organisation (NGO) programming) – have gym memberships and take sports classes. A Jordanian mother reported of her son, '*I registered him in Mafraq club… He spends from 4:00 to 6:00 PM in the club.*' A Syrian mother similarly stated of her son, '*He has been going to the gym. He does bodybuilding, he loves sports very much.*' Other boys and young men exercise for free, playing soccer for hours each day or lifting what weights they can find. A 17-year-old Palestinian boy reported, '*I work out with weights without going to the gym… I carry gas cylinders… It is healthy.*' An 18-year-old Turkmen young man echoed this, saying, '*I did not join a club, but I lift iron at home.*' Palestinian respondents reported that boys and young men living in Gaza camp almost always exercise informally, as there is only one sports club inside the camp and little NGO programming.

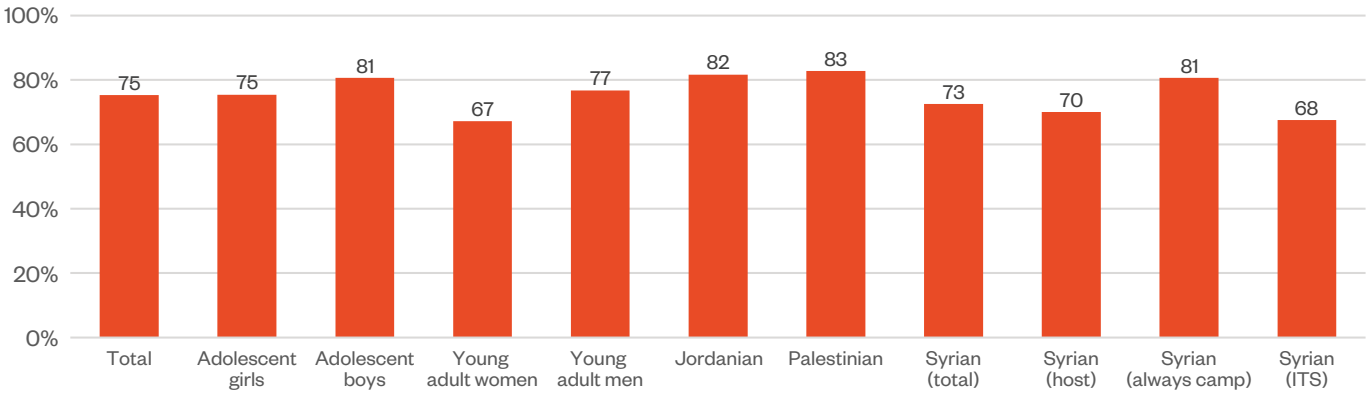
A few girls and young women reported exercising at home, which they added was challenging given small spaces and large families. A 21-year-old young Syrian woman from a host community stated that she exercises by following online videos: *'I never played sports. I try to do it at home… From the internet because I'm on Facebook.'* For most young females, however, 'access' to exercise depends on two facets of good luck: living close to a venue that provides female-only opportunities (more common in formal camps and almost exclusively NGO-run) and having particularly supportive parents. A 17-year-old Syrian girl from Zaatari camp recalled taking up Taekwondo: '*There's a Korean instructor here. He's responsible for the Taekwondo programme in Korea, and he opened it for Syrian refugees… I got the 1st Dan black belt… I love fighting in general. I love being fierce.*' A 22-year-old young Syrian woman from Azraq camp stated that the local gym has hours just for girls and women: '*The instructor does exercises for the girls… There is the exercise bike… There is the treadmill.*'

Many of the girls and young women taking part in qualitative research were frank about feeling unhappy with their weight; a minority reported that they were exercising specifically to lose weight. A 16-year-old Syrian girl from Azraq camp stated, *'I participated in sports activities in grade 8… It helps in losing weight.*' Many more, however, reported dieting to lose weight. A 16-year-old Syrian girl from an informal tented settlement reported, '*I am on a diet… I searched on Google, "How do I lose weight?" and it appeared.*' A 21-year-old Syrian young woman from a host community similarly stated, '*I am the kind of person who checks her calories a lot!*' Although mothers were often quite concerned about their daughters' (over-) weight – sometimes so concerned that they overcame their reservations about allowing their daughters to enrol in an exercise programme – they were also concerned that restrictive eating was resulting in malnutrition. A Syrian mother from a host community explained, of her daughter, '*She reduced her food intake. She is eating one meal a day, and it is hardly a complete meal.*'

Physical health and access to health services

In aggregate, 75% of young people – but only 64% of those with disabilities (see Box 3) – reported on the endline survey that they were in good physical health (see Figure 9). Cohort and gender differences were significant. Adolescents were more likely than young adults to report that they were in good physical health (78% versus 71%) (not shown); and males were more

Figure 9: Proportion of young people reporting that their physical health is good (by cohort, gender and nationality/location)



Box 3: Disability shapes young people's broader physical health

The endline survey found that young people with disabilities are significantly disadvantaged in myriad ways compared to their peers without disabilities. They are, for example, more likely to live in households that are severely food insecure (42% versus 30%), and more likely to report having been hungry in the past month (37% versus 25%) (see Figure 9). They are also more likely to report that they have had a serious health condition (19% versus 11%) or injury (12% versus 8%) in the past year, and less likely to report that they are in good physical health (64% versus 77%). Compared to their peers without disabilities, young people with disabilities are also more likely to report that they must pay out of pocket for health care (75% versus 65%), and that cost is a big problem in accessing care (53% versus 40%). Many of the gender patterns evident in the broader sample are also evident in the disability sample, highlighting intersecting disadvantages. For example, compared to young males with disabilities, young females with disabilities were significantly less likely to have consumed animal or plant protein in the day prior to the survey (68% versus 81%) and to report being in good health (58% versus 71%) (see Figure 10).

Figure 10: Health indicators (by disability status)

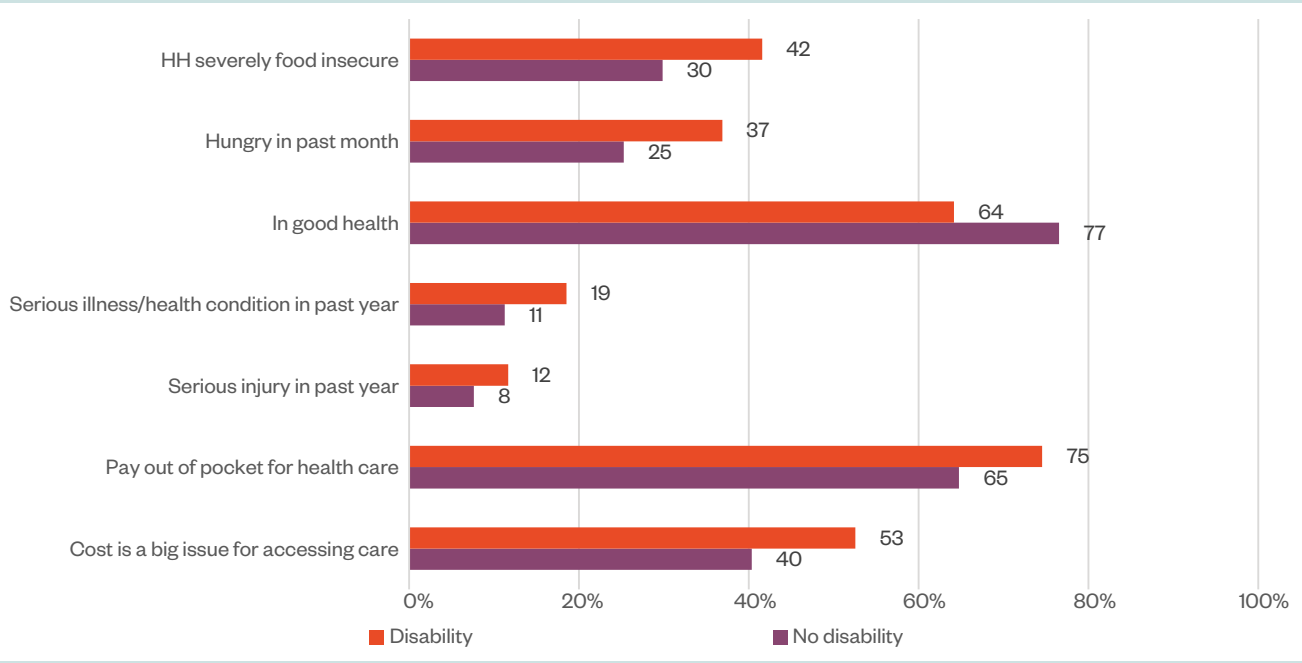
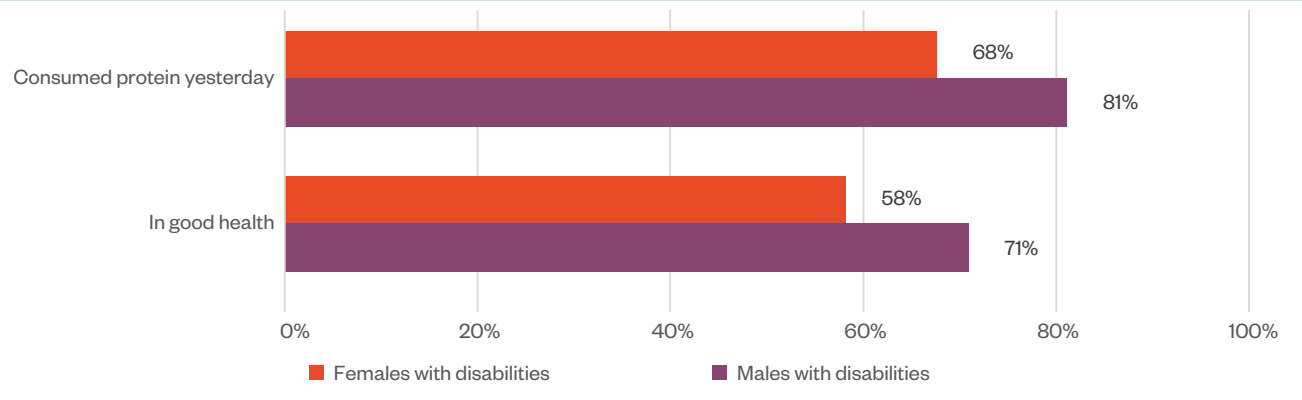


