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Progress of The Lancet Palestinian Health Alliance

The Lancet Palestinian Health Alliance (LPHA) is a loose network of Palestinian, regional, and international researchers who are committed to the highest scientific standards in describing, analysing, and evaluating the health and health care of Palestinians, to contributing to the international scientific literature, and to developing local evidence-based policy and practice.

The LPHA has five stated activities: to present and publish research findings; advocacy, based on science; developing scientific methods that are culture-specific; building capacity for research; and increasing academic collaboration within the occupied Palestinian territory, Lebanon, and across the region.

The LPHA has always been a network of individuals, not institutions. These individuals are not bound by the LPHA and the LPHA is not bound by anything said by individuals. The LPHA "speaks" only through its scientific outputs, as presented at annual conferences and published in scientific abstracts and papers.

For the first five LPHA conferences, in Ramallah (West Bank, Palestine) twice, Beirut (Lebanon), Cairo (Egypt), and Amman (Jordan), 434 abstracts were submitted, and 258 (59%) accepted for presentation, 118 as oral presentations, and 140 as posters. 138 abstracts have been published in The Lancet, including 40 in this issue from the 2014 conference in Amman. 15 presentations have been published as full scientific articles.

60% of the presented studies were quantitative, 14% qualitative, and 14% mixed. There were smaller numbers of audits, commentaries, and reviews. 60% of studies collected primary data, 34% secondary data, and 6% both primary and secondary data.

41% of studies were based in the West Bank, 18% in Gaza, 20% in both, 4% in East Jerusalem, 7% in Lebanon, and 4% in Jordan.

54% of presenters were women. 13% were younger than 30 years of age, 29% aged 30-39 years, and 52% aged 40 years or older. A third of presenters were health professionals, 31% academics, 13% PhD students, 6% other students, 6% managers and 7% researchers, with the rest noted as advisors, consultants or occupation unknown.

A quarter of presentations have involved various types of health needs assessment, such as child health, adolescent health and health of the elderly; 19% were on aspects of political violence; 13% on specific diseases; 12% on environmental, occupational, nutritional or Published Online mental health; 11% on refugee status; 6% on health care research; 4% on evaluations of interventions, 4% on fertility; 2% on evidence-based medicine and the rest on other topics such as inequality and methodological and information system related issues.

A key function of the LPHA has been to use structured enquiry to describe the health and health care of ordinary Palestinians living in extraordinary circumstances. Rudolf Virchow, the founder of social medicine, said many years ago, "Medicine is a social science and politics nothing but medicine on a large scale".1 WHO's report on the Social Determinants of Health confirmed this association.² It is inevitablegiven the circumstances of most Palestinians living under Israeli military occupation in the West Bank, during economic and nutritional siege and military bombardment in Gaza, or as refugees in Lebanon or from Syria-that many research studies include the effect of the political context on health.

Research can be scientific without being political, and political without being scientific. Science is discredited as science if shown to be influenced by political views and ideology, beyond what scientific results indicate. Policies are not always based on research evidence, but can be improved when they are. The key test for researchers is "what do our data allow us to say?"

The LPHA has never been larger, more productive, more broadly-based and more vibrant. Having completed a successful first 5 years, the challenge is to continue building capacity and improving quality.

*Graham Watt, Rita Giacaman, Huda Zurayk

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GW is a Trustee of the UK charity Medical Aid for Palestinians. We declare no competing interests.

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- Taylor R, Rieger A. Medicine as a social science: Rudolf Virchow on the typhus 1 epidemic in Upper Silesia. Int J Health Serv 1985; 15: 547-59
- 2 WHO. Commission on social determinants of health. Closing the gap in a generation. Geneva: World Health Organization, 2008. www.who.int/social_ determinants/thecommission/finalreport/en/index.html (accessed Aug 18, 2015).

Prevention of unintentional injuries at home in children younger than 5 years in Ramallah District: a case study approach

Intima Alrimawi, Michael C Watson, Carol Hall

Abstract

Background Unintentional child injuries are a growing public health problem, representing a major cause of mortality, morbidity, and disability worldwide. Injuries are a substantial burden on health-care systems, particularly in low-income countries. We aimed to explore the perceptions and practices of parents, health professionals, and key individuals about the prevention of home-related unintentional injuries in children younger than 5 years, and the potential factors that might affect such practices.

Methods We followed a case study approach, whereby we interviewed four parents from four households (one parent from each) in each of the three different settings within Ramallah District (camp, rural, and urban), and observed the rooms in their houses for potential hazards at a single timepoint using a standardised checklist. We interviewed 24 health professionals who worked with children in a primary health-care setting, and nine senior managers within organisations concerned with children's safety. We analysed data using inductive thematic analysis.

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Findings We recorded many hazards in all settings (48 in camp settings, 43 in rural settings, and 39 in urban settings). Parents attempted to prevent injuries to children in the home, and we noted many similarities between the perspectives of parents within the three settings. However, many factors affected their practice, mainly related to lack of awareness and low financial status. Environmental factors affected injury prevention, including the physical environment of the house, sociocultural environment (eg, belief in fatalism), and governmental policy (eg, lack of home safety regulations). 18 of the 24 health professionals and five of the nine senior managers interviewed were positive about prevention of home injuries, but workload and lack of training were the main barriers to their practice in this area.

Interpretation The causes of child home injuries are embedded within families' culture and social and economic status, and are affected by government policies. Interventions to prevent home injuries in Ramallah District should acknowledge these factors to increase the potential for success.

Funding The University of Nottingham, Birzeit University.

Contributors

IA had the major input into the design, analysis, and interpretation of the data. IA carried out the data collection. MW and CH contributed as PhD supervisors to the design, analysis, and interpretation. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

We thank the parents, health professionals, and senior managers for participating.

Needs assessment for a reproductive health registry towards a harmonised reproductive health registry in the occupied Palestinian territory: a qualitative study

Buthaina Ghanem, Rand Salman, Bjorn G Iversen

Abstract

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Correspondence to: Ms Buthaina K Ghanem, Palestinian National Institute of Public Health Project, WHO, West Bank & Gaza Office, PO Box 4284, Al-Bireh, occupied Palestinian territory ghanembu@who.int Background Reductions of maternal and child mortality are among the UN's Millennium Development Goals. The estimated maternal mortality ratio (MMR) in the occupied Palestinian territory in 2010 was 64 per 100 000 livebirths. WHO has developed a global initiative, the harmonised reproductive health registry (hRHR), to improve data quality and to reduce maternal and infant mortality. We undertook a needs assessment to identify strengths, opportunities, and gaps in the present information system for reproductive health in the occupied Palestinian territory before development of a strategic action plan for the future.

Methods We used a qualitative needs assessment tool (NAT) that has been developed in the International hRHR project and adapted to the Palestinian context. The tool was developed with sections on legal issues, essential indicators, minimum dataset, data collection, data dissemination, and data use. This assessment will help to identify data gaps, which can then be filled to help reduce maternal and child deaths. Through in-depth interviews with senior managers at the Ministry of Health, we adapted the NAT to the Palestinian context. A 1 day workshop with 20 participants from Ministry of Health stakeholder institutions (eg, Department of Primary Health Care) completed the NAT.

Findings The needs assessment showed substantial current data collection in antenatal, perinatal, and postnatal care in local health facilities. However, very little information is exchanged between primary and secondary care, jeopardising the continuum of care and preventing data being used to benefit services provided or for public health purposes. Nationally, reports consist mostly of aggregated, monthly reports of health status and activities that are then published annually. Data are not used for management, to improve quality of care, or to give feedback to health-care providers. Although many of the interventions practised are in line with the essential interventions recommended by WHO, legislation about confidentiality of health data is restricted, and no national agreement has been made about essential interventions, indicators, or a minimum dataset to be collected.

Interpretation Data that are collected should be kept at a necessary minimum and be selected according to evidencebased essential interventions. A way to improve the system would be to introduce a comprehensive computerised hRHR in a consensus-driven process with the major stakeholders in maternal–child health.

Funding WHO Palestinian National Institute of Public Health Project.

Contributors

BG was the main contributor and led the work during the whole process including the planning, doing the interviews, doing the assessment workshop, and writing of the Abstract. RS and BGI participated in the planning, in some of the interviews, and in the assessment of the workshop. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

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Smoking and life-course events among youths living in Area C of the occupied Palestinian territory: an analysis of data from the Palestinian Family Health Survey

Hendia A Abu-Nabaa, Niveen Abu-Rmeileh

Abstract

Background Individuals' maturity, independence, and freedom of choice involve five risky behaviours; smoking is the one that most seriously affects individual and public health. Since OSLO accord in 1993, 60% of the West Bank has been under Israeli military control (known as Area C) and is home to about 300 000 Palestinians and a settler population of at least 325 500 people. Israel retains the area to serve military training, economic interests, and settlement development, potentially affecting Palestinian people's life course. We aimed to compare smoking and life-course events among youths aged 14–29 years in 2010 living in Palestinian areas under Palestinian control (PA) of the West Bank and Gaza Strip (population 837 099 youths) with those residing in Area C (population 90 000 youths) in the West Bank.

Methods We used data from the Palestinian Family Health Survey (which was done by the Palestinian Centre Bureau of Statistics in 2010), in which smoking was the dependent variable. A youth's life-course events, including school enrolment, employment status, marital status, combined with employment (ie, married and employed), and waiting (ie, not married, employed, or studying), were regarded as independent variables in addition to other important factors using SPSS software (version 17).

Findings 25 484 youths were included in the analyses (1714 [7%] living in Area C and 24 132 [93%] living in PA). 255 (15%) youths in Area C were smokers compared with 3163 (13%) in PA. Bivariate analyses showed a significant association between smoking statuses and sex ($p \le 0.05$), age ($p \le 0.05$), life course ($p \le 0.05$), region of residency ($p \le 0.05$), wealth-index quintiles ($p \le 0.05$), and area ($p \le 0.05$). Logistic regression showed that youths living in Area C were more likely to smoke than those living in PA (odds ratio [OR] 1.55, 95% CI 1.29–1.86). Moreover, more youths reported to be smokers who were employed and married (41.6%) than workers not married (38.9%) and waiting (19.1%). Youths older than 17 years were more likely to smoke (aged 18–25 years: OR 4.19, 95% CI 3.63–4.85; aged 26–29 years: OR 5.45, 4.55–6.53) than were those aged younger than 17 years. Those living in the West Bank were more likely to smoke than those living in Gaza (4.70, 4.19–5.27). Living in rural refugee camps doubled the probability of being smokers than living in urban camps (1.48 1.27–1.72). Finally, men had an increased probability to be smokers. In PA, unemployed youths and students were both most likely to be smokers.

Interpretation Additional in-depth research is needed to understand the coping mechanisms used by youths to reach adulthood under stressful situations. A limitation of our study was that socioeconomic status was not included in the statistical model.

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Contributors

All authors conceived and designed the study, collected data, interpreted the data, and wrote the Abstract. All authors approved the final version of the Abstract for publication.

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Assessment of diabetic care and patients' satisfaction: an exploratory study

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Abstract

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Background It is expected that 438 million people will be affected by diabetes mellitus worldwide by 2030. Therefore, assessment of the quality of diabetic care from different dimensions, including patients' perspectives, is necessary. We did an exploratory study at Shouka Health Center, Gaza Strip, occupied Palestinian territory.

Methods We collected medical records of patients with diabetes from August, 2011, to October, 2011, to assess completeness of diabetic files. We assessed nurses' and doctors' management plans using a modified United Nations Relief and Works Agency (UNRWA) Gaza Field Health Programme Checklist. Each item had three components; we summed scores for each item for the three components to produce an overall scaled index as a percentage for diabetic care. Additionally, we assessed patient satisfaction through exit interviews with five domains addressing healthprovider care, health-provider communication, and self-care using a modified version of the Diabetic Continuity of Care Scale (Cronbach's α 0.75). We assessed differences between grouped variables using χ^2 and *t* tests at a significance level of p<0.05. Statistical analysis was done with SPSS software (version 11.5). The study was approved by the ethics committee and written informed consent was obtained.

Findings We collected 81 records. The overall scale of diabetic care quality was $85 \cdot 5\%$. Overall patient satisfaction was $78 \cdot 1\%$ and satisfaction with doctors' care was $89 \cdot 6\%$. Doctors' management plans scored the lowest satisfaction ($77 \cdot 9\%$) whereas completeness of patient records scored the highest ($97 \cdot 8\%$). We noted a significant positive correlation between doctors' management plans and overall satisfaction ($r=0 \cdot 24$, $p=0 \cdot 03$), completeness of files and overall satisfaction ($r=0 \cdot 27$, $p=0 \cdot 02$), doctors' management plans and access or care domain ($r=0 \cdot 28$, $p=0 \cdot 01$), and completeness of files and access or care domain ($r=0 \cdot 23$, $p=0 \cdot 05$). However, there was no significant correlation between the quality of diabetic care index and the overall satisfaction ($r=0 \cdot 16$, $p=0 \cdot 19$). Factor analysis showed that staff attitude was the most influential factor on overall satisfaction.

Interpretation Staffs' attitude and their commitments seem important to patients' overall satisfaction. Training of doctors properly to manage diabetic patients should be intensified. The relationship between overall satisfaction and the diabetic care quality was obscured by self-care and other health professional care dissatisfaction. Limitations of our study include that exit interviews only capture patients who attend, and do not include those who do not attend, which might be affected by quality of the care.

Funding None.

Contributors

IEL contributed to study design, data entry, analysis and interpretation. IJ and AT contributed to data gathering, data validation, and data analysis.

Declaration of interests

We declare no competing interests.

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Prevalence and predictors of double burden of malnutrition in Palestinian children younger than 5 years: analysis of data from the Multiple Indicator Cluster Surveys round four

Hala Ghattas, Khalil El Asmar, Moubadda J Assi, Carla M Obermeyer

Abstract

Background In the context of the global nutrition transition, large inequalities in the burden of child undernutrition persist across populations and are often concomitantly reported with increases in rates of overweight in these same communities. We aimed to compare the prevalence of stunting and overweight in Palestinian children younger than 5 years living in Lebanon and the occupied Palestinian territories and to investigate the predictors of undernutrition and overnutrition in these populations.

Methods We used maternal and child health data, sociodemographic variables, and anthropometric measurements from the 2010 Multiple Indicator Cluster Surveys (MICS) undertaken among Palestinian refugees living in Lebanon (1922 children) and the occupied Palestinian territories (11273 children). Z-scores for height-for-age and body-mass index-for-age for children younger than 5 years were based on WHO's child growth standards. Prevalence of stunting, overweight, and double burden (ie, children with stunted growth and overweight) was estimated. Logistic regression adjusted for survey design was used to model predictors of stunting, overweight, and double burden (STATA version 13).

Findings Prevalence of stunting, overweight, and double burden were all higher in Lebanon than in the occupied Palestinian territories (for stunting, 10.9% vs 10.1%, p<0.0001; for overweight, 11.3% vs 5.8%, p<0.0001; and for double burden, 3.2% vs 1.9%, p=0.0007). After adjusting for covariates, predictors of stunting were age 6–24 months (p=0.05) and region of residence in Lebanon, with Tyre having the highest probability of stunting (p=0.001). Boys (p=0.02), low level of maternal education (p=0.01), and region of residence predicted stunting in the occupied Palestinian territory, with the highest odds of stunting in central West Bank (p<0.0001). Predictors of being overweight were stunting (in Lebanon, odds ratio [OR] 4.30, 95% CI 2.98-6.20; in the occupied Palestinian territories, OR 4.48, 3.63-5.54), male sex (in Lebanon, OR 0.72, 95% CI 0.53-0.98; in the occupied Palestinian territories, OR 0.79, 0.66-0.96), region (highest odds in Bekaa and Tyre [p=0.003], and Central West Bank (p<0.0001), and higher wealth index in the occupied Palestinian territories (OR 1.3, 95% CI 1.1-1.5). Double burden varied only by region, with highest odds in Lebanon in Tyre (p=0.006) and in the occupied Palestinian territory in the central West Bank (p<0.0001).

Interpretation Stunting of growth was a predictor for being overweight in Palestinian children younger than 5 years, with boys at a higher risk than girls. Susceptibility to child malnutrition varied most by region of residence, highlighting the role of structural factors. Nutritional interventions aimed at addressing the common structural determinants of stunting and overweight should be targeted to these subpopulations.

Funding Faculty of Health Sciences, American University of Beirut.

Contributors

HG and CMO conceived the research questions. KEA and MJA analysed the data. All authors contributed to interpretation of findings. HG wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Management of non-variceal upper gastrointestinal bleeding in the Gaza Strip: survey of evidence-based practice

Abstract

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Alaa eldeen Al-Masri, Marwan Al-Agad, Khamis Elessi, Khaled Matar, Oseid Alser, Afaf Elsafeen

Background Early recognition, comprehensive assessment, and evidence-based care are crucial to reduce morbidity and mortality due to non-variceal upper gastrointestinal bleeding (UGIB). The aim of this study was to compare the present treatment of non-variceal UGIB in Gaza hospitals with the best available, evidence-based recommendations.

Methods We distributed 47 questionnaires to doctors in medical departments of three hospitals (Naser Hospital, Alshifa Hospital, and the European Gaza Hospital) about current management strategies for non-variceal UGIB in two hospitals in the Gaza Strip—the European Gaza Hospital and the Shifa hospital. The questions covered target haemoglobin for blood transfusion, duration of proton pump inhibitors (PPI) infusion after endoscopic therapy, use of nasogastric tubes, and use of endoscopic stigmata of recent haemorrhage for therapeutic decisions. Answers from both hospitals were compared with the best available evidence from guidelines by the American College of Gastroenterology (ACG), published in 2012.

Findings 47 questionnaires were completed and returned. Only ten (20%) of responders considered the ACGreccommended 7 g/100 mL as the best threshold for transfusion (most used a higher dose), and only 12 (25%) followed the evidence with respect to the dose and duration of intravenous infusion of PPIs after endoscopic therapy. By contrast, 42 (90%) respondents complied with ACG recommendations of not to routinely use nasogastric tubes, and 38 (80%) used endoscopic stigmata of recent haemorrhage to guide treatment decisions for patients. Finally, only 25 (53%) respondents matched the ACG guidelines about the optimum time to reuse aspirin after non-variceal UGIB.

Interpretation Overall, about half of the responses matched that stated in ACG guidelines, which suggests that only half of the decisions about treatment of non-variceal UGIB made by doctors in Gaza hospitals are based on the best available evidence. A potential limitation of our study was that our questionnaire only covered common and relevant aspects of management, not all aspects of therapy.

Funding None.

Contributors

AeA-M, KE, and KM conceived and designed the study. interpreted the data, and wrote the Abstract. MA-A, OA, and AE collected the data. AeA-M and AE interpreted the data. AeA-M wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Mechanical bowel preparation before elective colorectal surgery in the Gaza Strip: a survey of surgical practice

Spero A Tawil, Khamis A K Elessi, Zuhdi O Elifranji

Abstract

Background Many surgeons believe that postoperative complications and anastomotic leakage after colorectal surgery can be reduced by preoperative mechanical bowel preparation (MBP). We surveyed the practice of surgeons in the Gaza Strip, occupied Palestinian territory, and compared this with best available evidence for use of MBP.

Methods A five item questionnaire was given to the seven most senior surgeons who did almost all surgeries in the European Gaza Hospital and the Al-Shifa Hospital (the two main hospitals in the Gaza Strip). We searched the Cochrane Library for relevant evidence using the search terms "colonic" or "colon", or "colorectal electives surgery" in combination with "mechanical bowel preparation".

Findings All seven surgeons stated that they routinely prescribe MBP before elective colonic or rectal surgery. Two surgeons used MBP only for left colonic surgery; the other five surveyed reported using MBP for both right and left colonic surgery. For one surgeon, MBP consisted of rectal enemas and rectal enema plus oral fluids for 48 h. Another surgeon added oral laxatives to this regimen. Two surgeons used rectal enemas plus oral MBP, and three surgeons used oral quick preparation formulae, alone. All seven surgeons used systemic antibiotics before operating. We recorded no clear evidence from the available systematic review that MBP with rectal enema reduces complications after surgery, but the confidence interval around the estimates of its effects are wide (anastomotic leakage for MBP [95% CI 0.74-1.31] *vs* rectal enema [95% CI 0.74-2.36]; for wound infection [95% CI 0.95-1.42]).

Interpretation Generally, surgeons in the two main hospitals in Gaza use different approaches to MBP for elective colorectal surgery because they believe that it lowers the incidence of postoperative complications and anastomotic leakage in patients. However, a wide variation in their use of many forms of MBP was noted, representing the absence of clear evidence from research. MBP is reported as unpleasant by many patients and more research is needed to provide better evidence to assess whether this procedure has the believed beneficial effects and to guide future practice.

Funding None.

Contributors

SAT and ZOE did the study conception and design, acquisition of data. KAKE and ZOE did the data analysis and interpretation. KAKE did critical revision of the Abstract. ZOE drafted the Abstract.

Declaration of interests

We declare no competing interests.

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Social and political determinants of health equity of Palestinians in Jerusalem: a qualitative assessment

Anita M Vitullo

Abstract

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Correspondence to: Ms Anita M Vitullo, Jerusalem, via Israel anitamvitullo@gmail.com Background East Jerusalem was occupied in 1967, and the Palestinian people living there made permanent residents and became separated from those living in the West Bank. In a qualitative assessment we sought to understand the social and political determinants of health equity for this population in East Jerusalem.

Methods We reviewed the scientific literature into health disparities and social determinants in Jerusalem and comparative studies between Israeli Jews and Palestinians, whether Israeli citizens, residents, or people living in the remaining part of the occupied Palestinian territory. Our review was limited to English-language articles published after 2000. 682 results were scanned and 117 articles reviewed. We did semistructured interviews with 15 key health policymakers or experts from Palestinian, Israeli, and other international stakeholder groups. Data were recorded, transcribed, coded, organised into themes, and analysed with Rifkin's CHOICE framework that links human rights, empowerment, and health equity.

Findings Few health studies examined Palestinians living in Jerusalem as a distinct population group; official data was representative of Jerusalem's annexed status. In the reviewed literature, research methods showed little participation by Palestinians, the lack of an appropriate reference group, selection bias in data sets, and survey methods that were not adapted to the studied population. Health differences between populations in Israel were attributed to differences in culture, ethnic origin, sex, or lifestyle, with little discussion of underlying social determinants. Well documented social and political restrictions on Palestinians in Jerusalem and life-course analyses were absent from health research. Key informant narratives transcended sociopolitical identities and showed differences in ideological or value systems. Informants recognised that Palestinians have poor social determinants, but had different perspectives about the causes of the causes of health inequalities. 14 of 15 key informants offered insight into Palestinian experience in Jerusalem, including perceptions of discriminatory demographic and planning laws, exclusionary policies, imposed language and health system, and social and labour integration inequities.

Interpretation Our results were consistent with evidence in scientific literature that structural barriers, cultural subordination, and hostile state values adversely affect health of minority populations. Palestinians in East Jerusalem might perceive exclusionary national policies, which inequitably distribute social determinants, create structural barriers to equity, and hinder Palestinian development and free choice, to adversely affect their health and wellbeing.

Funding None.

Contributors

AMV conceived and designed the study, collected and interpreted data, wrote the Abstract, and approved the final version for publication.

Declaration of interests I declare no competing interests.

Overweight, obesity, and fertility in newly married Palestinians: a prospective observational study

Markku Sallmén, Yaser Issa, Khaldoun Nijem, Espen Bjertness, Petter Kristensen

Abstract

Background Obesity is an increasing concern for public health worldwide. Decreased reproductive capacity has been reported in women who were overweight or obese. Male obesity has been associated with sex-hormone changes and reduced semen quality. Large retrospective studies have associated a high male body-mass index (BMI) with reduced fertility, but the finding is debated. We investigated the affect of raised BMI in both sexes on fecundability (probability of conception in a menstrual cycle).

Methods In a prospective observational study we included all newly married couples in two villages in Hebron Governorate, occupied Palestinian territory, in 2005–07 who were planning their first pregnancy. Couples were followed up prospectively from marriage until pregnancy or for a maximum of 12 months. We classified BMI according to WHO criteria as underweight (BMI score <18.5), normal weight (18.5–24.9), overweight (25.0–29.9), and obese (\geq 30). We estimated adjusted fecundability density ratios (aFDR) by discrete proportional hazards regression. Adjustments were made for age, education level, occupation in farming, exposure to pesticides, frequency of intercourse, and place of residence. We used SAS PHREG procedure (SAS version 9.2) for the statistical analysis.

Findings We enrolled all 331 newly married couples in the period. In women, prevalence of overweight was 16% (53 women) and of obesity was 3% (9 women); in men, prevalence of overweight was 32% (105 men) and of obesity was 8% (28 men). In women, low fecundability showed an association with increased BMI: aFDRs were 0.71 (95% CI 0.50-1.01) for women who were overweight and 0.49 (0.21-1.14) for those who were obese (reference underweight and normal-weight combined; test for trend, female BMI as a continuous variable p=0.0446). In husbands, aFDRs were 1.16 (0.88-1.51) for men who were overweight and 1.34 (0.88-2.05) for men who were obese (test for trend, male BMI as a continuous variable p=0.2810).

Interpretation Our findings showed an significant association between low female fecundability and high BMI, although the findings were not conclusive for male BMI and fecundability. The factors mediating the association between fecundability and BMI, and whether these differ between the occupied Palestinian territory and other settings, should be studied further.