Figure 11: Health indicators, for young people with disabilities (by gender)



Participants in qualitative research reported that young people's disabilities are primarily the result of consanguinity and injury, which, for many Syrians, was the result of conflict. Those with hereditary disabilities were generally aware that marrying cousins makes this more common, but noted that marriage partners rarely have significant say in decisions about who they marry (see Presler-Marshall et al., 2025b). A Jordanian mother whose two children inherited severe muscular dystrophy reported that her daughter had asked, before she died of the disease: '*Was it necessary for you to marry your cousin?*

Young people with disabilities, and their caregivers, reported that disability can be very expensive. In some cases, this is because those with disabilities require special diets and home health supplies, such as disposable incontinence products. In other cases, this is because they need expensive equipment, such as braille machines, and specialist care. In most cases, these supplies and treatment must be paid for out of pocket. A 19-year-old Syrian young man, whose leg was amputated due to a war injury, reported: '*I buy crutches. When one breaks, it's a problem for me. They cost 14 lira.*' A Palestinian mother, whose 16-year-old son has a physical impairment, similarly stated, '*He takes physio at the centre for people with disabilities… Treatment is on us, there's no free treatment.*' Despite Jordanians' better access to health care, citizens also reported that disability-related care is usually paid for out of pocket. A Jordanian mother, whose son has a hearing impairment, said of his hearing aids, '*We pay… and there are no subsidies.*' Key informants noted that support for those with disabilities has largely evaporated in recent years, as NGO budgets have been slashed. One key informant listed the organisations that had recently closed due to the general decline in international aid going to Syrian refugees in Jordan: '*Noor Al Hussein Foundation was providing support to the disabled, but the centre was closed. There was a project to distribute hearing aids and glasses to the disabled, but this project was stopped. There are no wheelchairs. There was also a Spanish organisation that supported people with special needs, and the Holy Land Association also provided support to the disabled, but it was closed.*'

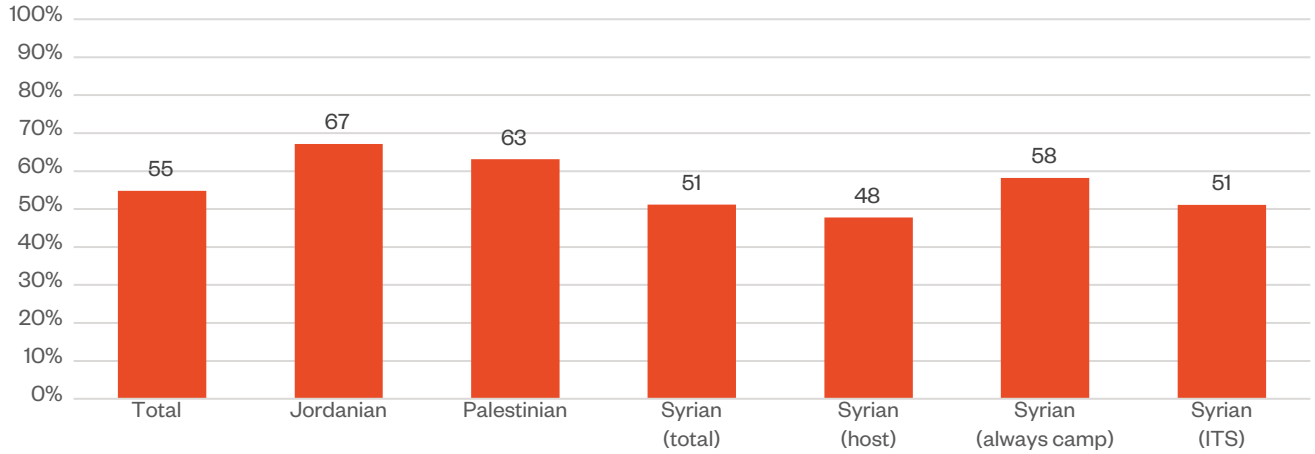
Respondents emphasised that the added cost of disability means two things for families, given that most already experience economic precarity. In many cases, young people simply forgo the equipment and treatment they need. A Syrian mother from Zaatari camp reported that she cannot afford batteries for her children's hearing aids, stating that, '*One hearing aid is 150* [Jordanian dinar] *… Mercy Corps has stopped, they no longer give us batteries or hearing aids… I have two children, where can I get them from?*' A 22-year-old Syrian young man from Azraq camp, who is nearly blind and needs a cornea transplant, stated that there is no way for him to access the care he needs: '*The doctor said I should be treated outside, but how can I go abroad?*' In other cases – and with the caveat that most of the adolescents in GAGE's disability sample were selected from the beneficiary rolls of disability-focused NGOs, meaning that caregivers are invested in helping their children with disabilities to thrive – families cut back on all other expenses to ensure that their children's disability-related needs were (better) met. A Palestinian key informant explained, '*Disability itself is costly, and therefore families who have children with disabilities have a very poor economic situation… All of these affect the quality of food.*'

likely than females to report the same (79% versus 72%) (not shown). Adolescent girls were 5.3 percentage points less likely to report good physical health than boys (75% versus 81%), with the gender gap increasing for young adult women, in line with young females' increasing likelihood of undertaking marriage and motherhood (see Box 2 above), such that young women were 9.6 percentage points less likely than young men to report good physical health (67% versus 77%). Nationality and location differences were also significant. Better-resourced Jordanians (82%) and Palestinians (83%) were more likely to report good physical health than Syrians (73%); and Syrians living in formal camps (81%) were more likely to report good health than their peers in host communities (70%) and informal tented settlements (68%). Cohort, gender and nationality/location differences intersect, leaving Syrian young adult women at the highest risk of poor health. Only 58% of those in host communities and 56% in informal tented settlements reported good health. That said, the gender gap is largest for Palestinians, for whom 90% of males but only 77% of females report being in good physical health.

Important to understanding threats to young people's health, the majority of adolescents and young adults (55%) reported that they live with someone who smokes cigarettes (see Figure 12) (young people's smoking will be discussed below). Gender and cohort differences were not significant, but nationality and location differences were. Better-resourced Jordanians (67%) and Palestinians (63%) were significantly more likely to report having a household member who smokes than Syrians (51%). Among Syrians, those living in formal refugee camps (58%) were significantly more likely to report living with a smoker than those in host communities (48%) or informal tented settlements (51%).

In aggregate, 12% of young people reported that they had a serious illness or health condition in the past year (not shown). Cohort differences were not significant, but gender differences were, with young females more likely to report a serious health condition than young males (13% versus 10%). The gender gap was largest for Palestinians, with 11% of young females but only 4% of young males reporting a serious health condition. Interestingly, young

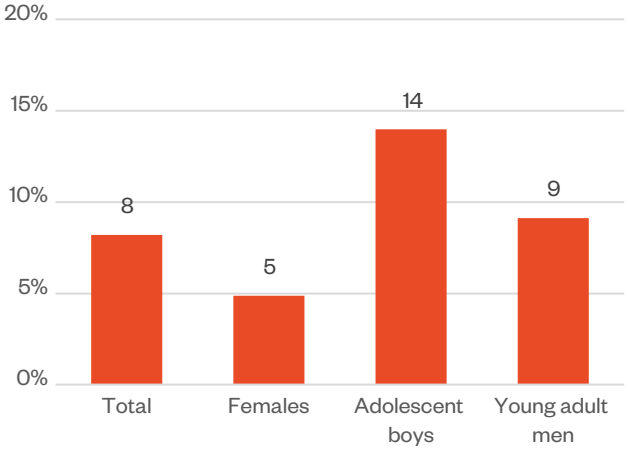
Figure 12: Proportion of young people who live with a smoker (by nationality/location)



females' greater likelihood of a serious health condition was not related to their likelihood of marriage, but were related to whether they married prior to age 18 – child brides were at greater risk of a serious health condition than their peers who married as adults (see Box 2).

The endline survey found that 8% of young people had had a serious injury in the past year (see Figure 13). Young males (12%, not shown), who are far more likely than young females to regularly leave home (see Presler-Marshall et al., 2025d), were significantly more at risk of injury than young females (5%). Adolescent boys were at the highest risk: 14% reported a serious injury in the past year, compared to 9% of young men. Nationality and location differences were not significant in aggregate, but were so for adolescent boys. Jordanian adolescent boys (18%) and Syrian adolescent boys living in host communities (16%) were more likely to report a serious injury in the past year than their peers (not shown). Unsurprisingly, given restrictions on their mobility, most (79%) young females who reported a serious injury reported that they had been injured at home. Young males reported that their injuries happened at home (21%), on the street (21%), or at a sports centre (18%).

Figure 13: Proportion of young people with a serious injury in the past year (by cohort and gender)



At endline, two-thirds (66%) of young people reported that they have to pay out of pocket for health care (see Figure 14). Nationality differences were significant, with Jordanians (45%) – who are more likely to have health insurance – far less likely to have to pay out of pocket than Syrians (70%) and Palestinians (68%). For Syrians, location differences were also significant: those living in host communities (76%) and informal tented settlements (83%) were more likely to have to pay out of pocket than their peers living in formal camps (46%), where (some) basic services are provided for free.