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Contributors

YI, KN, EB, and PK designed the study and study methods. YI and KN participated in data collection and monitoring. MS, YI, and PK did the data analysis. MS drafted the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Detection of multidrug-resistant bacteria in the occupied Palestinian territory: a cross-sectional study

Isabella Sjölander, Frank Hansen, Abdelraouf Elmanama, Rasha Khayyat, Alaeddin Abu-Zant, Ayman Hussein, Adham Abu Taha, Anette M Hammerum, Oana Ciofu

Abstract

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A la stars

Background Antimicrobial resistance is a worldwide threat to public health. WHO has created several resolutions and strategies on this subject at the World Health Assembly. In May, 2015, WHO published a global action plan to mitigate antimicrobial resistance, including tracking and global surveillance focusing on improving awareness and understanding of this issue. The aim of this study was to screen for carbapenem-resistant bacteria in the occupied Palestinian Territory, to investigate the mechanisms behind the resistance, and to assess the scope of this difficulty in the area.

Methods During 6 weeks in 2012, we collected all available Gram-negative isolates taken from inpatients and outpatients in hospital laboratories at Al-Shifa Hospital and five additional hospitals in the West Bank to screen for carbapenem resistance. Resistant isolates were identified with MALDI-TOF, mapped for their resistance pattern, and further analysed for mechanism of resistance by multiplex PCR and gene sequencing. Pulsed-field gel electrophoresis (PFGE) and multilocus sequence typing (MLST) were used to type bacteria to compare the resistant isolates locally and internationally.

Findings Of the 248 Gram-negative isolates we collected, 21 (8%) showed significant in-vitro resistance to carbapenems and several other antibiotics. These 21 were identified as 15 isolates of *Acinetobacter baumannii* and six of *Pseudomonas aeruginosa*. Carbapenemase gene investigations showed intrinsic OXA-51 group in all isolates and one isolate from Gaza was positive for NDM-2. Of the six *P aeruginosa* isolates, one VIM-4 and three VIM-2 producers were recorded and MLST reported three new sequence types named ST1562, ST1563, and ST1564.

Interpretation We identified a high ratio of multidrug-resistant bacteria in the occupied Palestinian territory, to our knowledge the first documented isolates showing production of NDM-2 and VIM carbapenemases as a contributing mechanism. These findings emphasise the importance of this growing health threat in the occupied Palestinian territory and the need for further investigation and adequate surveillance of antibiotic resistance.

Funding Danish Ministry of Health and Prevention—the Danish Integrated Antimicrobial Resistance Monitoring and Research Programme (DANMAP).

Contributors

IS and OC conceived the idea. IS wrote the Abstract, collected the samples in the West Bank, and did the screening with RK, AA, AH, and AAT. AE collected samples and did the screening in Gaza. FH, AH, and OC did the analyses in Copenhagen. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Perceived physical and psychosocial adaptations during the perinatal period in Palestinian women and men in a remote West Bank village: a qualitative study

Sahar Hassan, Espen Bjertness, Laura Wick

Abstract

Background Coverage and quality of postnatal care in the occupied Palestinian territory, and information about morbidities and challenges that families might face, remain inadequate despite its centrality to ensure maternal and infant health. In our planning of a postnatal home-visiting programme, we explored rural women's and men's views about physical and psychosocial adaptations before, during, and after childbirth in the Beit Liqya village situated in Area C (60% of the West Bank placed under undivided Israeli security and infrastructural control).

Methods We undertook four focus groups with married women and one with married men of different ages in 2012, using an open-ended guide. Participants included 44 women (aged 21–70 years; nine were pregnant, four were childless, 31 were not pregnant and already had at least one child) and nine men (aged 24–71 years). Ethical approval was obtained and participants provided verbal consent. Data were analysed with thematic analysis.

Findings The diversity of participants provided a rich perspective on societal changes. Five main themes emerged: transitions in men's paternal and spousal roles and women's lifestyles; the institutionalisation of childbirth; formally trained midwives and physicians replacing the village daya (a traditional birth attendant skilled through apprenticeship); psychosocial adaptation after birth; and views about health services. Nowadays, men participate more in pregnancy, childbirth, and post-partum family life than they previously did. However, the diet of women is reduced in nutrition; they are not as active during pregnancy because of reduced agricultural labour and are more focused on medical controls, such as frequent antenatal visits and laboratory tests. As noted by a woman that "[there are] too many antenatal visits, women do not eat breakfast, although there are many available options in houses these days, they eat unhealthy junk food". The postpartum period was viewed as a crucial time for recovery with a need for strong family support. Female participants expressed a preference for female health-care providers.

Interpretation Findings deepened our understanding of rural women's and families' needs and views regarding pregnancy, birth, and postpartum. Changes in the experiences of Palestinian women and men during the perinatal period should inform changes to policy and practices to tailor accessible and effective community programmes that are responsive to these families' needs and of those in other marginalised populations.

Funding The Theodor-Springmann Foundation.

Contributors

SH and LW conceptualised and designed the study. SH designed the research methods, wrote focus group guide, trained field workers, supervised and participated in data collection, prepared texts for analysis, and analysed and wrote the draft. LW and EB contributed to the analysis, interpretation, and writing the final version. All authors approved the final version of the Abstract for publication.

Declaration of interests We declare no competing interests.

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Quality of life for families living in East Jerusalem's Kafr 'Aqab urban sprawl: a qualitative study

Doaa Hammoudeh, Layaly Hamayel, Rita Giacaman

Abstract

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Methods In-depth qualitative interviews with 25 women were done with a locally-developed semistructured interview schedule that explored living conditions and quality of life. We selected participants through purposeful-convenience sampling methods to include Palestinians with Jerusalem residency who were married to residents of the occupied Palestinian territory, and vice versa. The Institute of Community and Public Health (ICPH) Research Ethics Committee granted ethical approval. Data were analysed by reading and rereading transcripts for recurring themes and subthemes.

Findings Residents of Kafr 'Aqab were exposed to various life stressors, including anxiety resulting from legal and administrative battles to maintain residency, increased financial strains, economic exploitation, and the distress of relocating to areas with poor living-conditions to maintain Jerusalem residency, and at the same time living with spouses who are residents of the occupied Palestinian territory. Most women expressed strong feelings of insecurity for the future of their families' residency, given Kafr 'Aqab's situation outside the Separation Wall. Heightened by fear of local Palestinian investigators working with the National Insurance Institute and perceived increase in crime, some women noted that they increasingly mistrusted newcomers and did not feel part of a community or integrated social fabric. Physical barriers (ie, the Qalandia-checkpoint and Separation Wall) restrict access to families and social support, and pose obstacles to access health-care services in Jerusalem. Most women reported harmful environmental conditions (including filth, sewage, and water concerns) because of increased urban sprawl and inadequate access to municipality services, despite taxation.

Interpretation The Kafr 'Aqab predicament attests to poor conditions to live in for a vulnerable group, ruled with ambiguity and uncertainty, existing within an already volatile context. As a result, this raises concerns of the effects on health and wellbeing of families living in these conditions.

Funding Reproductive Health Working Group, Arab World and Turkey.

Contributors

All authors collected the data, interpreted the data, commented on drafts and revisions, and approved the final version of the Abstract for publication. DH wrote the Abstract.

Declaration of interests

We declare no competing interests.

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Prevalence of disability among elderly people in the occupied Palestinian territory: a cross-sectional study

Jeda J B Jasser, Nouh A Y Harsha, Luay S A Ziq, Aisha A-M Shalash, Rula Ghandour, Rita Giacaman

Abstract

Background From the 2011 Palestinian Center Bureau of Statistics, disability is defined as long-term physical, mental, intellectual, or sensory impairment that can hinder full and effective participation in society; disability among elderly people has become a major public health concern in recent years. More than 1 billion people live with disability worldwide. In the occupied Palestinian territory, disability in elderly people is still not well understood. This study aims to assess the prevalence of disability among Palestinians aged 50 years or older and associated factors.

Methods Data were obtained from the Palestinian Central Bureau of Statistics Disability-Survey of 2011, representing the Palestinian population. People aged 50 years or older were selected. We gathered descriptive statistics and used multivariate binary logistic regression to check for confounders. Data were analysed with SPSS17 software.

Findings The total sample size was 8747 people aged 50 years or older. 71% of those had no disability and the remaining 29% reportedly had at least one disability, of which 53% represented problems with mobility, 26% vision, 11% hearing, 7% memory, 1% mental health, 1% communication, and 1% intellectual. Men were less likely to be disabled than women (odds ratio [OR] 0.75, 95% CI 0.64-0.89, p=0.001). The level of disability increased at age 70 and older (OR 1.96, 95% CI 1.67-2.31). The percentage of disabled elderly people increased among those who could not read compared with those educated (OR 2.93, 95% CI 2.36-3.63); decreased in those with large families compared with families of fewer than three people (for families of three to six people, OR 0.73, 95% CI 0.63-0.84; for families of seven to 27 people, 0.59, 0.50-0.70); increased in refugees compared with non-refugees (OR 1.26, 95% CI 1.07-1.47, p=0.005); increased in non-workers compared with workers (OR 2.96, 95% CI 2.50-3.49); and increased in those widowed and divorced compared with people who were married (OR 1.25, 95% CI 1.07-1.47, p=0.005). Compared with the centre of the West Bank, the number of people with disability was highest in the Gaza Strip (OR 2.23, 95% CI 1.63-2.63), followed by north West Bank (OR 2.60, 95% CI 2.22-3.05), and south West Bank (OR 1.95, 95% CI 1.63-2.33).

Interpretation Disability is more prevalent in women, those not educated, refugees, non-workers, widowed and divorced individuals, and people in Gaza. Further investigations are needed to establish the main causes of disability in the occupied Palestinian territory, and associated factors.

Funding None.

Contributors

JJBJ participated in the method, data analysis, interpretation, conclusion, writing, and overall work integration. NAYH participated in the introduction, data analysis, and in writing. LSAZ participated in data analysis. AA-MS participated in Abstract conclusion. RGh participated in data analysis, conclusion, and interpretation. RGi supervised all the work. All authors approved the final version of the Abstract for publication.

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Patient safety culture in Palestinian hospital pharmacies: a cross-sectional survey

Wafa' J Zaghari, Motasem Hamdan

Abstract

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Correspondence to: Ms Wafa' J Zaghari, Palestinian Pharmaceutical Association, Ramallah, West Bank, occupied Palestinian territory Wafa_zaghari_85@hotmail. com Background Assessment of safety culture—safety-related norms and behaviours—in health care settings is receiving increasing attention. Assessment of pharmacy safety culture in the occupied Palestinian territory is scarce. We aimed to investigate patient safety culture in Palestinian hospital pharmacies and its association with hospital characteristics (ie, ownership and number of beds) and pharmacy staff characteristics (including sex, age, education, job title, working hours, and years in profession and working in a hospital).

Methods The self-administered safety attitudes questionnaire (SAQ) was translated into Arabic and was then undertaken in February 2012 to April 2012. All pharmacy staff (n=115) working for more than 3 months before taking the survey in 28 public, private, and non-governmental hospitals in the West Bank were targeted. We used IBM-SPSS (version 19) for data analysis.

Findings 73 staff completed surveys (response rate 69%). Mean age of participants was $35 \cdot 3$ (SD $6 \cdot 5$) years and 48 (67%) respondents were women. The mean scores for overall safety varied significantly between hospital pharmacies, ranging from 43 (poor safety) to 85 (good safety) on a 0–100 scale (p=0.004). For SAQ domains (including teamwork atmosphere, job satisfaction, safety climate, positive perception of management, stress recognition of respondents, and favourable working conditions), mean scores ranged from 76 (SD 21) for favourable working conditions, to 62 (SD 25) for stress recognition. Only two SAQ domains received 75% or more positive responses from participants, which were for job satisfaction (56 respondents, 77%) and favourable working conditions (56 respondents, 77%). Overall safety score was significantly associated with hospital ownership, with higher scores in private and non-governmental hospitals than in public hospitals (p=0.002). Additionally, participants working in hospitals with less than 50 beds reported higher positive perceptions of management than did their counterparts in hospitals with a greater number of beds (p=0.031). No participant characteristic was significantly related to SAQ domain scores. 45 (62%) respondents did not report any drug-related adverse event recorded by patients in the past year. 64 (87%) participants rated patient safety at their hospital units as excellent or very good, and 9 (13%) rated patient safety as acceptable.

Interpretation Our results showed that patient safety could be improved in Palestinian hospital pharmacies. Additionally, results showed the interventions that are needed might vary across hospitals.

Funding None.

Contributors

WZ and MH conceived and designed the study. WZ collected the data. WZ and MH interpreted the data. WZ wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Educational attainment and economic participation in Palestinian women living in Lebanon: analysis of data from the Labour Force Survey among Palestinian refugees

Sawsan Abdulrahim

Abstract

Background In Arab societies, women have made advances in educational attainment but continue to show very low rates of economic participation. This occurrence has been labelled the sex-education-work paradox. We aimed to explore this paradox among Palestinian refugees in Lebanon and assessed wage differences between Palestinian men and women at every educational level.

Methods We used data from the most recent International Labour Organizations' Labour Force Survey of Palestinians in Lebanon (2012). The survey was implemented in all Palestinian refugee camps and gatherings across Lebanon, yielding a sample size of 2600 households and 7212 individuals. We tested sex differences in education, work, and wages using bivariate and multivariate methods, using SPSS version 18.

Findings We included data for 2020 employed men and 444 employed women in this study. Although Palestinian women had a better educational profile than did Palestinian men, they had a very low rate of economic participation (15% overall, and 10% in married women). Employed Palestinian women had an advantage to men with respect to occupational status (29% were professionals and managers compared with 8% men) and job security (73% women earned monthly wages compared with 37% men), but earned lower wages than men at every educational level. Average sex wage differences increased gradually with increasing education, ranging from US\$94.6 for primary education (0–6 years), to \$132.6 for complementary education (6–9 years), to \$198 for those with a secondary education (9–12 years). The results of linear regression analysis showed, after adjusting for age, education, and occupation, that women earned significantly lower wages than men (β =137; p<0.0001).

Interpretation The results accord with the persistence of the sex-education-work paradox among Palestinians in Lebanon. The findings also show a sex-wage paradox, whereby, with increasing education, women earn lower wages than men do. Palestinian women are doubly disadvantaged in Lebanon: discriminatory policies that negatively affect all Palestinian workers (eg, barring them from working in more than 60 managerial and professional jobs) intersected with sex social and cultural norms to exert a cumulative effect on their economic wellbeing.

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Contributors

SA conceived and designed the study, collected and interpreted the data, and wrote the Abstract. SA approved the final version of the Abstract for publication.

Declaration of interests I declare no competing interests.

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Disability among children in the occupied Palestinian territory: a cross-sectional study

Dima Khoury, Ansam Al-Khatib, Nisreen Shelleh, Shayma Hijazi, Rula Ghandour, Rita Giacaman

Abstract

Background Disabilities are impairments or limitations that can vary between groups, localities, and family financial status. These restrictions could range from mental and intellectual to sensory and physical, and could be either congenital or acquired. In the occupied Palestinian territory, little attention is given to people with a disability, reasons behind their disabilities, and the prevalence of different disabilities in communities. This research focuses on the prevalence of disabilities among Palestinian children aged 0–17 years in 2011, in the occupied Palestinian territory and also the associated factors.

Methods We used data from the Disability Survey in 2011 by the Palestinian Central Bureau of Statistics in this analysis. 42176 children were included, representing all children in the occupied Palestinian territory. We analysed data with frequencies, cross tabs with significance testing, and regression analysis to test for confounders using SPSS version 17. Age was dealt with as a continuous variable and household size was dealt with as a categorical variable. No written consent was required for this study.

Findings Prevalence of disability was 1586 (3.7%), including intellectual disabilities in 521 (33%) children, communication disabilities in 488 (31%), vision disabilities in 437 (28%), memory disabilities in 389 (25%), mobility disabilities in 384 (24%), hearing disabilities in 261 (16%), and mental disabilities in 144 (9%). More disability was reported in boys than in girls (odds ratio [OR] 1.37, 95% CI 1.24-1.52). Disability increased with increasing age groups (OR 1.07, 95% CI 1.06-1.08) and increasing household size (OR 1.02, 95% CI 1.00-1.04). Disability was higher in the south West Bank and Gaza Strip than in the centre West Bank region (OR 1.32, 95% CI 1.11-1.57 for south West Bank; vs 1.20, 1.03-1.42 for Gaza) and higher disability numbers were recorded in refugees than in non-refugees (OR 1.17, 95% CI 1.05-1.31). 520 (33%) children with a disability had more than one disability.

Interpretation Disability prevalence was increased in south West Bank and the Gaza strip, and in older children. We could not analyse data by locale (eg, urban, rural, or refugee camp) or socioeconomic status because these variables were not found in the dataset, therefore the prevalence of disability in refugees could not be assessed. Further studies are recommended to identify the factors that account for these findings, with special attention given to children with a disability and refugees.

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Contributors

The authors used a set of precollected data by the Palestinian Central Bureau of Statistics. DK interpreted the data, wrote the Abstract, and approved the final version of the Abstract for publication.

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Psychosocial health and menopausal symptoms in Palestinian women in the West Bank: a pilot study

Shiraz Nasr, Sawsan Imseeh, Lee Moya Bradley, Asad Ramlawi, Rita Giacaman

Abstract

Background Palestinian health-care services are directed towards prenatal care and childbirth, marginalising women of different ages, especially in the menopausal period. We aimed to investigate factors affecting Palestinian women's menopausal symptoms and psychosocial health.

Methods We used purposeful or convenience sampling to identify eligible women aged 45-65 years in 18 Ministry of Health clinics in north, central, and south West Bank. We developed a locally relevant instrument on the basis of published literature and results from a pilot qualitative study. We made scales to score women's reported medical history, non-communicable diseases (NCDs), pains, menopausal symptoms, and quality of life (ie, physical health, sense of control and fulfilment, and psychosocial health status) with good or more Chronbach's α values (0.7–0.8 or more). We used binary logistic regression to check for confounders. Ethical approval and verbal consent were obtained.

Findings Between Oct 21, 2013, and Nov 20, 2013, we identified 1817 eligible women. After exclusion of 781 perimenopausal or menopausal women, we included 1036 postmenopausal in our analysis. Women with less than 12 years in education, living in crowded households, with no family support, and with one or more NCDs were more likely to report more menopausal symptoms than women with 12 years of schooling or more (OR 1.90, 95% CI 1.32-2.85), living in less crowded households (1.70, 1.19-2.32), with family support (1.60, 1.13-2.25), and with no NCDs (1.60, 1.13-2.20). Women with satisfactory psychosocial health were less likely to report menopausal symptoms than those with unsatisfactory psychosocial health (OR 0.10, 95% CI 0.07-0.15). Women who lived in north or south West Bank were more likely (OR 2.60, 95% CI 1.69-4.07 for north West Bank; 3.20 1.79-5.73 for south West Bank) to have unsatisfactory psychosocial health status than women who lived in the centre West Bank.

Interpretation Our results highlight the need to address the psychosocial health of Palestinian menopausal women.

Funding United Nations Population Fund, occupied Palestinian territory.

Contributors

RG and AR conceived and designed the study. SN, SI, and LMB the collected data. SN and SI interpreted the data. SN and SLRG wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Rational use of brain CT scans at Al-Shifa Hospital in Gaza Strip: an analysis of hospital records

Abdelrazeq Beram, Sami Alagha, Yousef Abu-Safieh

Abstract

Background The use of CT scans has increased substantially in the Gaza Strip, occupied Palestinian territory. Although this technique has improved diagnostic capability, it has increased patient exposure to radiation and contributed to high costs. We aimed to assess the need for neurological CT scans at the Al-Shifa Hospital, Gaza Strip, occupied Palestinian territory, with a view to restrict patient exposure to radiation and minimise the financial burden of CT scanning on the Palestinian Ministry of Health.

Methods We reviewed all neurological CT scan requests between June 1, 2011, and Aug 31, 2011, in the Al-Shifa Hospital using a checklist that included availability and completeness of requests, previous examination, clinical data, medical data, and the results of examinations. We used SPSS to analyse the data and χ^2 to assess the association between the study variables. This study was approved by the Helsinki Committee, Gaza Strip. We used we used SPSS (version 13) for the analyses.

Findings 4132 CT scans were done in the study period, of which 1578 (38%) were brain CT scans. We identified and reviewed 1129 (72%) scan requests: 616 (55%) of the requests were urgent, 420 (37%) were for patients younger than 20 years, and 642 (57%) were for male patients. In 1023 (91%) requests the referring physicians did not note if the patient had undergone previous examinations. In 501 (44%) of scans the medical history was not provided, in 348 (31%) CT scans clinical assessment was not provided, and in 536 (47%) of requests no tentative diagnosis was stated. No abnormalities were noted in 660 (58%) of the brain CT scan assessments (260 [42%] of the urgent examinations and 400 [78%] of elective examinations, 356 [56%] of male examinations, and 304 [62%] of female examinations). The differences in results between urgent and elective examinations were significant (χ^2 =97.06 and p=0.0001), as were the difference in results between male and female examinations (χ^2 =1.52 and p=0.10).

Interpretation Brain CT is frequently requested by physicians without documentation of previous tests, clinical examination, and patients' medical history. More than 58% of brain CT scans are normal in Gaza public hospitals. The Palestinian Ministry of Health has restricted funds, therefore, CT requests for patients should be better justified.

Funding None.

Contributors

AB participated in writing, literature, methodology, study design, and analyses. SA participated in discussion and reviewing of the Abstract. YA-S participated in data collection and editing. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Prevalence of distress and associated factors among Palestinian university students living in the West Bank and East Jerusalem: a cross-sectional study

Hiba Darwish, Haya Shojaia, Itaf Hassan, Safa Mansour, Suzan Al Metwalli, Rita Giacaman

Abstract

Background Distress is a reaction in response to life changes that result in physical and emotional changes, including frustration, nervousness, or anger. We aimed to assess factors associated with distress levels among Palestinian university students.

Methods We did a cross-sectional study measuring distress among students at the Birzeit and Bethlehem universities. We selected an equal number of students to interview from the two universities (Birzeit and Bethlehem). A total of 572 students were interviewed with an equal selection of sex, type of identity, and place of residency (ie, West Bank or east Jerusalem). Inclusion criteria at Birzeit University were an equal number of students who had Jerusalem identity and lived in east Jerusalem, and those who had West Bank identity and lived in Ramallah; whereas at the Bethlehem University, the selection sample was of students who had Jerusalem identity and lived in east Jerusalem and those who had Jerusalem identity and lived in east Jerusalem and those who had Jerusalem identity and lived in east Jerusalem and those who had Jerusalem identity and lived in east Jerusalem and those who had West Bank identity and lived in Bethlehem. We asked 12 questions to assess distress during the 2 weeks before the interview with Cronbach's $\alpha 0.89$. We assessed the association between sociodemographics variables and distress with bivariate analysis using SPSS (version 20), and did regression analysis of any significant associations.

Findings We interviewed 572 students (286 students from each university). 288 ($50 \cdot 3\%$) were men and 284 ($49 \cdot 7\%$) were women. 302 (47%) students reported moderate to high distress levels, 374 (65%) were satisfied with their health, and 288 (50%) reported a desire to leave oPT after university. 309 (54%) participants reported that their fathers had university-level education, and 390 (68%) reported that their mothers were not working outside the home. Regression results showed that students who stated they were satisfied with their health were less likely to report high distress than those who were dissatisfied with their health (OR 0.37, 95% CI 0.24-0.57). Students who wanted to out-migrate were increasingly likely to report being highly distressed (OR 1.55, 95% CI 1.02-2.34). Students whose fathers had a university education were less likely to report distress than did those whose fathers had a lower level of education (OR 0.40, 95% CI 0.21-0.76). Students with non-working mothers were more likely to report high distress level than were students with employed mothers (OR 1.80, 95% CI 1.08-3.00).

Interpretation High distress among Palestinian university students is negatively associated with health satisfaction and positively associated with a reported desire to out-migrate. Students with university educated fathers and working mothers reported less distress than students with lower educated fathers and non-working mothers. Although additional research needs to be completed into the direction of causation if it exists, this pilot study suggests that an association might exist between socioeconomic status and distress level among university students.

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Contributors

HD and HS did the literature review, discussion, and interpretation. SM and IH completed analysis and interpretation. RG supervised the project and SAIM was a researcher assistant. All authors approved the final version of the Abstract for publication.

Declaration of interests

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Unintended pregnancy in Palestinian women living in Ramallah District, occupied Palestinian territory: a qualitative study

Eatimad Shalabi-Abbas

Abstract

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Background About 39% of pregnancies in Palestinian women are unintended. So far, the determinants and results of unintended pregnancy are poorly understood. This study explores the determinants of unintended pregnancy of women in the Ramallah District, occupied Palestinian territory.

Methods A qualitative design used included five focus groups, which all contained five to six married women from the Ramallah district, occupied Palestinian territory, between May 1, 2013, and Sept 30, 2013. Participants were married, of reproductive age (about 24–28 years), and had a history of at least one unintended pregnancy. Convenience purposive sampling was used to achieve a diversity of Palestinian context. Participants were from rural (nine women), urban (12 women), and refugee camps (six women). Verbal consent was obtained from all participants. Focus groups were taped and transcribed to explore sociocultural, emotional, and economical circumstances. Furthermore, some resulting effects of unintended pregnancy on both the mothers and their infants were also investigated. Thematic analysis was done on the basis of research objectives.