Although nearly all young people who reported having had a serious illness or health condition in the past year had sought treatment for their illness or health condition (88%), many also reported significant barriers to accessing advice or treatment. For example, 42% of young people reported that cost is a big problem (see Figure 15). Cohort and gender differences were significant, with young adults (whose households are poorer, see Presler-Marshall et al. (2025c)) more likely to report cost as a big problem than adolescents (50% versus 36%, not shown), and young males (who contribute to household income and are more often included in financial conversations) more likely to report the same than young females (45% versus 39%, not shown). Young adult men (55%) were the most likely to report cost as a big problem; adolescent girls (33%) were least likely to. Nationality differences were also significant, with Syrians (47%) more likely to report cost as a big problem than Palestinians (34%), whose care is provided and partially subsidised by UNRWA, and Jordanians (24%), who are more likely to have health insurance and whose care at government health facilities is subsidised. The endline survey also found that for 22% of young

Figure 14: Proportion of young people reporting that they usually pay out of pocket for health care (by nationality/location)

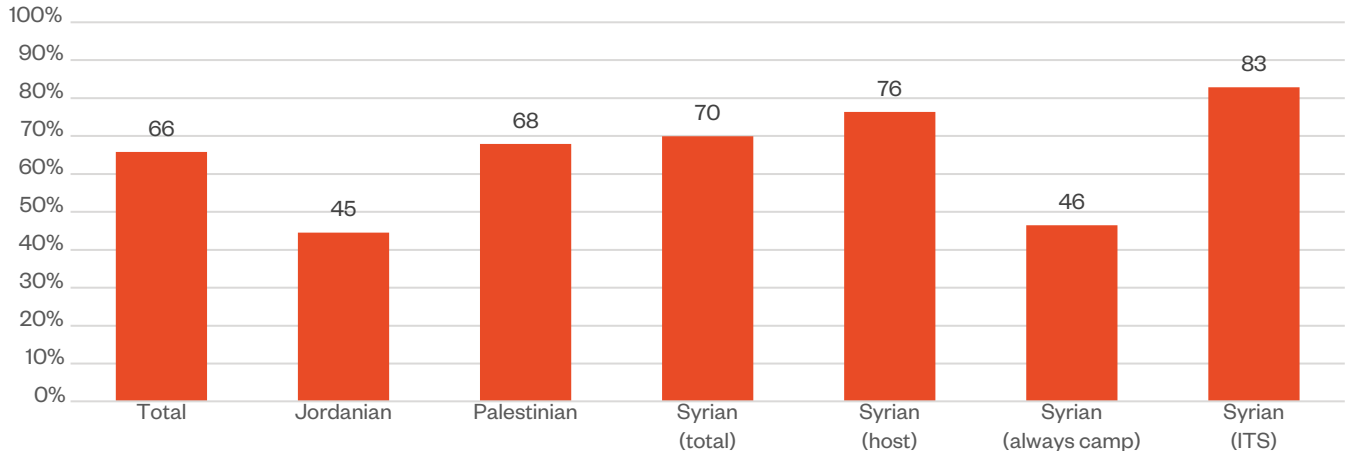
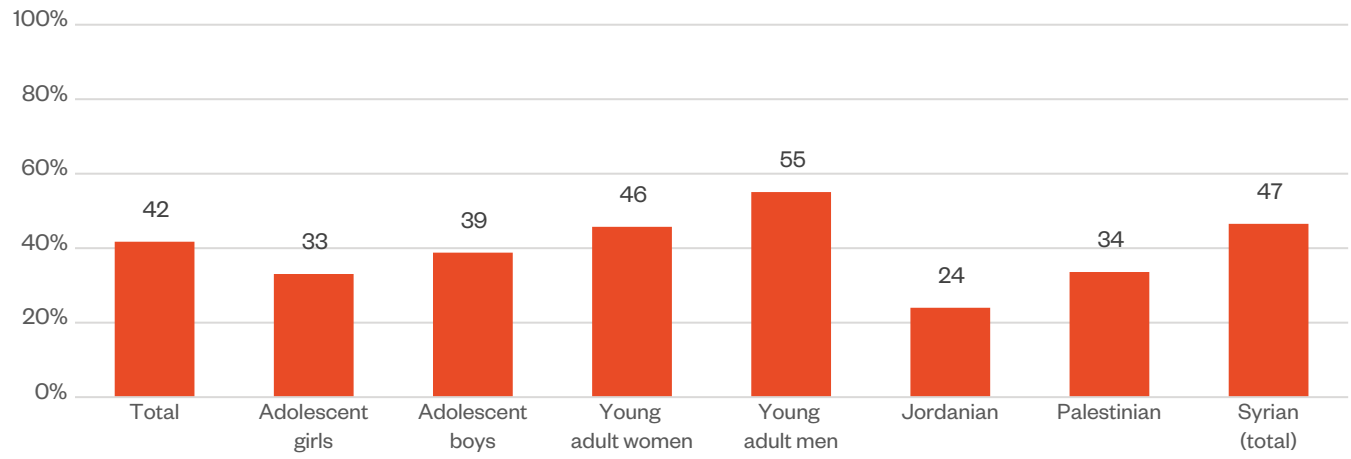


Figure 15: Proportion of young people reporting that cost is a big problem for accessing health care (by cohort, gender and nationality)



people, distance is a big problem for accessing advice or treatment (see Figure 16). Gender differences were not significant, but cohort differences were. Young adults were more likely to report that distance is a big problem than adolescents (25% versus 20%), possibly because they were more aware of transport costs. Nationality and location differences were also significant. Jordanians (12%) were the least likely to report that distance was a big problem for accessing health care. Syrians in formal camps (26%) (who have to leave those camps to access all but the most basic services, especially given that health care services have been pared back as a result of funding deficits), and those living in informal tented settlements (39%) were the most likely to report distance being a big problem for accessing health care.

Although young males' health is unchanged over time, the proportion of young females who reported being in good physical health has significantly declined since baseline. Of adolescent girls in the panel sample who did not have missing data in either round for the specific question, the decline was an average of 7 percentage points (82% to 75%) (see Figure 17). Declines for young women in the panel sample were twice as large: 14 percentage points.

During qualitative interviews, young people reported that poverty-related health conditions are common. Adolescent girls and young adult women, especially those who were or had been pregnant, spoke often of malnutrition, particularly anaemia. A 22-year-old Syrian mother from Azraq camp recalled, '*I had severe anaemia and severe iron deficiency.*' Young females also spoke of frequent gynaecological and urinary tract infections, due to inadequate supplies of clean water for washing and drinking. A 19-year-old Bani Murra young woman explained, '*Because I don't drink a lot of water, I have urinary tract infections.*' Young people – females and males – called out the relationship between ill health and poverty-related stress. Many reported high blood pressure, ulcers and irritable bowel disease, which they attributed to their constant anxiety about poverty (see also Presler-Marshall

Figure 16: Proportion of young people reporting that distance is a big problem for accessing health care (by cohort and nationality/location)

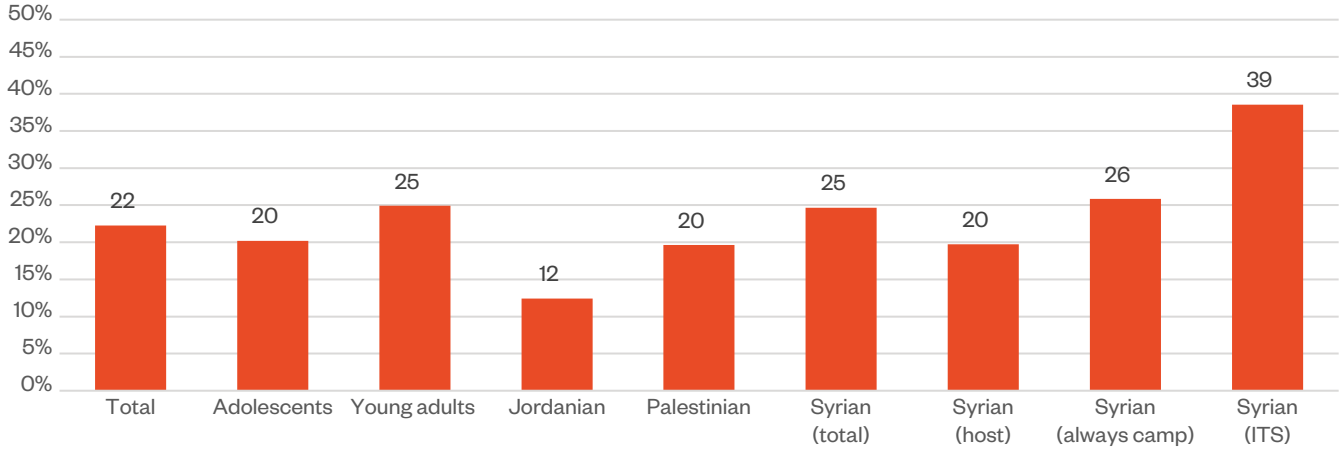
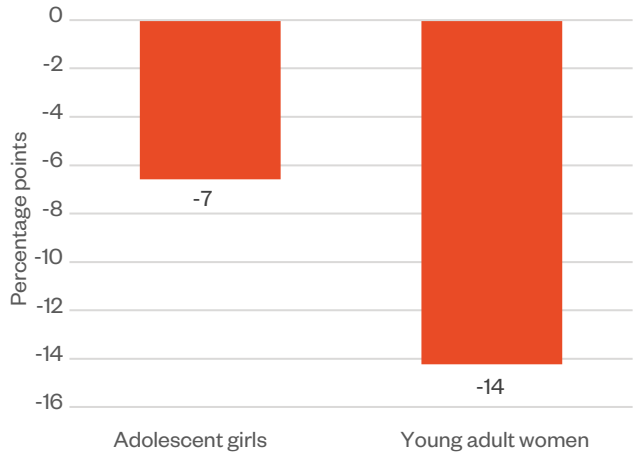