Findings Poor health status and poverty were reported by participants who considered their pregnancy as unintended. Recurrent unintended pregnancies were mainly associated with coitus interruptus, calendar method, and breastfeeding as contraceptive methods. Barriers to use of modern contraceptives (eg, condoms and intrauterine contraceptive devices) included sociocultural factors (such as in-laws or husband forbidding use of contraception), fear of side-effects of modern contraceptives, and refusal of condom by husband. Participants had no awareness of emergency contraceptives, with most women having considered abortion, but did not complete the procedure because of religious beliefs and a scarcity of medical support. Participants referred to disappointment with unintended pregnancy as *musiba* (calamity), and *zomba* (letdown). Most participants had exacerbated physical symptoms during pregnancy, delays in receiving antenatal care, and some reported post-partum depression and post-partum haemorrhage. Participants did not report any effect of unintended pregnancy on their infant's weight or breast feeding duration.

Interpretation The social context of Palestinian women seems to determine unintended pregnancy rather than availability and accessibility of family planning services. These results could be used to formulate a framework to study unintended pregnancy in Palestinian women and to inform policies in reproductive health services.

Funding None.

Contributors

ES-A conceived and designed the study, collected and interpreted the data, and wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

I declare no competing interests.

Acknowledgments

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Effectiveness of timed and targeted counselling about feeding and caring practices for infants and young children to mothers in West Bank: a randomised controlled trial

Hana S Al-Rabadi, Nuha E Sharif

Abstract

Background Restricted access to health facilities in some Palestinian localities is believed to contribute to little knowledge and poor infant and young child feeding (IYCF) and care practices among mothers. The objective of this study was to assess the effectiveness of a community approach called Timed Targeted Counselling in improving mothers' knowledge and practices of IYCF in four remote villages surrounding Bethlehem in the West Bank.

Methods We did a randomised controlled trial in four villages. All mothers of infants born between March 1, 2011, and April 30, 2011, were identified by community health workers (CHWs) and randomly assigned to the intervention or comparison group. Randomisation was done at the individual level, four villages who had similar characteristics were identified and all newborns during the months of March and April, 2011, were assigned randomly into intervention and comparison groups, univariate, and multivariate analysis were applied. CHWs targeted the intervention group with key messages and support for positive IYCF and caring practices during two organised home visits (sometimes three depending on their counselling) throughout 12 months. Women in the comparison group were not exposed to any messages; they were visited only for data collection. Baseline and postintervention data from a questionnaire, designed for the purpose of the study, were collected for both groups at the end of 12 months. Ethical approval was given and informed consent obtained from participants. The primary endpoint was behavioural caring practices of mothers towards their children. We did univariate and multivariate statistical analysis were planned to be done using SPSS version 17.

Findings We enrolled 118 mothers in the study and randomly assigned them to the intervention group (n=66) or the comparison group (n=52). IYCF and caring practices improved significantly among mothers in the intervention group: exclusive breastfeeding up to 6 months increased from 27% (18 of 66 women) to 70% (46 women; OR 29, 95% CI $8 \cdot 02$ –108); breastfeeding of children aged 1 year increased from 56% (37) to 83% (55; 2 · 94, 1 · 03–8 · 41); timely introduction of complementary meals increased from 38 · 5% (25) to 67% (44; 83 · 6, 17 · 24–40 · 5); rubbing of salt on infant skin and umbilical cord decreased from 54 · 5% (36) to 3% (3; 0 · 033, 0 · 006–0 · 19); recognition of danger signs increased from 15% (10) to 48% (32; 3 · 96, 0 · 17–9 · 2); and, bathing of newborns within 24 h after birth decreased from 68 · 2% (45) to 32% (21; p<0 · 0001 for all comparisons). No behavioural changes were recorded among mothers in the comparison group. During the study period, fewer disease episodes were reported in the intervention group than in the comparison group for diarrhoea (10 cases *vs* 25 cases), respiratory illness (15 *vs* 33), common cold (39 *vs* 50), fever (20 *vs* 31), and ear infections (7 *vs* 32 cases).

Interpretation Timed Targeted Counselling proved very effective for improvement of a range of IYCF and caring practices. Because of contextual similarities in most Palestinian localities, scale-up for TTC is recommended for other areas in West Bank (Gaza, occupied Palestine territory).

Funding World Vision Jerusalem.

Contributor

HAS-R was responsible for the work, including the design, intervention, and data collection, entry, and analysis. NES was responsible for supervising the research. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

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Sense of coherence in Palestinian helpers operating in emergency settings: a mediation study

Guido Veronese, Alessandro Pepe

Abstract

Background Palestinian helpers—such as medics, paramedics, and mental health personnel—operating in emergency Published Online August 1, 2017 settings are commonly recognised as being at risk of developing trauma symptoms. Research has assessed the role of sense of coherence (SOC) as a key determinant of reactions to psychological distress in these emergency workers. SOC is a global tendency to view one's environment as comprehensible, manageable, and meaningful. In this study, we aimed to assess the functioning of SOC as a determinant of the interaction between individual helper's primary responses to traumatic events (assessed via intrusion and avoidance measures) and the secondary effects in terms of general psychological distress (as shown in levels of anxiety, social dysfunction, and loss of self-confidence). Three hypotheses were tested: first, that SOC would mediate the association between effects of traumatic events with anxiety, social dysfunction, and loss of confidence.

> Methods The research project included physicians, psychiatrists, social workers, and volunteers at public hospitals in three different areas of the occupied Palestinian territory. We administered the General Health Questionnaire, SOC scale, and Impact of Event Scale. We did multivariate regression and mediation analysis to assess whether and to what extent SOC affected the effects of trauma on helpers. All analyses were done with SPSS 22. The participants gave written informed consent. The research was approved by the ethics committee of Milano-Bicocca University.

> Findings We recruited 218 people to our study. Of those recruited, 122 were men (56%) and 96 were women (44%). Mean age of participants was 30.4 years (SD 8.68, range 18–59). SOC was found to be a determinant of the association between effects of traumatic events and anxiety (F=5.44, p=0.03) and loss of confidence (F=15.67, p=0.0028). Analysis suggested that SOC partly mediated the effects of trauma on both anxiety (β =0.287, p=0.0018) and social dysfunction (β =0.282, p=0.0022), whereas it fully mediated the relationship between trauma and loss of confidence (β =0.055, p=0.627).

> Interpretation Our findings suggest that SOC helps individuals to manage and overcome traumatic experiences, reduce anxiety and sense of bereavement, and maintain a functioning system of relationships in the wake of trauma. Thus, SOC displays protective abilities that might be assessed and targeted for training or clinical treatment in this specific group of professionals.

Funding None.

Contributors

GV planned the research and wrote the Abstract. AP did the statistical analysis and wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

GV has worked in Gaza recently as a trainer with Mercy Corps, USA, and as a teacher in the MA programme in community mental health run by the Gaza Community Mental Health Program. Since 2009, GV has contributed to the Remedial Education Centre in Gaza as a consultant, teacher, and project coordinator. AP declares no conflicts of interest.

Acknowledaments

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Cultural appropriateness of International Child Abuse screening tools for child abuse and neglect: a qualitative study

Suzan Mitwalli, Zeina Amro, Layaly Hamayel, Doaa Hammoudeh, Sawsan Imseeh, Yoke Rabia, Samia Halileh, Rita Giacaman

Abstract

Background Although much research has been done into fertility and childbearing in the Palestinian context, research into the practice of child-raising is scarce. In preparation for a study on child discipline and abuse in the West Bank, we investigated the cultural appropriateness of two International Child Abuse screening tools: one for parents or caretakers (ICAST-P) and the other for young people aged 18–24 years (ICAST-R), which were both developed by the International Society for Prevention of Child Abuse and Neglect (ISPCAN).

Methods The research team used purposeful selection to obtain a diverse sample and did ten in-depth interviews with mothers, ten with single men aged 19–24 years, and ten with single women aged 18–23 years in the West Bank. Besides general questions about child discipline, interviewers asked all participants for feedback in relation to clarity, acceptability, and relevance of the ICAST survey questions.

Findings 26 (87%) people interviewed perceived most ICAST questions as acceptable and relevant. However, their feedback suggested severe problems related to sexual abuse questions. Young women suggested that such questions could reopen emotional trauma in a context where support services are at a minimum. Many of the interviewees asked if respondents would answer these questions truthfully and warned that both interviewees and interviewers could face social repercussions. The group of 20 men and women aged 18–24 years also raised issues about child abuse and neglect that were not addressed by the ICAST surveys, such as discrimination among siblings by parents. Additionally, young people questioned whether people who are illiterate and those with mental disabilities could be included in the survey.

Interpretation In view of the absence of adequate services for psychological follow-up for victims of sexual abuse, our findings suggest that the survey in its original version could cause harm. Combined with the doubtful sensitivity of this instrument as a screening technique, our study highlights the importance of undertaking validation of research instruments before being introduced into a new cultural setting. In the Palestinian context, alternative research methods need to be considered to study issues of sexual abuse.

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Contributors

All authors participated in implementing and analysis of interviews, and writing the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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This study is part of a larger study of child discipline in Qatar and the occupied Palestinian territory. The study was conceptualised and planned by Marcellina Mian, RG, SH, and Margaret Lynch. The research instrument was based on ISPCAN's two questionnaires ICAST-P and ICAST-R, with slight modifications made to suit context.

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Determinants of bullying among Palestinian refugee students in Lebanon: a qualitative study

Abstract

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students in Lebanon: a qualitative study Zahraa Y Beydoun, Mona H Osman, Nimer Kassim, Ali M Khader

Background Despite the high prevalence of bullying among Palestinian refugee students at schools of The United Nations Relief and Work Agency (UNRWA), estimated at $52 \cdot 5\%$ by Global School-based Students Health Survey done in 2010, little attention is given to it. Compared with worldwide prevalence of bullying, ranging between $7 \cdot 1\%$ and $70 \cdot 2\%$, the prevalence of bullying at UNRWA schools is high. This study aims to understand the determinants behind bullying among Palestinian refugee students at UNRWA to be able to intervene and reduce the prevalence.

Methods Qualitative methods for data collection were used. Three focus groups were interviewed at Haifa School in Lebanon among both female and male students of grades 7, 8, and 9 (aged 13–15 years). Every group contained ten students who were asked for both written parental consent and verbal consent. Findings were analysed with thematic analysis.

Findings Our findings showed that both individual and environmental factors were determinants of bullying being done among participants. Students' definition of bullying was different from what is accepted in the literature, being defined as physical abuse. Moreover, bullying was not regarded as a harmful behaviour, but instead a way of having fun and seeking a better self-image among their peers. These perceptions were the result of the camp environment. Our findings showed that Palestinian refugee students are exposed to violent acts—eg, hitting and use of guns in the refugee camp—which made them perceive bullying as an acceptable behaviour. Some students stated that they were raised on the idea of holding a gun or a knife to fight and protect themselves. This extreme exposure to violence made participants perceive kicking or hitting for the sake of making fun as being an acceptable behaviour as long as there is no injury.

Interpretation The determinants of bullying among Palestinian refugee students are different from those among non-refugee populations as shown in the published literature. Therefore, UNRWA schools should take these differences into consideration when planning future antibullying interventions.

Funding The United Nations Relief and Work Agency (UNRWA).

Contributors

ZYB contributed in all the stages of the study, from reviewing the literature, data collection, data analysis, and writing up the results and the Abstract. MHO was advisor to ZYB and helped in guiding and advising ZYP throughout the process of the project. AMK and NK contributed in reading the Abstract and gave valuable comments. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Implementation of WHO package of essential noncommunicable disease interventions in the occupied Palestinian territory: assessment of patient perceptions to changes in quality of care with participatory ranking methods

Nadim Barghouthi, Ramez Dweakat, Yaser Bouziyeh, Reem Abu-Hijleh, Ilhama Shamasnah, Asad Ramlawi, Wendy Venter

Abstract

Background Non-communicable diseases (NCDs) are major contributors to disease and economic burden in the occupied Palestinian territory. From January 2013, to June 2013, the Palestine Ministry of Health and WHO introduced an evidence-based, cost-effective package called the WHO Package of Essential NCD Interventions (PEN), through a pilot project in 14 primary care clinics in Salfit District, West Bank. After a 6 month pilot, an assessment was done to ascertain patients perceptions of changes in NCD services, and to determine the feasibility of using Participative Ranking Methodology (PRM) to understand perceptions of quality of care in primary care clinics in the occupied Palestinian territory.

Methods PRM includes a qualitative component that allows for in-depth discussions with patients, and a quantitative component that ranks issues identified by participants as important. We completed PRM discussions with two groups of men and two groups of women patients with a NCD, representing 11 of the 14 pilot clinics. Group size varied from eight to 12 participants. Selection of clinics and participants was based on convenience.

Findings All four groups identified positive changes in NCD service delivery since the PEN was introduced. More thorough physical examination by a doctor, more time with the doctor, perceived improvement in prescription of drugs, and better organisation of laboratory tests were all ranked in the top three positive changes by two out of four groups. Regular measurements of blood pressure, waist circumference, and weight taken by nurses, and health education messages provided by nurses to patients as part of the protocol, in addition to shorter waiting times were in the top eight improvements noted by all four groups. Additionally, application of an appointment system was identified as a positive change by three groups. Both male groups appreciated an increased follow-up period between visits, whereas neither group of women mentioned this as a substantial factor. No negative perceptions related to the PEN were expressed.

Interpretation Patients perceived positive changes in the quality of NCD services since the introduction of the PEN. PRM is a relatively rapid and easy to implement method for data collection that has potential for use in understanding patient perceptions' of quality of care.

Funding None.

Contributors

NB completed group discussion, data analysis, and Abstract writing. RD completed group discussion and Abstract revision. WV completed Abstract revision. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Clinical audit to assess quality of service in a newly implemented NCD programme: a cross-sectional survey to review a pilot implementation of the WHO PEN approach in Salfit district, occupied Palestinian territory

Ramez Dweakat, Nadim Barqhouthi, Yaser Bouziyeh, Reem Abu-Hijleh, Asad Ramlawi, Ilhama Shamasnah, Wendy Venter

Abstract

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Correspondence to: Dr Ramez Dweakat, NCD's Department, PHC & Public Health General Directorate, Ministry of Health, Ramallah, West Bank, occupied Palestinian territory dr.ramez.dwekat@gmail.com Background Non-communicable diseases (NCDs) are the leading causes of death and disability in the occupied Palestinian territory. Traditionally, Ministry of Health's (MOH) primary care clinics managed NCDs through a vertical, disease-focused approach. In 2012, the MOH used a new approach, WHO's Package of Essential NCD Interventions (PEN), which integrates comprehensive NCD care into primary care with evidence-based protocols. PEN places the patient at the centre of care, rather than the disease. Patient management is individualised according to the combined effect of various risk factors, rather than treatment of separate diseases. PEN was piloted in Salfit, a rural district in West Bank, occupied Palestinian Territory, from January 2013, to June 2013. During this time, 2200 patients with NCDs were registered in 14 pilot clinics. A comprehensive review of the pilot was undertaken during July, 2013, to September, 2013, to assess the quality of services provided through the new approach.

Methods A clinical audit was implemented by completion of a field-tested questionnaire for every patient's file of a total of 493 files, using computer generated random sample from the total list of 2200 registered patients. Indicators of file completeness and staff adherence to protocols were used to assess quality of services.

Findings The audit showed that staff did generally follow the PEN protocols and adequately completed patient records. However, problem areas were highlighted, notably risk miscalculations (119 of 369 files, 32%); urine testing not regularly done for patients with diabetes mellitus (213 of 227 files, 96%); medical plan for the next scheduled visit not mentioned (or written) in the file (251 of 470 files, 53%); cholesterol testing done too frequently (106 of 471 files, 23%); and, not referring patients to higher levels of care according to the protocol's criteria (14 of 471 cases, 3%). The audit showed that in more than 10% of cases, doctors did not take appropriate clinical actions in the face of clear indications of NCD—eg, failure to address high blood pressure and high blood glucose.

Interpretation If the evidence-based protocols are followed, improvements in quality of care and health outcomes can be expected. The audit identified areas where further training and supervision of staff are needed. Clinical audit is a useful technique to assess the quality of services provided through a newly-implemented programme.

Funding None.

Contributors

RD completed data collection, data analysis, and Abstract writing. NB completed data collection, data analysis, and review of the Abstract. WV completed the Abstract review. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

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Contextualised suffering in the occupied Palestinian territory: a mixed methods study

Brian K Barber, Eyad El Sarraj*, Clea McNeely, Mahmoud Daher, Rita Giacaman, Cairo Arafat, William Barnes, Carolyn S Spellings, Mohammed Abu Mallouh

Abstract

Background Most studies of political conflict rely on imported measures of mental health. We identified and tested a local definition of suffering in the occupied Palestinian territory that we labelled "Feeling Broken or Destroyed".

Methods The construct was identified in group interviews completed in Arabic in 2010, with 68 residents as the total sample size from the West Bank, East Jerusalem, and the Gaza Strip aged 30–40 years. Survey items were then written and given to a representative sample of people (same age group in the same territories) in June 2011 (n=508; study 1), and November 2011 (n=1778; study 2). All data were collected with written consent by the Palestinian Center for Policy and Survey Research, who purposively selected participants to represent key elements of diversity in Palestinian society.

Findings Participants referred in Arabic to a type of suffering not included in standard instruments, which the participants typically associated with economic and political hardships. Descriptions from the participants included being or feeling: broken, crushed (muhattima), destroyed, (mudammira), exhausted, and tired (ta'bāna). Aspects of the participants were described as the self or spirit (an-nafs), morale (al-ma'naūiyyat), and hopes or ambition for the future (amālak aū tamūḥatak ban-nisba lil-mustaqbil). The following survey items were then written in English, translated to Arabic, and back-translated. The survey was administered in Arabic, asking the respondents to rate how often during the past 2 weeks they "felt that your spirit or morale is broken or destroyed?" (Kam murra aḥsast ba'n nasfiyyatak wa ma'naūiyyatak muḥattima?); "felt that your ambitions and hopes for the future are destroyed?" (Kam murra aḥsast ba'n amālak aū tamūḥatak ban-nisba lil-mustaqbil muḥattima?); and "felt emotionally or psychologically exhausted?" (Kam murra aḥsast ba'n amālak aū tamūḥatak ban-nisba lil-mustaqbil muḥattima?); Internal consistency of these items across subgroups in studies 1 and 2 ranged from 0.80 to 0.87. Discriminant validity was evident in that these items factored separately from standard mental health items in principal components analysis. The scale correlated moderately in both data sets with: feelings of depression (study 1: r=0.46; p<0.0001; study 2: r=0.55; p<0.0001) and trauma-related stress (study 1: r=0.21; p<0.001; study 2: r=0.21; p<0.001).

Interpretation Contextualised suffering can be discerned through careful interviewing, and can be efficiently and reliably measured, tested, and quantitatively distinguished from traditional mental health measures.

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Contributors

BB conceived the study. BB and CM designed the study. BB, CM, and CS collected the data. BB, ES, CM, MD, RG, CA, WB, CS, and MA interpreted the data. BB and CM wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Long-term effects of political imprisonment on men in the occupied Palestinian territory: a retrospective cohort study

Clea McNeely, Brian K Barber, Carolyn S Spellings, Robert F Belli, Rita Giacaman, Cairo Arafat, Mahmoud Daher, Eyad El Sarraj*, Mohammed Abu Mallouh

Abstract

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Background Long-term effects of political imprisonment on functioning are unknown. This retrospective study explored the association between economic, political, psychological, physical, community, and family functioning and political imprisonment during a span of 25 years in a population-based sample of Palestinian men aged 32–43 years in the West Bank, East Jerusalem, and the Gaza Strip.
 Methods Event-history calendars and surveys of present level of functioning were given by the Palestinian Center for Policy and Survey Research to a representative sample of 884 men who completed it. Informed consent was obtained

Policy and Survey Research to a representative sample of 884 men who completed it. Informed consent was obtained from all participants. Latent class models were used to identify patterns of imprisonment across 25 years (1987–2011). We compared mean scores of 13 measures of functioning across five latent classes of political imprisonment representing the main trajectories of imprisonment during the 25 years. To assess these 13 measures, we used previously established and validated scales for four measures, whereas others we assessed with scales we had developed and validated ourselves.

Findings The overall response rate was 97%. Of the 884 men who completed the study, 26% (233 men) had been politically imprisoned at some point. Men imprisoned mainly during the first Intifada (1987–93; 87 men) or the Oslo period (1994–99; 78 men) did not significantly differ from men who had never been imprisoned (651 men) with respect to 12 indicators of functioning. Men who had been politically imprisoned reported higher trauma-related stress: during first Intifada mean stress was scored 1.32 (95% CI 1.05-1.58), and Oslo mean of 1.54 (95% CI 1.29-1.80), compared with men not imprisoned mean of 1.04 (95% CI 0.96-1.13; range score of 0-3; p=0.030 and p<0.001, respectively). Men imprisoned during 2006–11 (21 men), reported lower functioning than never-imprisoned men on six measures: work insecurity (mean 2.06 [95% CI 2.31-3.44] *vs* 2.52 [95% CI 2.40-2.65], p=0.017, range 1-5), ability to pay for their children's education (mean 2.88 [95% CI 2.31-3.44] *vs* 3.47 [95% CI 3.35-3.59], p=0.05, range 1-5), community belonging (mean 3.08 [95% CI 2.77-3.38] *vs* 3.42 [95% CI 3.34-3.51], p=0.036, range 1-5), feelings of depression (mean 1.25 [95% CI 1.03-1.47] *vs* 0.96 [95% CI 0.90-1.03], p=0.015, range 0-3), feeling broken or destroyed (a locally defined measure of suffering suggesting that their morale is damaged; mean 3.71 [95% CI 3.27-4.14] *vs* 2.99 [95% CI 2.60-3.38], p=0.035, range 1-5), and functional limitations (mean 2.84 [95% CI 2.39-3.30] *vs* 2.28 [95% CI 2.19-2.38], p=0.015, range 1-5).

Interpretation Findings suggest long-term resilience of these men after political imprisonment. Efforts to support previous political prisoners in the occupied Palestinian territory should provide support to those recently released from political imprisonment to promote long-term recovery.

Funding The Jacobs Foundation, Switzerland.

Contributors

CM did data collection, coding, statistical analyses, and wrote the Abstract. BKB and PI did data collection and edited the Abstract. CSS did data collection and coding. RG, CA, MD, EES, and MAM consulted on item development. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

We express our sincere thanks to the Jacobs Foundation for funding the study and to the participants who gave so much of themselves and their time.

Prevalence and associated factors of post-partum depression in Palestinian mothers: a cross-sectional study

Khubaib Ayoub, Amira Shaheen, Shakoor Hajat

condition has received little attention in Palestinian primary health care. In this study we aimed to determine the prevalence and associated factors of post-partum depression in women in the Nablus district, occupied Palestinian territory.

Abstract Background Post-partum depression is a major concern for public health that can affects the mother and child. This

Methods In a cross-sectional study we recruited mothers aged 18-45 years at 7-12 weeks post partum on a convenient basis from 12 conveniently chosen primary care and Maternal and Child Health (MCH) clinics in the Nablus district in 2013. Participants were interviewed with the Arabic version of the Edinburgh Postnatal Depression Scale (EPDS; cutoff score \geq 10) and other questions related to risk factors. Ethical approval was obtained and informed consent gained from participants.

Findings We enrolled 245 mothers in our study, of whom 235 completed the ten questions of EPDS and were included in the analysis. The mean age of mothers was 26.13 years (SD 5.34). 117 mothers (50%) lived in Nablus city whereas 70 (30%) and 48 (20%) lived in villages and refugee camps near Nablus, respectively. 40 (17%) mothers scored 10 or more on the EPDS, suggesting that they had depression. Results showed that depression during pregnancy (p<0.001), positive history for mental health difficulties (p=0.016), exposure to two or more stressful events during pregnancy (p<0.001), poor satisfaction with marital relationship (p<0.001), with their husband's help and support (p<0.001), with relations with their mother-in-law (p=0.37), and perceived low social support (p<0.001), were strongly associated with post-partum depression. All results were significant at p<0.05. No significant correlations were reported with sociodemographic characteristics (ie, age, education, region of residence, and income), pregnancy-related factors (including obstetrical complications, place and type of birth, and satisfaction about care during birth), and birth factors or newborn factors.

Interpretation Prevalence of post-partum depression is an important health concern affecting Palestinian mothers and is mainly associated with psychosocial stressors during pregnancy. Although further research is needed because of the small sample size and non-random approach used, we highly recommend the integration of post-partum screening into antenatal and postnatal health-care and for additional time to mothers for counselling purposes, in addition to the medical services offered.

Funding An-Najah National University.

Contributors

KA, AS, and SH conceived and designed the study. KA collected data. KA and SH interpreted the data. KA wrote the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests

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The effect of a husband's history of political imprisonment on intimate partner violence: evidence from the occupied Palestinian territory using propensity score matching

Marwan Khawaja

Abstract

Background Little is known about the direct effect of political imprisonment on men's subsequent violent behaviour within the family. Availability of these recent survey data about intimate partner violence and measures of men's detention in prison and their associated physical and emotional torture provides a unique opportunity to assess the causal association between these two factors. We aimed to examine the effect of political imprisonment on intimate partner violence, using data from the 2011 Palestinian domestic violence survey, which included the West Bank and Gaza Strip.

Methods The study was based on data from a 2011 cross-sectional survey of a representative sample of 4413 married Palestinian women. A total of 3988 women were included in the matching analysis, of which 640 women had husbands who had been detained. The outcome variable was the women's exposure to partner physical violence during the past year. The treatment effect was whether a husband had been detained before 2010. We used propensity score matching and propensity-based weighted regression models to assess the effect of a whether a husband had a history of detention on intimate partner violence. Score matching was undertaken with the variables of age, education, region, type of residence, refugee status, residential crowding, labour force participation, poverty, financial stress, decision making index, and husband control index.