Figure 17: Declines in self-reported good health since baseline (by cohort and gender)



et al., 2025d). A 21-year-old Syrian young man from a host community stated, '*I have pain in my heart, my blood pressure increases and my lungs hard in respiration… because of mental pressures… There isn't any work or anything.*' A 22-year-old Syrian young woman from a host community similarly noted, '*I suffer from irritable bowel syndrome as I think too much.*' Dental issues were also singled out by young people as a significant health-related concern. A 24-year-old Syrian young woman from a host community, when asked what ails her, replied: '*My teeth have eroded… I wake up, brush my teeth, and I'm spitting out blood, blood, blood, blood.*'

In addition to slips and falls, mishaps with home heating and cooking appliances (primarily among young females), and sports-related injuries (almost exclusively among young males), respondents reported that traffic accidents are very common in Jordan's urban areas (more often among young males). An 18-year-old Bani Murra young man explained that this is because drivers do not heed speed limits, and because streets are too poorly lit: '*I was hit by a car… It was evening, and the car was speeding. The driver couldn't see me because of the darkness and hit me.*' A 21-year-old Palestinian young woman noted that young people are not safe even during daylight hours, saying that she was hit by a car on her way to school in broad daylight. She recalled, '*When I was a girl, I was run over by a car.*'

Respondents also reported that work-related accidents and health conditions are common, especially among young males and those who live in informal tented settlements, who are disproportionately likely to work (see Presler-Marshall et al., 2025c). Boys and young men reported burns, broken bones, concussions, slipped discs, and hernias because of accidents at work. For example, a 19-year-old Syrian young man from Zaatari camp reported that he had been burned while working at a mechanic shop by '*the hot water in the car radiator*'. An 18-year-old Syrian young man from Azraq camp, who works on a farm, reported that he has had to endure several unsuccessful surgeries to repair his foot after an accident with a nail gun: '*I was nailing watermelon crates… I lost balance and accidentally shot myself in the foot with the nail gun… The nail was 4.5cm long and hit the bone. I had two surgeries, but neither was successful.*' Adolescent girls and young adult women who live and work in informal tented settlements observed that although they are often spared from the most physically demanding work, they too face work-related health risks. For example, a 17-year-old Syrian girl from an informal tented settlement noted that constant exposure to agricultural chemicals irritates her lungs, skin and eyes: '*There was work in the plastic houses, tomatoes, matches, and workshops… My eyes were shut like a blind person's.*'

Young people and their caregivers, especially those from Azraq and Zaatari camps, also reported that asthma

is common and becoming more so. Without exception, this was attributed not to exposure to second-hand smoke, but to dust and worsening climatic conditions. A mother from Zaatari camp explained, '*People in the camp suffer from many diseases, such as asthma due to sweating and dust.*' A 17-year-old girl from that same location elaborated, '*Because of the dust, of course, especially since it is increasing because there is dust here, so the disease increases.*'

Respondents' narratives about their access to health care are shaped by what nationality they are and – for Syrians – by where they live. Jordanians (and ethnic minorities with Jordanian citizenship) on the whole reported better access to health care than refugees, in part because they are more likely to have health insurance (which is subsidised by the government for the poorest households) and in part because they pay lower fees at government clinics and hospitals. A Turkmen key informant noted that access to health insurance has been transformative:

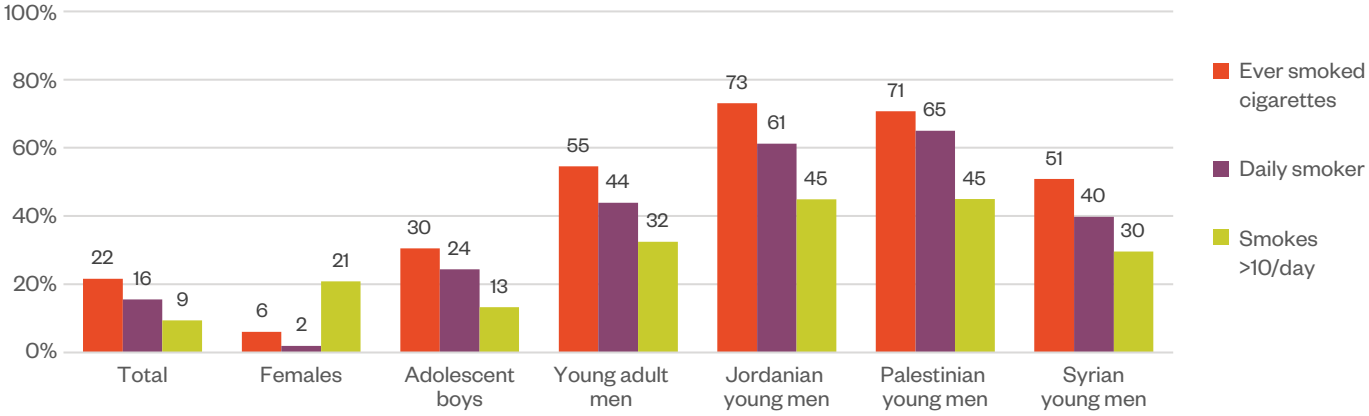
> *We used to go to the clinics and pay money. We didn't know there is insurance. People did a good deed for us, told us that insurance is better for us, God forbid, you can undergo surgeries free of cost, if you are sick, you can get treatment for free. We asked how it could be for free, and they told us about health insurance for poor families. Go and apply in the Ministry of Development, show your ID card and get health insurance for yourself. Hospitals and government clinics will be free for us.*

Palestinians reported decent access to basic preventive and curative services, albeit with only limited access to medication and with very little follow-up, but that more complicated care is expensive because it is not available in the camp's single clinic. A Palestinian father stated, '*Here in the camp, we do not have a hospital. We have only one UNRWA clinic.*' A Palestinian key informant explained that seeking care outside of that venue is costly: '*If they need treatment, imaging, surgery, or anything else, it's not covered… UNRWA provides 75% if the family holds a refugee card. If the family has a refugee card, UNRWA covers the first 100* [Jordanian dinars] *and provides 75%.*' For Syrians living in formal refugee camps, basic health services are also both available and affordable. A key informant from Zaatari camp stated, '*We have free childbirth, free vaccinations and free everything, so zero cost.*' The problem, he admitted, is that services in the camp have been pared back in recent years, due to funding shortfalls, so residents are often forced to venture into host communities and pay out of pocket for care. All Syrian respondents agreed that regardless of where they live, the costs for out-of-pocket care – including for medications – are exorbitant. A key informant explained that this is because non-citizens are charged twice as much as citizens: '*The hospital takes 60 dinars or 65 dinars from a Jordanian, but when a Syrian has to pay, they take from him 125 dinars.*'

Substance use

The endline survey found that young males are very likely to be regular smokers of cigarettes, which are very inexpensive. Although only 6% of young females reported having ever smoked cigarettes, this was true of 40% of young males. Young adult men (55%) were significantly more likely to have ever smoked cigarettes than adolescent boys (30%) (see Figure 18). Most young males who have ever smoked cigarettes reported that they do so daily – and many admitted that they smoke

Figure 18: Proportion of young people who report smoking cigarettes (by cohort and gender and for young men, by nationality)



more than 10 cigarettes a day. Of adolescent boys, 24% reported being daily smokers, and 13% reported smoking more than 10 cigarettes each day. For young adult men, the figures were 44% and 32% respectively. For young males, nationality differences were also significant, with relatively better-resourced Jordanians and Palestinians more likely to smoke cigarettes than Syrians. For example, 45% of Jordanian young adult men, 45% of Palestinian young adult men and 'only' 30% of Syrian young men reported smoking at least 10 cigarettes a day.

In aggregate, 27% of young people reported on the endline survey that they have ever smoked shisha, and 11% reported that they currently smoke shisha at least once a week (see Figure 19). Gender and cohort differences were significant: young males were more likely to have ever smoked than young females (36% versus 19%), and young adults were more likely to have ever smoked than adolescents (34% versus 21%) (not shown). Young adult women were more likely to have ever smoked than adolescent girls (24% versus 15%), primarily because they smoke with their husband (see Box 2), and young adult men were more likely to have ever smoked than adolescent boys (47% versus 28%). Nationality and location differences were also significant: Jordanians (35%) and Syrians in host communities (28%), who have better access to cafes, were more likely to have ever smoked shisha than Palestinians (20%) and Syrians living in informal tented settlements (24%) and formal camps (20%). As was the case with cigarettes, Jordanian young adult men are the most likely to smoke shisha; 53% reported having ever smoked and 24% reported smoking at least weekly.

Just over a tenth (12%) of young people reported on the endline survey that they have ever vaped, and 5% reported that they currently vape at least weekly (see Figure 20). Cohort differences were not significant, but gender differences were. Young males were more likely than young females to have ever vaped (19% versus 6%) and to vape at least weekly (9% versus 1%). Nationality differences were also significant: Jordanians (23% and 10%) were more likely than Palestinians (11% and 3%) and Syrians (9% and 4%) to have ever vaped and to have vaped weekly. For Syrians, location differences were also significant, with those living in host communities (where vape shops are more common) more likely to have ever vaped and to vape weekly than their peers in formal camps and informal tented settlements. Young Jordanian males were the most likely to vape; 36% had ever vaped and 21% vaped at least weekly.