Findings Severe physical intimate partner violence during the past year was reported by 455 (11%) women and sexual violence by 439 (11%) women. 640 (16%) women reported that their husbands were detained before 2010. Analysis of model-based estimates and average treatment effect showed a positive effect of a husbands who had been detained on their physical violence (mean treatment effect 0.036, 95% CI 0.008 to 0.62), but not with sexual violence (mean treatment effect 0.040 to 0.11) towards their partner.

Interpretation The results are important for the design of specific interventions that might mitigate the negative effect of a husband's detention on their wives's lives. A potential confounder is that Palestinian men who are more likely to be imprisoned (eg, active in demonstrations) might also be more likely to commit intimate partner violence. An important implication is the need to consider rehabilitation services or counselling for previous detainees in this context.

Funding None.

Contributors

MK conceived and designed the study, gathered and interpreted the data, and wrote the Abstract, and approved the final version for publication.

Declaration of interests

I declare no competing interests.

Acknowledgments

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Distribution and factors associated with the occurrence of road traffic collisions in the West Bank: a cross-sectional study

Amira Shaheen, Mohammed Awada, Omar Abu-Zaydehb, Jon M Hirshon

Abstract

Background Road traffic collisions are of major concern to public health, particularly in low-income and middleincome countries. Despite increases in number of casualties from road traffic collisions in the West Bank, little attention has been devoted to its research. The aim of this study was to investigate the distribution and associated factors related to road traffic collisions in the West Bank in a 3 year period.

Methods This cross-sectional study included all causalities from road traffic collisions that reported to the Palestinian Ministry of Health (PMoH). Information sheets for casualities from road traffic collisions are expected to be completed by doctors in West Bank hospitals providing clinical care. Once a week, this information is transferred from hospitals to the road traffic collisions unit at the PMOH. With SPSS version 16, we checked data completeness and quality before analysis. Ethical approval was obtained from the An Najah National University and permission for data use was obtained from the PMOH for this study.

Findings From Sept 1, 2009 to Sept 30, 2012, 24756 casualties from road traffic collisions were reported to the PMOH, including 134 deaths. Injures were mainly in men (18413 casualties, $74 \cdot 4\%$; p=0.064) and among the age group of 18–45 years (12939 casualties, $52 \cdot 3\%$; p=0.027). The north West Bank was reported to have the highest percentage of road traffic collisions with 11980 (48.4%; p<0.0001) during 2009–12. The number of casualties varied by month; highest numbers were in September (2737, 11.1%), August (2528, 10.2%), and July (2483, 10.0%) compared to other months in the study (p=0.01), and seemed to be related to Ramadan. Passengers travelling in a vehicle with four wheels accounted for the highest proportion of injuries (11078 [44.8%]), significantly more than drivers of vehicles with four wheels, drivers or passengers of vehicles with two or three wheels, or pedestrians (combined, p<0.0001). Head injury was the most frequent cause of death among causalities, resulting in 52 deaths (39%; upper part *vs* lower part of the body, head *vs* lower part of the body, upper *vs* lower part of the body, head *vs* lower part of the body, upper *vs* lower part of the body, head *vs* lower part of the body.

Interpretation Our results suggest a high burden of injuries in the West Bank from road traffic collisions. Limitations of these public health data included lack of information about seat belt use and mode of transportation (including only pedestrian, occupant, and driver (to include only choices of pedestrian, occupant [of vehicle], and driver). We recommend changes to the present method to better assess for factors and activities associated with injuries from road traffic collisions to improve future public health policies and regulations. Furthermore, we recommend connection of the two present reporting systems (Palestinian police and the PMOH) to obtain a more precise understanding of the situation of road traffic collisions in the West Bank.

Funding Partial funding from An-Najah National University.

Contributors

All authors participated in the design, data gathering and interpretation, and writing of the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Effect of the Lebanese nationality law on the experiences of Lebanese women married to Palestinian men: a qualitative study

Nadine Abdallah, Rouba El Hawarneh, Sawsan Abdulrahim

Abstract

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Background Citizenship provides identity and ensures rights to its holders. In Lebanon, the issue of citizenship and civil rights of Palestinian refugees has long been a controversial topic. Lebanese Nationality Law enforces the concept of sex exclusion in which Lebanese women are denied the right to pass their citizenship to their husbands and children. We studied the effects of the Lebanese Nationality Law on the experiences of sex discrimination and on day to day life of Lebanese women married to Palestinian men, particularly in access to health care for their children.

Methods After approval was obtained from the Institutional Review Board (IRB) at the American University of Beirut (Beirut, Lebanon), we undertook indepth interviews with 12 Lebanese women married to Palestinian men and residing in Lebanon. We tape-recorded and transcribed the interviews and analysed the data by open and thematic coding.

Findings Our analysis showed five main themes. First, is Lebanese identity: rights versus citizenship; second is suffering; third is disruption of sex roles; fourth is strength and perseverance; and fifth, is seeking services (eg, social and health care). The women in our study are discrimined against on various levels, to the extent that they no longer feel like Lebanese citizens. Restricted access for their husbands and children to education and employment opportunities creates a severe economic affect. In seeking health care for their children and husbands, women often had to rely on the services of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), which are insufficient for their needs, whereas a Lebanese citizen could rely on support by the National Social Security Fund.

Interpretation The effects of the Lebanese Nationality Law are harmful in the case of Lebanese women married to Palestinian men, because of the institutionalised discrimination against the Palestinian refugee population. The results of this study provide a glimpse into some of the daily struggles of Lebanese women married to Palestinian men. This nationality law has caused many women to lose their sense of identity to feel like foreigners in their own country and struggle to provide basic needs for their families that are granted to holders of a Lebanese citizenship.

Funding None.

Contributors

NA and REH provided equal contributions in this research study, more specifically to the design of the study, data analysis, and write-up of the Abstract. SA supervised the research project on which the Abstract is based. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

NA and REI-H thank SA for her support and guidance throughout all phases of this research study. We especially thank the courageous women who welcomed us into their lives and agreed to share their personal stories with us, in addition to the dedicated members of The Collective for Research and Training on Development-Action (CRTD.A) and the Nationality campaign in Lebanon (Jinsiyati) for their support.

Client-centredness of government primary health-care services in the Gaza Strip, occupied Palestinian territory: a cross-sectional study

Huda H Anan, Bassam A Hamad

Abstract

Background Client-centred services respond to clients' needs and involve them in the provision of health-care services to achieve improved health outcomes. We aimed to assess the extent to which governmental primary health-care services in the Gaza Strip are client-centred, from the clients' perspectives.

Methods Five themes representative of clients' centredness were identified: accessibility, delivery of health-care services, involvement, clients, and clinics characteristics variables (included the clinic level (levels 2–4) according to the Palestinian Ministry Of Health's classification of clinics according to the number of staff, type of services provided, and other factors; location in the Gaza Strip [north, Gaza, middle area, Khanyounis, Rafah]; availability of a community committee which holds meetings once per year between the community and the clinic staff). Every theme has subthemes and related items. A self-administered questionnaire was developed by the author, and reviewed by ten experts. The study questionnaire showed high internal consistency (α =0·9). Through exit interviews, randomly selected clients completed the study questionnaire between Oct 1, 2010, and Dec 30, 2010. We used SPSS (version 13). The questions had its scores that were compared and analysed (eg, if one question has three answers: yes [score of 2], intermediate [score of 1], or no [score of 0]).

Findings We invited 300 clients to participate (response rate 91%). Clients' perspectives were positive regarding most of the accessibility subthemes except the accessibility to drugs; 35% (88 of 252) of clients reported shortages of drugs at the clinics. For the service delivery theme, the subthemes of waiting time (71.2% [195 of 274]), contact time (70.9% [188 of 264]), and quality of basic amenities were perceived positively by the clients (80.17%; in which 100% was the best score). Only 35% (70 of 273) of clients reported involvement in planning their own treatment plans. About 67% (181 of 269) of clients reported that the availability of drugs was the main factor to show the perceived quality of care of a health facility, followed by respect from the health provider personnel (46%, 125 clients). Further analysis was done to compare the overall scores of selected subthemes that illustrate the clients-centredness' of services (ie, choice, respect, communication, and involvement in planning) between clinics' characteristic variables. Significant differences in scores were reported between level 4 and level 2 or 3 clinics (choice, p=0.015, communication, p=0.029), and clinics that did frequent meetings with community members and clinics that not (respect, communication, and involvement in planning p=0.01).

Interpretation Increased involvement of beneficiaries in the delivery of health care promotes clients' centredness. Promotion of interactions between health-care providers and clients, increasing confidentiality and privacy, and ensuring the availability of essential drugs all positively affect clients' perspectives about health services. A limitation of our study is that it did not include the clients who did not present to the identified clinics, who might have different perspectives than the included clients

Funding None.

Contributors

HHA did the literature review, initial design of study questionnaire, data collection with the support of two data collectors, data entry, and preliminary data analysis. All authors were responsible for the study design, interpretation of results, and writing and editing the Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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Mothering within the context of political violence: an exploratory qualitative study of mental health risks and resilience

Cindy Sousa, Mona El-Zuhairi

Abstract

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Correspondence to: Dr Cindy Sousa, Bryn Mawr College, Graduate School of Social Work and Social Research, 300 Airdale Road, Bryn Mawr, PA 19010-1697, USA csousa@brynmawr.edu Background Modern strategies of political violence increasingly rely on the erosion of previously held boundaries between a war-front and a home-front. As political violence intrudes into civilian spaces, families encounter home invasions and demolitions; impediments on movement; and surveillance, detainment, and humiliation. Because of the use of these type of tactics, political violence jeopardises the protective role of parents when it is most needed. Yet, despite a few studies associating the inability to safeguard their children to parents' profound distress, insufficient knowledge exists of how, within political violence, parents encounter unique threats to well being and strategise for individual and family resilience. In this pilot study we aimed to expand knowledge about mental health and the family within political violence through exploring mothers' experiences during this type of conflict.

Methods In 2008, a collaborative team undertook five focus groups in Arabic with a total of 32 Palestinian women. Respondents were chosen from general health, children's clinics, and eye-care clinics in the West Bank. Verbal informed consent was obtained from all participants. Translation included multiple stages; using two translations, the research team jointly resolved any discrepancies and arrived at a final agreed translation. Researchers analysed data with conventional content analysis, initially coding line-by-line and then constructing thematic network displays to connect codes and create larger themes.

Findings Women reported routine threats to their abilities to protect and care for their children within political violence, because of economic turmoil; shootings and arrests; home invasions and demolitions; and restrictions on movement that prevent mothers from helping children obtain health care, continue education, and visit important cultural sites. Women described a sense of helplessness and grief in the face of their children's fear and distress as mothers struggled to simultaneously shield children from and help them make sense of suffering. Women's narratives also detailed regular attempts at resistance, small and large, wherein mothers strategised to ensure the safety and dignity of themselves, their family, and their culture.

Interpretation Results illustrate particular ways that, within conflicts, mothers both suffer and promote individual and collective resilience. Results from this pilot study suggest a framework to analyse future qualitative and quantitative research on this topic, and facilitate continued investigations into health and family within political violence.

Funding The National Institute of Mental Health (grant T32MH20010).

Contributors

CS initiated the study. ME-Z facilitated the focus groups and provided the first translation of the data. CS was the lead data analyst and writer. CS and ME-Z agreed jointly on the final interpretation of data and the final Abstract. All authors approved the final version of the Abstract for publication.

Declaration of interests We declare no competing interests.

Acknowledgments

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The effect of son preference on Palestinian fertility

Weeam Hammoudeh

Abstract

Background Palestinian fertility has been termed as a demographic puzzle because of the persistence in high fertility even with favourable levels of women's education and urbanisation, and access to contraception and low infant mortality, compared with other Arab countries. Anecdotal evidence shows that the desire to have at least one son drives women to continue to have children even if they have reached their desired number of children. This study aimed to understand the role of son preference and sex distribution of children have on adults' fertility behaviour in the occupied Palestinian territory.

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Methods This study used data from the birth history calendar in the 2006 Palestinian Family Health survey for married women between the ages of 15 and 54 years with at least one child. Event-history analysis techniques were used to assess if preference for a son and sex distribution of children had an effect on the probability of a subsequent birth. We tested whether women who have more sons at any given parity level (between 1 and 5 births) effected the probability of having a subsequent birth.

Findings The sample included 8926 women with a total of 35285 births. After controlling for sociodemographic characteristics, women with more sons were less likely to move on to a subsequent birth at all parity levels. In women with one daughter, the hazard ratio (HR) of subsequent birth was 1.16 (p<0.001) compared with women who had one son (at parity one). In women with three children, women with all daughters had a 22.6% increased likelihood of subsequent birth compared with women with three sons (HR 1.23, p<0.001). Women with two daughters and one son were 14.8% more likely to have a subsequent birth (HR 1.15, p<0.001). Women residing in the West Bank were consistently less likely to have a subsequent birth than were women in the Gaza Strip across all parities (at parity three, HR 0.75, p<0.001; at parity five, HR 0.71, p<0.001).

Interpretation Even in the context of high fertility and a quite common sex ratio at birth in the occupied Palestinian territory, the sex of children seems to affect individual fertility behaviour, with women without sons or few sons increasingly likely to have subsequent children.

Funding Population Studies and Training Center, Brown University.

Contributors

I did the analysis, interpreted the results, and wrote the Abstract. I approved the final version of the Abstact for publication.

Declaration of interests

I declare no competing interests.

Individual and socioeconomic disparities in health-seeking behaviours and out-of-pocket payments in the Gaza Strip in 2013: results from a household survey

Majdi Ashour

Abstract

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Background Different population groups in the Gaza Strip, occupied Palestinian territory, use the services of a pluralistic health system and spend part of their income on health. Nonetheless, little is known about disparities between different populations in seeking and paying for health care.

Methods A random sample of 760 households with 5192 people in July, 2013, in the Gaza Strip, occupied Palestinian territory, were interviewed using a structured questionnaire to inquire about health-seeking behaviour and the out-ofpocket payments. The data were collected over 1 week, and respondents were asked about their use of services with different recall periods. Expenditure was annualised to calculate catastrophic health expenditure as a proportion of income (defined as spending 20% or more of household income on health). χ² tests were done to compare differences between grouped variables. Statistical Package for Social Sciences (SPSS) version 20.0 was used for statistical analyses.

Findings Catastrophic health expenditure occurred less in households with refugee status (132 [25 · 1%] of 526) than in those without refugee status (77 [32.9%] of 234); this yielded to a relative risk (RR) of 0.76 (95% CI 0.60-0.96, p=0.026). The occurrence of catastrophic health expenditure in households which live inside refugee camps was less than households which live outside the refugee camps (43 [20.4%] of 209 living inside vs 168 [30.2%] of 551 living outside; RR 0.67, 95% CI 0.50–0.91, p=0.006]). Catastrophic health expenditure occurred in 138 (33.2%) of 416 households that have at least one person with a chronic non-communicable disease, and in 71 (20.6%) of 344 households with no individual with a chronic non-communicable disease (RR 1.61, 95% CI 1.25-2.06). The occurrence of catastrophic health expenditure in the households with the lowest two income quintiles was greater than households with higher income; 129 (35.5%) of 363 households in the lowest-income quintiles compared with 80 (20.15%) of 397 households in other income quintiles (RR 1.76, 95% CI 1.39-2.24; both p=0.0001). People reported having good access to health services, and preferred free-of-charge services and those offered at nominal users fees for medicines and diagnostic tests. 15 (12.3%) of 122 consultations of people who were acutely ill and from the lowest-income quintile were provided by private for profit providers, compared with 72 (28.9%) of 249 consultations from other income quintiles; relative risk of using private providers for the lowest-income quantile was 0.43 (95% CI 0.25-0.71, p=0.0088. However, a proportion of health services users sought the care of second health providers, mostly private, in addition to initially chosen ones, although this proportion did not differ among income quintiles.

Interpretation Refugees who were offered free of charge primary health care services were had reduced health expenditures. People in poor households avoided using costly health services; however, they spent a higher proportion of their income on health than those wealthier households. The findings suggest that maintaining health services offered free of charge or on a low-cost basis and improving their quality and responsiveness might decrease financial burden of ill health on the poor in the Gaza Strip.

Funding World Health Organization.

Contributors

I conceived and designed the study, analysed the data, interpreted the data, and wrote the Abstract.

Declaration of interests

I declare no competing interests.

Acknowledgments

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Retinopathy among patients with diabetes in Ramallah Governorate: a clinic-based study

Nahed Mikki, Rula Ghandour, Margareta Norberg, Lars Jerden, Hans Stenlund, Sawsan Imseeh, Abdullatif Husseini

Abstract

Background In 2010, diabetes mellitus was the fourth cause of death in West Bank, causing 9% of deaths. Few reliable data on diabetes complications exist. We aimed to estimate prevalence of diabetic retinopathy and determinants in a clinic-based sample in Ramallah Governorate, West Bank.

Methods The study was done in 11 clinics (four United Nations Relief and Works Agency [UNRWA], five Ministry of Health, two joint Ministry of Health and non-governmental organizations). It was approved by ethics committee at Institute of Community and Public Health (Birzeit University), Ministry of Health, and UNRWA and oral witnessed consent was obtained from patients. Patients with type 2 diabetes older than 25 years were identified in clinics or from clinic databases and were invited to participate in a slit lamp eye exam by a licensed ophthalmologist. Questionnaire, physical examination, and lab tests (glycated haemoglobin [Hb_{Atc}], lipid profile) were done. We classified retinopathy using International Clinical Diabetic Retinopathy Disease Severity Scale. Data were collected between Feb 28, 2012, and June 7, 2012, and analysed using the statistical package for social sciences (SPSS) version 22.

Findings Most eligible patients (517) consented to participate and were referred for eye exam; 376 (73%) underwent eye exam (127 men and 249 women). Mean age was 57.8 years (SD 9.0) and mean duration of diabetes was 8.9 years (SD 7.0). Only 21% (77) of patients had controlled diabetes (Hb_{Atc}<7%) and 37% (138) had never had an eye exam. The prevalence of retinopathy was 37% (138 patients, 52 [41%] men and 86 [35%] women). 26% (98) had mild-to-moderate non-proliferative retinopathy, 3% (11) had severe non-proliferative retinopathy, and 8% (29) had proliferative retinopathy. Multivariate regression showed that Hb_{Atc}, diabetes duration, and systolic blood pressure were associated with retinopathy (p<0.001). Patients with uncontrolled diabetes (Hb_{Atc} >7%) were four times more likely to have retinopathy compared with patients with controlled disease (odds ratio [OR] 4.16, 95% CI 1.76-9.85). Patients with diabetes duration more than 7 years were eight times more likely to have retinopathy than were patients whose diabetes duration was 7 years or less (OR 7.7, 95% CI 4.30-13.79). There was a 2% increase in risk of retinopathy per 1 mm Hg increase in systolic blood pressure (OR 1.02, 95% CI 1.01-1.04).

Interpretation A third of patients with diabetes had retinopathy. Early regular screening might help early diagnosis and control of diabetic retinopathy, especially among high-risk patients (ie, those with uncontrolled diabetes, high systolic blood pressure, and long diabetes duration).

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Contributors

NM, AH, RG, LJ, MN, and SI contributed to study design and developing the tools. RG, NM, and HS did the data analysis. All authors approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

Acknowledgments

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Evidence-based health care in the occupied Palestinian territory: findings from a conference-based preparatory workshop

Khamis Elessi, Omar Ferwana, Fadel Naim

Abstract

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Background The principles of evidence-based health-care (EBHC) are not widely appreciated in the occupied Palestinian territory. During the past 5 years, interest in EBHC in Gaza has been generated through a series of lectures and workshops run by the EBHC Unit in Gaza. To further promulgate the principles of EBHC in the occupied Palestinian territory and to raise awareness of differences between local practice and best evidence, a 2 day conference was organised in October 2013. In this study our objectives were to promote the principles of EBHC and to improve clinical practice in 15 specific areas of clinical practice.

Methods Five subcommittees were established 6 months before the conference that addressed general surgery, medicine, paediatrics, obstetrics, and orthopaedics and neurosurgery. Each subcommittee comprised a senior and a junior specialist and was given 5 months to identify the three most common medical and surgical conditions reported in their areas of specialty, to survey the actual and present practice in the management of these conditions in the most senior and heads of major hospitals, to search for the best available evidence relevant to management of these conditions using the latest evidence-based resources, and to prepare presentations comparing present practice with best evidence practice. A preparatory workshop was held for members of subcommittees to train them on how to search for strategies with best evidence.

Findings About 500 physicians and health workers attended all sessions of this EBHC conference. All subcommittees adhered to the timetable and presented their final findings. Only five of 15 (25%) of reviewed local practice themes (ie, acute bronchiolitis, mechanical bowel preparation, endoscopic retrograde cholandiopancreatography procedures, and management of traumatic brain injury and emergency department and premature rupture of membranes were consistent with best evidence. For the remaining ten local practices (of meningitis, steroid therapy for spinal cord injuries, gastroenteritis, upper gastrointestinal bleeding, osteoarthritis, post-partum haemorrhage, obstructed labour, sepsis, hernia repair, and deep-vein thrombosis) the review showed that most local practices (75%) were not in line with best available evidence.

Interpretation The conference was able to raise awareness of EBHC among about 500 physicians and health workers. The conference also showed gaps between practice in Gaza and best evidence in most of the themes selected. The conference succeeded in showing attendees how local practice could be improved by applying best available and reliable evidence.

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Contributors

KE trained subcommittees members on EBM, wrote up and revised the Abstract. OF reviewed and revised the Abstract. FN reviewed and revised the Abstract

Declaration of interests

We declare no competing interests.

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Neonatal mortality trends at Al-Nasser paediatric hospital in Gaza, occupied Palestinian territory: a retrospective analysis of hospital records

Nabil Al-Barqouni, Sherin N Abed

Abstract

Background Neonatal mortality accounts for nearly 60% of infant mortality, with this percentage slowly decreasing in developing countries. The aim of this study was to describe the pattern of neonatal mortality rates among neonates who were admitted to the neonatal intensive care unit (NICU) in Al-Nasser Paediatric Hospital (NPH) during a span of 2 years.

Methods This was a retrospective descriptive study that included 2 years of data (from January 2011 to December 2012) of all neonatal admissions and deaths in the NICU in NPH collected from the medical records. Neonatal mortality rates in 2011 and 2012 were analysed, using R software (version 3.1.0).

Findings The total number of neonatal admissions to hospital were 1541; 1915 during 2011 and 2012, respectively. 57 and 28 infants died during the each year. The total neonatal mortality rate (NMR) in 2011 (0.037 per 1000 admissions) was significantly higher than NMR in 2012 (0.0146 per 1000 admissions), with the difference being 0.0224 per 1000 admissions (95% CI 0.0114-0.0334, p<0.0001). The most common causes of neonatal deaths were prematurity and its complications followed by congenital anomalies.

Interpretation Neonatal mortality in NPH in 2012 was reduced compared with 2011. Whether this reduction was due to renovation of the NICU, equipment improvement, new medical supplies, or improvement in data quality and registration system, or mostly due to human resources training for implementation of neonatal guidelines, is unclear. These findings would not necessarily represent overall changes in NMR between the 2 years since our data are only representative for neonates admitted to the NPH NICU. Further research about other NICUs in Gaza is warranted and could be easily undertaken when the registration systems in Palestinian paediatric hospitals are computerised, unified, and linked. This new system will be the first step to design and develop Gaza Neonatal Network to establish easy communication between NICU in other hospitals and to solve problems, consultation, and finally to estimate causes of NMR.

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Contributors

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Declaration of interests

We declare no competing interests.

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Perceptions of violence among young people in the West Bank: a qualitative investigation

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Abstract

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Background In the scientific literature, violence in Palestinian young people seems to be interrelated with complex factors including the continuous political violence, economic hardship, and mounting stress. This qualitative study was done to provide primary data on the different types of violence and factors contributing to violence that affect young people in the West Bank and East Jerusalem.

Methods Ten focus groups and 17 in-depth interviews were undertaken in young people aged 16-24 years, with a total of 83 participants (42 men and 41 women), who had a mean age of 20 years. Purposive sampling was used to include young men and women (aged 16-24 years) from urban, rural, and refugee camps located in the north, middle, and south of the West Bank. Qualitative analysis was done using NVIVO version 9.

Findings Several participants perceived that violence is widespread with nine focus groups and seven people interviewed mentioning physical violence of some type. Additionally, six focus groups and six interviewees mentioned verbal or emotional harassment and violence, ten focus groups and three interviewees described sexual abuse, harassment, or rape. Girls mentioned that sexual harassment mostly happened in streets, taxis, at work, schools, and universities. The most common explanatory models used by youth respondents to account for violence were: individual predisposition (in seven focus groups, two interviewees), family disintegration and dysfunction (seven focus groups, 49 interviewees; mostly related to domestic violence), stress from the "Israeli occupation" (seven focus groups, 49 interviewees), and Palestinian cultural norms that might lead to the oppression of women (five focus groups, one interviewee) that is mostly associated with harassment and sexual assault.

Interpretation Violence among young people in the occupied Palestinian territory seems to be a complex manifestation of several political, economical, cultural, and sex factors, and is far from limited to violence directly associated with "Israeli occupation". The extent and diversity of violence need further study to help to estimate the prevalence of risky behaviours and design relevant policies and programmes.

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