The endline survey allowed young people to privately report illegal drug use. In aggregate, 3% admitted to having ever used illegal drugs (see Figure 21). Gender differences were not significant for adolescents (3%), but were so for young adults: young men were more likely to admit to having used illegal drugs than young women (5% versus 1%). Jordanian young adult men were the most likely to admit to having used drugs: 11%. Reported alcohol use in the past year was very rare. Only 1% of young males– and no adolescent girls or young adult women – admitted to having consumed alcohol in the past year.

Although few young people admitted to having used illegal drugs or alcohol themselves, it was common for them to report that they believed that substance use is common among young people in their community. In aggregate, 40% of young people reported that other young people use alcohol, 29% reported that other young people use marijuana, 24% reported that other young people use Captagon, 15% reported that other young people use

Figure 19: Proportion of young people who report smoking shisha (by cohort, gender and nationality/ location)

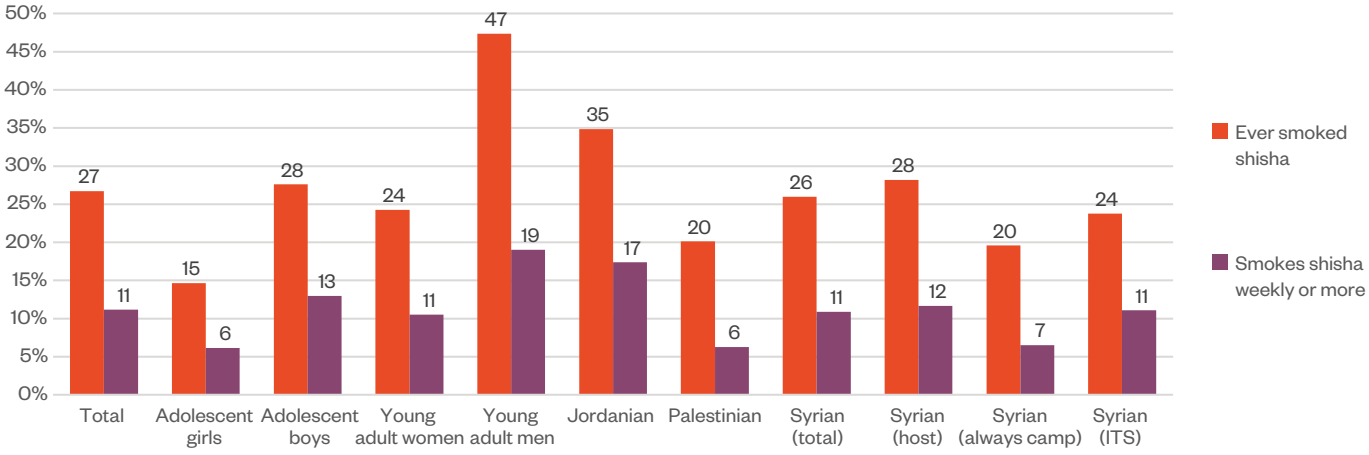


Figure 20: Proportion of young people who report vaping (by gender and nationality/location)

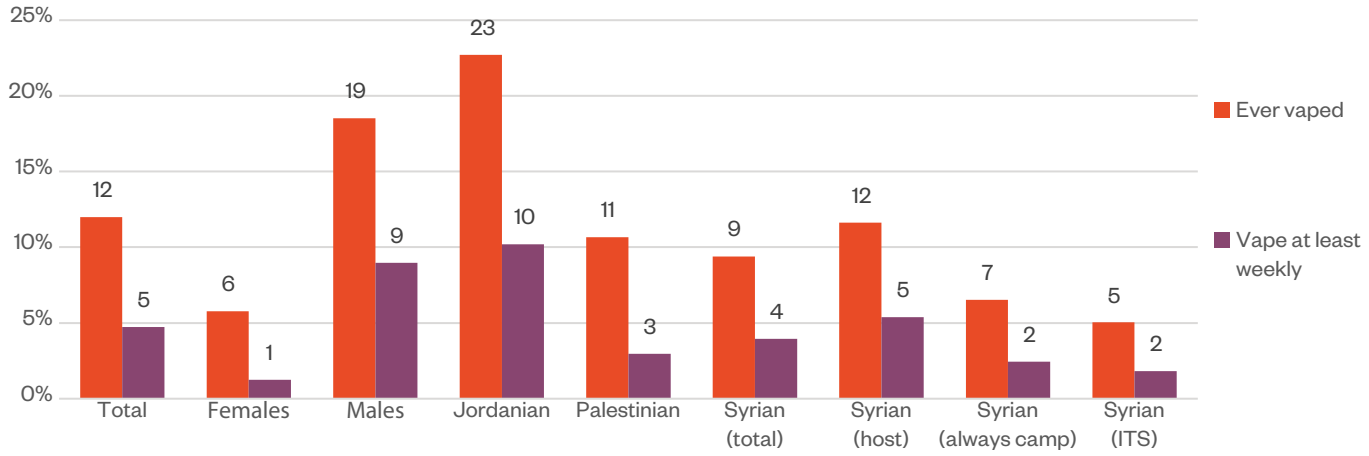
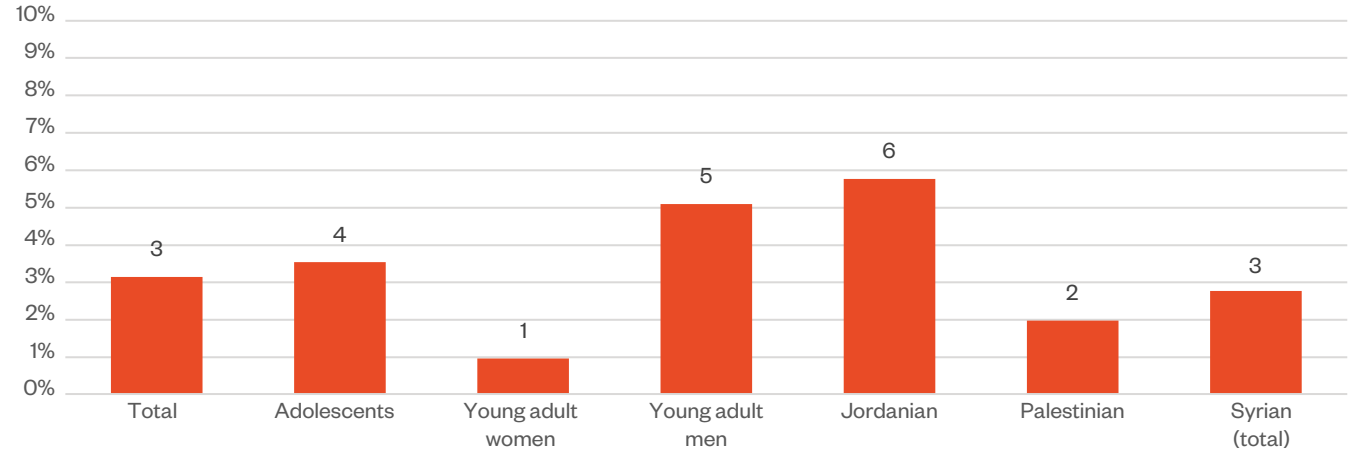


Figure 21: Proportion of young people privately reporting illegal drug use (by cohort, gender and nationality)

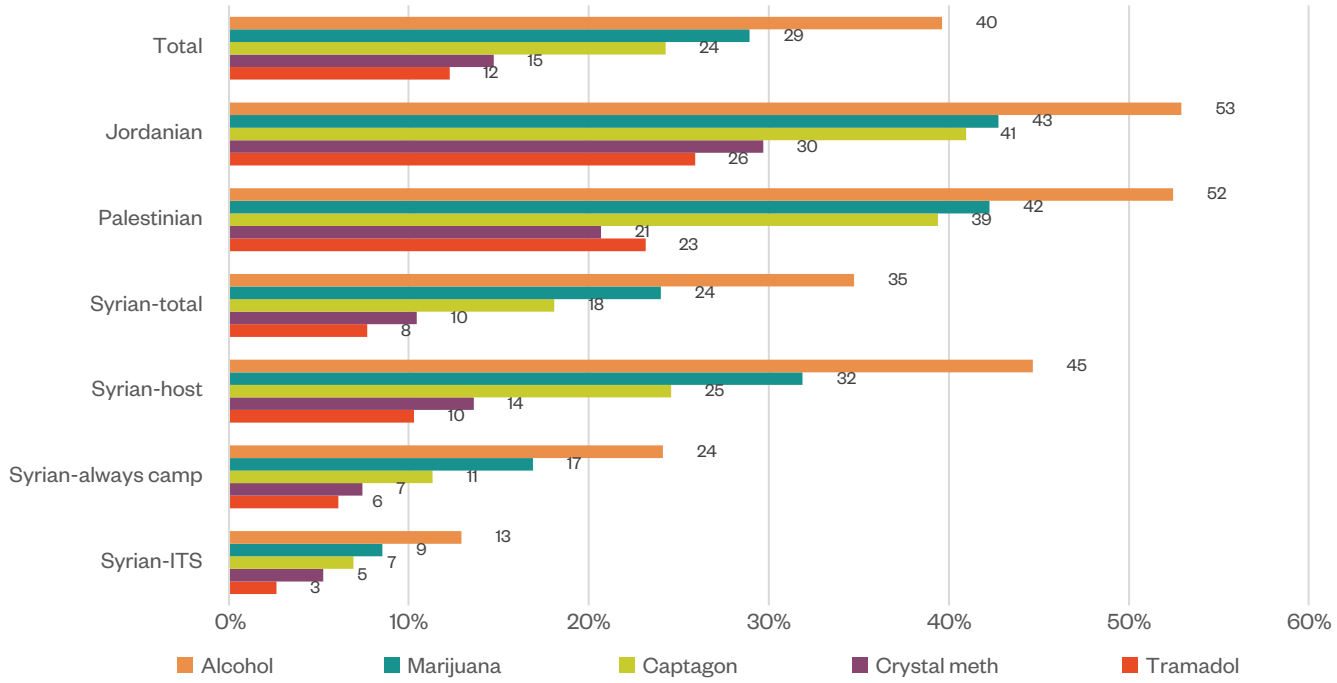


crystal meth, and 12% reported that other young people use Tramadol (an opioid painkiller) (see Figure 22). Jordanian and Palestinian young people were significantly more likely than their Syrian peers to report that other young people use substances. For example, over half of Jordanian and Palestinian young people (53% and 52%, respectively) reported that other young people use alcohol, compared to 35% of Syrian young people. Among the latter, substance use was reported to be much higher in host communities than in formal camps and informal tented settlements. For example, 32% of Syrian young people in host communities reported that other young people use marijuana, compared to 17% of their peers in formal camps and 9% of their peers in informal tented settlements.

The endline survey found that only half of young people had ever been educated about the health risks of drugs (49%); a similar proportion (50%) reported that they knew where someone struggling with addiction might seek help (see Figure 23). Gender differences were not significant, but cohort differences were. Adolescents were more likely than young adults to have been exposed to drug education (52% versus 46%), likely because they have had better access to formal education. Young adults, on the other hand, were more likely than adolescents to know where someone struggling with addiction might seek help (53% to 48%). Nationality and location differences were also significant, with Jordanians and Syrians in host communities the most likely to have information, and Syrians in formal camps and informal tented settlements least likely to. For example, 66% of Jordanians and 56% of Syrians in host communities had been exposed to drug education, compared to only 40% of Syrians in formal camps and 27% of Syrians in informal tented settlements. Of the young people who reported that they know where to get support for addiction, 48% said a government rehabilitation facility and 44% said a private mental health centre.

Qualitative research suggests that cigarette smoking is probably even more common than survey findings would indicate, and is facilitated by very low costs (especially as cigarettes can be purchased by pack as well as by individual cigarettes). Many respondents reported that it is not unusual to see boys as young as 6 or 7 sneaking the

Figure 22: Proportion of young people who believe that other young people in their community use various substances (by nationality/location)



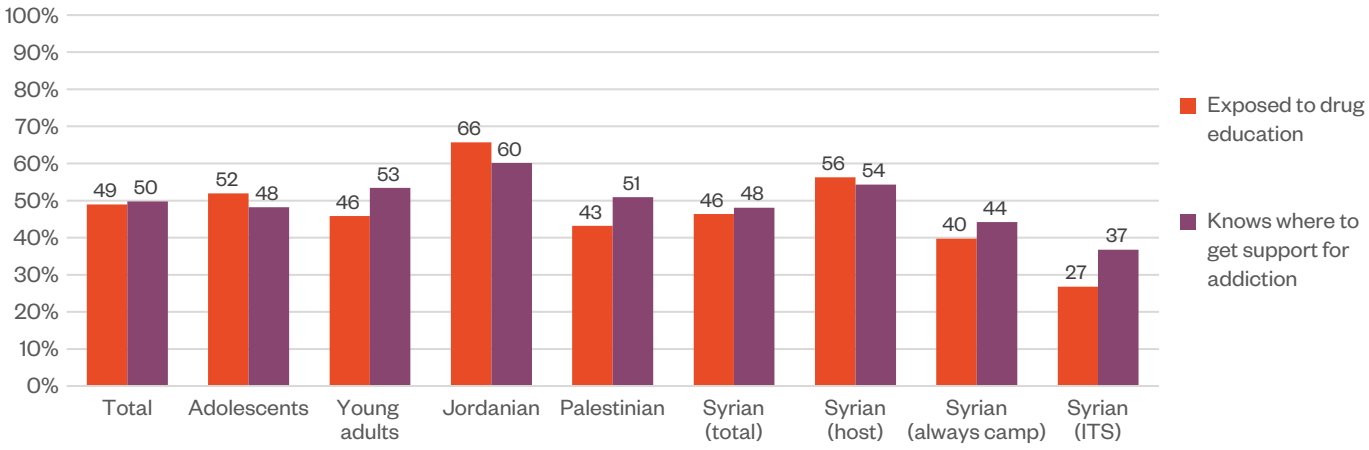
occasional cigarette, when they are sent out to acquire them by their father. A Palestinian mother explained, '*A child who might be 6 years old, I swear, he is in the street smoking… The father is the one who sends his son to buy him a pack of cigarettes*.' Boys and young men reported that by middle-adolescence, smoking is the norm. A 17-year-old Syrian boy from a host community stated:

> *My father is a smoker, my friends are smokers, and everyone in my environment smokes, so smoking cigarettes has become normal for me.*

Indeed, several young males noted that smoking is so closely associated with masculinity in Jordan that boys who try to resist have their masculinity questioned until they give in. A 16-year-old Syrian boy from a host community recalled, '*The boys told me to try it, you are a man and all such things…*' Although most caregivers reported that girls and young women do not smoke cigarettes, due to social norms, it was fairly common for young females to admit that they smoke in secret, sometimes chewing gum afterwards to hide the smell on their breath. A 20-year-old Syrian young woman from a host community confessed, '*Smoking is forbidden – but I smoke… I smoke two cigarettes a day. It helps clear my head*.'

Qualitative research participants emphasised that the health-related impacts of young males' smoking extend

Figure 23: Proportion of young people exposed to education about drug use and with knowledge of where to seek support for addiction (by cohort and nationality/location)



A Syrian man with multiple disabilities posing with young family members © Marcel Saleh/GAGE 2025

beyond smoke and nicotine, because the habit can be so expensive that it jeopardises good nutrition. A 20-year-old Jordanian young man, who noted that shops sell cigarettes individually to make them affordable to young smokers, reported that some boys and young men are so addicted that they give up food to buy cigarettes: '*He forbids himself from eating in order to buy a cigarette*.' In addition, it was common for young mothers to report that their husband is so addicted to smoking that cigarettes are prioritised over children's needs. A 22-year-old Syrian mother of two from Zaatari camp stated, '*My husband smokes. First, he spends on cigarettes, then diapers, food and milk*.'

Respondents also reported that it is common for young people to smoke shisha. A 17-year-old Syrian girl, who first stated that girls should never smoke, then exclaimed, '*There is no life without a hookah!*' For young males, especially better-resourced Jordanian males, smoking shisha often takes place among friends in public cafés. A father reported, '*The cafés here have a lot of hookah, and the friends… You see kids as young as 12 smoking, even 10-year-olds smoking*.' Critically, many families have one or more hookah pipes at home, and smoking shisha is something that siblings and cousins – and even adult relatives – do together. A Syrian mother from Azraq camp reported of her son, '*Sometimes he smokes hookah, when they prepare it, he smokes with his sister and his cousin*.' Indeed, although many caregivers strenuously object to the idea of girls smoking cigarettes, they allow even quite young daughters to smoke shisha. A 15-year-old Syrian girl from a host community reported, '*I was 9 years old, and I started smoking myself… The whole family sat down and smoked*.'

Vaping is also growing in popularity. This is because, as several young people explained, the flavours are 'delicious' (16-year-old Syrian boy, Zaatari camp). Respondents reported that vape stores have become more common in recent years, even in formal camps. A 21-year-old Syrian young woman from Zaatari stated, '*I witnessed a smoking store in the marketplace today… Everything became acceptable*.' Several respondents added that boys and girls now publicly carry vape devices, even at school. A key informant stated:

> *Today, it's socially acceptable… You'll see both boys and girls, older or younger, walking around with their vape devices… I've noticed that some people are more addicted to vaping than to regular cigarettes.*

Respondents stated that drugs have become a pressing problem in recent years, especially in Amman and in Jerash (Gaza) camp. A 21-year-old Jordanian young woman stated, '*Drugs are found in all areas of society*.' A 20-year-old Bani Murra young man agreed, '*We have a common issue that is drugs*.' Most respondents reported that the main reason why drug use has exploded in recent years is growing hopelessness, especially among older boys and young men, related to unemployment and poverty (see also Presler-Marshall et al., 2025d). A 21-year-old Palestinian young man explained:

> *Drugs are so common… All kinds of drugs are spread, like weed* [marijuana], *Captagon, shabu* [methamphetamine], *crystal and Rohypnol* [a benzodiazepine]. *The guys are losing their way… People*

are tired of poverty and the life they are living… They use [drugs] *to escape reality.*

That said, several respondents noted that almost the reverse is true of the stimulant Captagon, which was widely distributed during the Assad regime. A 17-year-old Syrian boy from Zaatari camp observed that Captagon helps exhausted workers work harder for longer: '*If a guy is working and unable to continue, he takes this pill, and keeps working.*' Although respondents agreed that young males are far more at risk of drug use than young females (in large part because young females' mobility is so tightly restricted), several adults noted that female students are at risk of substance use. A Syrian mother from Zaatari camp reported:

My daughter told me that there is a girl in the class who tells them, 'I will give you a pill, when you take it, you will feel happy before the exam.' My daughter is aware and understands what she is saying, and she understands everything that is going on around her. There is the distribution of narcotic pills in schools. My daughter is in 4th grade, she is 10 years old, meaning that narcotic pills are distributed to girls from a young age.

A Jordanian mother agreed, saying, '*There is even drug abuse in schools among girls… girls distribute narcotic pills in schools.*'

A few young people, primarily Palestinian boys, reported having been exposed to drug education at school. A 16-year-old Palestinian boy, for example, when asked if he had had a class on puberty, replied that he had instead had a class on drugs: '*The courses were about drugs… Someone from the drug control team* [from the police] *came.*' However, and unsurprisingly, given that a key informant admitted that '*Government institutions are not working much on this subject*,' nearly all the substance use education mentioned by qualitative interviewees was provided by parents to their own children. Most parents reported that they had emphasised health messages, often taking a religious perspective. A Syrian father from Zaatari camp stated that he tells his children to stay away from drugs: '*I tell them it's haram* [forbidden]*… I tell them if you hear someone is using, stay away. If you hear someone is dealing, stay away.*' A Palestinian mother similarly recalled her husband's efforts to prevent their daughters from smoking shisha, recalling that, '*My husband told them that their health is a priority.*'

A Syrian father from a host community, who acknowledged that young people (especially young men) are not always receptive to health-related messaging, reported that he had told his sons to avoid smoking to improve household food security: '*I advised my children not to smoke and to use the money for food instead.*' Indeed, several young people, both young males and young females, acknowledged that they had ignored their parents' entreaties until they had begun to be ill because of smoking. An 18-year-old Syrian young woman from a host community, who reported that she had begun smoking hookah with her cousins in 7th grade, added, '*I regret it because my health got damaged a lot, and now I have attacks of shortness of breath.*'

A 75-year-old traditional healer © Nathalie Bertrams/GAGE 2025

Conclusions and implications

GAGE endline research found that the physical health of young people living in Jordan is at risk, due to poverty and social norms. Risks vary by age, gender and nationality, and – for Syrians – by where they live. Risks also vary by disability and marital status.

Food insecurity is widespread among young people in Jordan. Some groups – namely, Syrian refugees in host communities and informal tented settlements, young brides, and young people with disabilities – are at elevated risk due to their greater likelihood of household poverty. Some young people report hunger; far more report poor diet quality, with calories almost exclusively from carbohydrates rather than proteins, vegetables or fruit. Respondents stated that food security is worsening, due to inflation and cuts to nutrition support programmes. Young people's diets are further compromised by cultural preferences for sweetened foods and tea, and age-related preferences for 'Western' snacks, such as chips.

Most young people in Jordan are physically inactive. Due to social norms that confine girls and young women to the home, lest their 'honour' be besmirched by sexual harassment, they are far more likely to be physically inactive than boys and young men. Adolescent boys, who have more free time on their hands and dedicate some of it to football, are more active than young men. Most young people would like to get more exercise than they do, but report that classes and sports facilities are either off-limits to them (females) or too expensive (males).

In part due to poor diets and in part due to physical inactivity, Jordan has an epidemic of overweight and obesity among its young people. Young females – and especially young women, most of whom are married and must endure extremely tight restrictions on their mobility – are at higher risk than young males. Many girls and young women report being deeply unhappy with their body and try to control their weight by dieting.

Most young people report being in good health, but this varies considerably by group. Married girls and young women (most of whom have been pregnant at least once and many of whom are anaemic), and young people with disabilities (who sometimes have more complex health needs and are often poorer), are far less likely to report good health than unmarried young females, young males, and those without disabilities. Young males, on the other hand, are more likely to report serious injuries, some related to traffic accidents and others to sports or work. Young people's access to medical care is limited by household poverty, lack of insurance, and – for many Syrians – by distance, as only basic services are available inside formal camps, and informal tented settlements are often remote.

Tobacco use is common among young males, especially better-resourced Jordanians and Palestinians. In part because they see the behaviour modelled by their father and older boys, and in part because smoking is believed to reduce stress (primarily related to unemployment and underemployment), many boys begin smoking cigarettes in early adolescence, and many young men smoke them daily. Young people, especially young males, also smoke shisha and vape. Young brides are more likely to use tobacco than their unmarried peers, because they are encouraged to do so by their husbands.

Drug use is a growing concern in Jordan, especially in host communities and among Palestinians living in Jerash camp. Respondents agree that the phenomenon is largely confined to young males and is tightly connected to youth unemployment. Adolescent boys and young adult men take drugs because they are distressed that they cannot find work – whereas some sell drugs because that is the only decently remunerated work they can find.

If Jordan is to deliver on the Sustainable Development Goals and ensure that all of its young people have access to the nutrition, information and services they need to grow up healthy, GAGE research suggests the following priority actions:

To improve food security and nutrition

- Restore social protection benefit levels and, for households dealing with members with a disability, ensure that levels take account of the added health-related costs associated with many disabilities.
- Provide young people with nutrition classes as part of the standard formal education curriculum, and reinforce messages through adolescent and youth empowerment programmes.
- Complement health and nutrition and education for adolescents, with inclusion of nutrition education components in parenting programmes aimed at parents of adolescents.
- Use mass media and social media campaigns to address cultural preferences for sweetened foods and beverages.

- Provide micronutrient supplements to those who need them, first targeting females of reproductive age.
- Target girls and women with information about the importance of good nutrition, aiming to ensure that young brides are adequately nourished even before becoming pregnant.

To encourage healthy exercise

- Ensure that exercise classes and sports facilities are available in all communities, with special hours and instructors for girls and young women and with schedules that are conducive to young men's work schedules. Classes for young females could be provided in the gymnasiums of girls' schools in the evening and on weekends.
- Use mass media and social media campaigns to encourage regular exercise for everyone, making it a family affair, using recognisable role models and emphasising forms of exercise that are free and accessible to all, including through online videos for those with restricted mobility (e.g. young mothers).
- Target young females' gatekeepers – mothers, husbands and mothers-in-law – with information about the importance of exercise and how they can facilitate girls and young women to partake.

To improve broader physical health

- Reduce the stress that drives many physical ailments by restoring and scaling up access to social protection and stepping up investments in informal psychosocial support services.
- Work towards improving air quality, starting with indoor spaces, by banning smoking inside in public spaces and using mass media and social media campaigns to raise awareness about the life course consequences of second-hand smoke.
- Improve access to health care by reducing costs/making insurance more available and affordable (and inclusive of transportation costs, given that the availability of health services has declined in camps due to donor funding cuts).

To reduce substance use

- Target fathers for education about the risks of smoking (health and financial), and encourage them to set a better example for their children, especially their sons.
- Use mass media and social media campaigns, using popular champions (especially sports figures) to encourage young males to eschew smoking in order to remain healthy and virile.
- Use mass media and social media campaigns to raise awareness that smoking shisha is unhealthy, and encourage socialising at gyms, juice bars and youth centres.
- Provide adolescent boys and young men with programming designed to teach them stress reduction techniques that do not jeopardise their physical health.
- Ensure that schools educate young people about the risks of drug use, beginning in early adolescence and extending throughout the duration of high school. This should include awareness of where to get help if they need it.

19-year-old Jordanian young man at a water tap © Marcel Saleh/GAGE 2025

References

Abdulfattah, S., Ahmad, A.R., Kitaneh, R. et al. (2024) 'Nonmedical use of stimulants among students in Jordan: a nationwide study' *Journal of Addiction Medicine* 18(4): 443–450. doi: 10.1097/ADM.0000000000001308

Alkhalili, M., Al-Hmaid, Y., Kheirallah, K. et al. (2024) 'Assessment of knowledge of sexual reproductive health among female university students in Jordan' *Cureus* 16(2): e53386. doi: 10.7759/cureus.53386

Al-Qerem, W., Zumot, R., Jarab, A. et al. (2025) 'Prevalence of being obese, overweight, and underweight among Jordanian children and adolescents based on international growth standards' *Healthcare* 13(2): 146 (https://doi.org/10.3390/healthcare13020146)

Amnesty International (2019) Seventy+ years of suffocation (https://nakba.amnesty.org/en/chapters/jordan)

ANERA (2024) Jordan situation report, November 2024. American Near East Refugee Aid (https://www.anera.org/blog/jordan-situation-report-november-2024/)

CARE (2015) *"To protect her honour". Child marriage in emergencies – the fatal confusion between protecting girls and sexual violence*. London: CARE International UK (https://insights.careinternational.org.uk/media/k2/attachments/CARE_Child-marriage-in-emergencies_2015.pdf)

Department of Statistics (2016) *General Population and Housing Census 2015. Main results*. Amman: Department of Statistics, Hashemite Kingdom of Jordan (www.dos.gov.jo/dos_home_e/main/population/census2015/Main_Result. pdf)

Department of Statistics (2024) Population of the Kingdom (1952–2024) (https://jorinfo.dos.gov.jo/Databank/pxweb/en/Demographi_Statistics/-/Table6.px/table/tableViewLayout2/)

Department of Statistics and ICF (2024) *Jordan Population and Family and Health Survey 2023* Amman, Jordan, and Rockville, Maryland, USA: Department of Statistics and ICF (https://dhsprogram.com/publications/publication-FR388-DHS-Final-Reports.cfm)

El Arab, R. and Sagbakken, M. (2018) 'Healthcare services for Syrian refugees in Jordan: a systematic review' European Journal of Public Health 28(6): 1079–1087. doi: 10.1093/eurpub/cky103

Elnakib, S., Akhu-Zaheya, L., Khater, W. et al. (2024) 'The emergence and regression of political priority for refugee integration into the Jordanian health system: an analysis using the Kingdon's multiple streams model' *Conflict and Health* 18 (Suppl 1): 30 (https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-024-00588-3)

ESCWA (2023) 'Counting the world's poor: Back to Engel's law', Economic and Social Commission for West Asia.

Felbab-Brown, V. (2024) 'The Middle East is awash in drugs: Captagon has fueled violence and aided tyrants—and meth could be next.' Foreign Affairs, 11 April (https://www.foreignaffairs.com/middle-east/middle-east-awash-drugs)

Gausman, J., Othman, A., Dababneh, A. et al. (2020) 'Landscape analysis of family planning research, programmes and policies targeting young people in Jordan: stakeholder assessment and systematic review' *Eastern Mediterranean Health Journal* 26(9): 1115–1134. doi: 10.26719/emhj.20.018

Higher Population Council (2017) 'Child marriage in Jordan.' Policy brief (https://reliefweb.int/report/jordan/policy-brief-child-marriage-jordan-2017)

Higher Population Council (n.d.) Jordan's National Strategy Reproductive and Sexual Health 2020– 2030. UNFPA Jordan and HPC (https://www.hpc.org.jo/sites/default/files/JORDAN%27S%20NATIONAL%20STRATEGY.pdf)

Hunaiti, N. (2024) 'Everything you need to know about poverty in Jordan'. The Borgen Project (https://borgenproject.org/poverty-in-jordan-2/#:~:text=A%20Department%20of%20Statistics%20report,below%20that%20threshold%20in%20Jordan)

Jones, N., Baird, S., Presler-Marshall, E., Małachowska, A., Kilburn, K., Abu Hamad, B., Essaid, A., Amaireh, W., Sajdi, J., Banioweda, K., Alabbadi, T., Alheiwidi, S., Ashareef, Q., Altal, S., Kharabsheh, W., Abu Taleb, H., Abu Azzam, M. and Abu Hammad, B. (2019) *Adolescent well-being in Jordan: exploring gendered capabilities, contexts and change strategies. A synthesis report on GAGE Jordan baseline findings*. Report. London: Gender and Adolescence: Global Evidence.

Jordan News (2023) 'More than one-third of Jordanians live below poverty line, report finds'. Jordan News, 12 July (https://www.jordannews.jo/Section-109/News/More-than-one-third-of-Jordanians-live-below-poverty-line-report-finds-29697)

Kabeer, N. (2003) *Making rights work for the poor: Nijera Kori and the construction of 'collective capabilities' in rural Bangladesh.* Working Paper 200. Brighton: Institute of Development Studies

Khader, Y., Khudair, S.A., Tanaka, E. et al. (2024) 'Psychosocial, emotional and behavioral problems, quality of life, and mental health care seeking behaviors among children and adolescents in Jordan: a national school-based survey' *Frontiers in Public Health* 12 (https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1409158/full)

Nussbaum, M. (2011) *Creating capabilities: the human development approach*. Harvard: Harvard University Press, Belknap Press

Pawson, R. and Tilley, N. (1997) *Realistic evaluation*. London: Sage

Presler-Marshall, E., Jones, N., Alheiwidi, S. et al. (2020) *Through their eyes: exploring the complex drivers of child marriage in*

A young Turkman woman in Jordan © Nahtalie Bertrams/GAGE 2025

humanitarian contexts. Report .London: Gender and Adolescence: Global Evidence. (https://www.gage.odi.org/publication/through-their-eyes-exploring-the-complex-drivers-of-child-marriage-in-humanitarian-contexts/)

Presler-Marshall, E., Oakley, E., Jones, N. et al. (2023a) *'There should be some freedom in our lives': exploring adolescent girls' experiences of child marriage*. Report. London: Gender and Adolescence: Global Evidence (https://www.gage.odi.org/publication/there-should-be-some-freedom-in-our-lives-exploring-adolescent-girls-experiences-of-child-marriage/)

Presler-Marshall, E., Jones, N., Oakley, E. et al. (2023b) 'Tackling the "culture of silence" to improve adolescent sexual and reproductive health in Jordan'. Policy brief. London: Gender and Adolescence: Global Evidence

Presler-Marshall, E., Oakley, E., Jones, N. et al. (2023c) 'Sexual and reproductive health, information and services: opportunities and challenges for marginalised young people in Jordan'. Policy brief. London: Gender and Adolescence: Global Evidence (https://www.gage.odi.org/publication/sexual-and-reproductive-health-information-and-services-opportunities-and-challenges-for-marginalised-young-people-in-jordan/)

Presler-Marshall, E., Oakley, E., Jones, N. et al. (2023d) *'I didn't know anything!': GAGE midline findings on the sexual and reproductive health of vulnerable young people in Jordan*. Report. London: Gender and Adolescence: Global Evidence (https://www.gage.odi.org/publication/i-didnt-know-anything-gage-midline-findings-on-the-sexual-and-reproductive-health-of-vulnerable-young-people-in-jordan/)

Presler-Marshall, E., Oakley, E., Jones, N. et al. (2024a) '*Our life is all about suffering': GAGE evidence on young people's psychosocial well-being in post-pandemic Jordan*. Report. London: Gender and Adolescence: Global Evidence (https://www.gage.odi.org/publication/our-life-is-all-about-suffering-gage-evidence-on-young-peoples-psychosocial-well-being-in-post-pandemic-jordan/)

Presler-Marshall, E., Jones, N., Luckenbill, S. et al. (2024b) *Age and gender-based violence facing young people in Jordan: findings from GAGE midline evidence*. Report. London: Gender and Adolescence: Global Evidence

Presler-Marshall, E., Luckenbill, S., Jones, N., Alheiwidi, S., Baird, S., Leung, S., ... and Shareef, Q. (2025a) *Young people's sexual and reproductive health in Jordan: evidence from the GAGE endline*. Report. London: Gender and Adolescence: Global Evidence (https://gage.odi.org/young-people-s-sexual-and-reproductive-health-in-jordan-evidence-from-the-gage-endline/)

Presler-Marshall, E., Jones, N. Luckenbill, S., Al Amaireh, W., Alheiwidi, S., Baird, S., Oakley, E. and Harrison, M. (2025b) *Age and gender-based violence facing young people in Jordan: findings from GAGE midline evidence*. London: Gender and Adolescence: Global Evidence (https://gage.odi.org/age-and-

gender-based-violence-facing-young-people-in-jordan-findings-from-gage-midline-evidence/)

Presler-Marshall, E., Luckenbill, S., Jones, N., Alheiwidi, S., Baird, S., Leung, S., ... and Shareef, Q. (2025c) *Young people's economic empowerment in Jordan: GAGE endline findings.* Report. London: Gender and Adolescence: Global Evidence (https://gage.odi.org/young-people-s-economic-empowerment-in-jordan-gage-endline-findings/)

Presler-Marshall, E., Luckenbill, S., Jones, N., Alheiwidi, S., Baird, S., Leung, S., ... and Shareef, Q. (2025d) *Young people's psychosocial well-being and opportunities for voice and agency in Jordan: GAGE endline findings.* Report. London: Gender and Adolescence: Global Evidence (https://gage.odi.org/young-people-s-psychosocial-well-being-and-opportunities-for-voice-and-agency-in-jordan-gage-endline-findings/)

Sachs, J.D., Lafortune, G. and Fuller, G. (2024) *The SDGs and the UN Summit of the Future. Sustainable Development Report 2024*. Paris: SDSN, Dublin: Dublin University Press. doi:10.25546/108572 (https://s3.amazonaws.com/sustainabledevelopment.report/2024/sustainable-development-report-2024.pdf)

Sen, A.K. (1985) *Commodities and capabilities*. Amsterdam: North-Holland

Sen, A.K. (2004) 'Capabilities, lists, and public reason: continuing the conversation' Feminist Economics 10(3): 77–80

UNFPA (2025) World Population Dashboard (https://www.unfpa.org/data/world-population-dashboard)

UNHCR (2024) *Socio-economic survey on refugees in Jordan 2024: at a glance* (https://data.unhcr.org/en/documents/details/111279)

UNHCR (2025a) 'Total registered Syrian refugees', UNHCR Operational Data Portal (https://data.unhcr.org/en/country/jor)

UNCHR (2025b) 'Historic return of displaced Syrians presents opportunity and urgent challenges' (https://www.unhcr.org/news/press-releases/unhcr-historic-return-displaced-syrians-presents-opportunity-and-urgent)

UNHCR (2025c) 'Jordan, health'. UNHCR website (https://help.unhcr.org/jordan/en/helpful-services-unhcr/health-services-unhcr)

UNICEF (2021) Socio-economic assessment and practices In Jerash Camp. Amman: UNICEF Jordan (https://www.unicef.org/jordan/media/11341/file/Jerash20Report20.pdf)

UNRWA (2023) *An appeal for sustainable funding* (https://www.unrwa.org/resources/fact-sheet/appeal-sustainable-funding)

UNRWA (2025a) 'Where we work', UNRWA website (https://www.unrwa.org/where-we-work/jordan)

UNRWA (2025b). 'Finance update – June 2025'. Amman: UNRWA> finance_update_-_adcom_meeting_-june_2025.pdf

World Bank (2023) 'Jordan.' Poverty and Equity Brief. World Bank Group, Middle East and North Africa (https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global_POVEQ_JOR.pdf)

WHO (2024) 'Adolescent and young adult health', WHO website, 26 November (https://www.who.int/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions)

A young Jordanian girl in school © Marcel Saleh/GAGE 2025

About GAGE

Gender and Adolescence: Global Evidence (GAGE) is a decade-long (2016-2026) longitudinal research programme generating evidence on what works to transform the lives of adolescent girls in the Global South. Visit www.gage.odi.org for more information.

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Front cover: A 21-year-old Jordanian painter who has been smoking since he was 13 © Marcel Saleh/GAGE 2025

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