Litteratursøk Helsestasjons- og skolehelse-tjenesten

Rapport fra Kunnskapssenteret nr 10 –2009
Litteratursøk med sortering

kunnskapssenteret

Bakgrunn: Kunnskapssenteret fikk den 21. januar 2009 en muntlig henvendelse fra avdeling kommunale tjenester i Helsedirektoratet. Vi ble spurt om vi kunne utføre et litteratursøk etter forskning om effekten av ulike tiltak innen skole- og helsestasjonsvirksomheten. **Metode:** Vi søkte etter systematiske oversikter i databasene Ovid MEDLINE, Ovid EMBASE, Cochrane Library of Systematic Reviews, DARE og HTA. Søket inneholdt termer for helsesøster/helsestasjon/skolehelsetjeneste kombinert med termer for barn/foreldre. I MEDLINE og EMBASE ble søket avgrenset med søkefilter for systematiske oversikter. I tillegg til søket i databasene gjennomgikk vi Kunnskapssenterets publikasjonsliste for relevante publikasjoner. **Resultat:** Søket ga 256 treff totalt, etter duplikatsjekk. 124 referanser ble ekskludert og 132 referanser var mulig relevante. Vi fant i tillegg 14 rapporter fra Kunnskapssenteret.

Nasjonalt kunnskapssenter for helsetjenesten
Postboks 7004, St. Olavsplass
N-0130 Oslo
(+47) 23 25 50 00
www.kunnskapssenteret.no
Rapport: ISBN 978-82-8121-269-5 ISSN 1890-1298

nr 10–2009

kunnskapssenteret

Tittel	Litteratursøk helsestasjons- og skolehelsetjenesten
Institusjon	Nasjonalt kunnskapssenter for helsetjenesten
Forfattere	Liv Merete Reinar**,** Ingvild Kirkehei
ISBN	978-82-8121-269-5
ISSN	1890-1298
Rapport	Kunnskapssenterets rapportserie nr. 10
Rapporttype	Litteratursøk med sortering
Antall sider	56
Oppdragsgiver	Helsedirektoratet
Sitering	Reinar LM, Kirkehei I. Litteratursøk helsestasjons- og skolehelsetjenesten. Oslo: Nasjonalt kunnskapssenter for helsestjenesten, 2009. Kunnskapssenterets rapportserie nr. 10.

Nasjonalt kunnskapssenter for helsetjenesten fremskaffer og formidler kunnskap om effekt av metoder, virkemidler og tiltak og om kvalitet innen alle deler av helsetjenesten. Målet er å bidra til gode beslutninger slik at brukerne får best mulig helsetjenester. Senteret er formelt et forvaltningsorgan under Helsedirektoratet, uten myndighetsfunksjoner. Kunnskapssenteret kan ikke instrueres i faglige spørsmål.

Nasjonalt kunnskapssenter for helsetjenesten
Oslo, 06.05.2009

Forord

Kunnskapssenteret fikk den 21. januar 2009 en muntlig henvendelse fra avdeling kommunale tjenester i Helsedirektoratet. Vi ble spurt om vi kunne utføre et litteratursøk etter forskning om effekten av ulike tiltak innen skole- og helsestasjonsvirksomheten. Vi oversendte litteratursøket til bestiller 23. januar 2009.

Når vi bruker forskning som beslutningsgrunnlag, bør vi ta utgangspunkt i tilgjengelig forskning av høyest mulig kvalitet. Studiedesign, utførelse og analyser påvirker vår tillit til studienes resultat. I dette litteratursøket har vi ikke lest artiklene i fulltekst eller vurdert den metodiske kvaliteten av dem. I vedlegg til Kunnskapssenterets håndbok "Slik oppsummerer vi forskning" finnes det sjekklister som kan brukes til å vurdere kvaliteten av ulike typer studier. Sjekklistene kan være gode hjelpemidler i det videre arbeidet med å ta stilling til forskningens verdi, gyldighet og overførbarhet. Håndboken er tilgjengelig på www.kunnskapssenteret.no/Verktoy/2139.cms.

Gro Jamtvedt	Liv Merete Reinar	Ingvild Kirkehei
Avdelingsdirektør	*Forskningsleder*	*Forskningsbibliotekar*

Metode

LITTERATURSØK

Vi søkte etter systematiske oversikter i databasene Ovid MEDLINE, Ovid EMBASE, Cochrane Library of Systematic Reviews, DARE og HTA. Søket inneholdt termer for *helsesøster/helsestasjon/skolehelsetjeneste* kombinert med termer for *barn/foreldre*. I MEDLINE og EMBASE ble søket avgrenset med søkefilter for systematiske oversikter. Detaljert søkestrategi er gjengitt i vedlegg 1.

I tillegg til søket i databasene gjennomgikk vi Kunnskapssenterets publikasjonsliste for relevante publikasjoner (http://www.kunnskapssenteret.no/Publikasjoner?reportsandnotes=1&count=1000).

UTVELGELSE OG SORTERING

Etter en gjennomgang av titler og sammendrag, laget vi en liste over mulig relevante referanser med titler og evt. sammendrag gruppert etter følgende temaer: helsesøster, hjemmebesøk, kosthold, fysisk aktivitet, overvekt, spiseforstyrrelser, foreldreveiledning, tidlig intervensjon, barselgrupper, barnehage/førskole, skader/ulykker (forebygging), screening, ungdomshelse, skolehelsetjenesten, forebygge mishandling, selvmordsforebygging og sosial ulikhet.

Resultat

Søket ga 256 treff totalt, etter duplikatsjekk. 124 referanser ble ekskludert og 132 referanser var mulig relevante. Vi fant i tillegg 14 rapporter fra Kunnskapssenteret. Referansene ble fordelt på de ulike kategoriene som vist i tabell 1.

Tabell 1 Referanser fordelt på kategorier

	Referanser	Se side
Helsesøster	2	6
Hjemmebesøk	20	6
Kosthold	10	13
Fysisk aktivitet	4	16
Overvekt	7	18
Spiseforstyrrelser	2	20
Foreldreveiledning	7	21
Tidlig intervensjon	6	24
Barselgrupper	1	26
Barnehagen/førskolen	3	26
Skader/ulykker (forebygging)	2	27
Screening	15	28
Ungdomshelse	18	33
Skolehelsetjenesten	30	39
Forebygge mishandling	10	47
Selvmordsforebygging	4	52
Sosial ulikhet	4	52

HELSESØSTER

1. **Briss PA, Rodewald LE, Hinman AR, Shefer AM, Strikas RA, Bernier RR, et al. Reviews of evidence regarding interventions to improve vaccination coverage in children, adolescents, and adults. Am J Prev Med 2000;18(1 Suppl.):97-140.**
   Abstract**:** This paper presents the results of systematic reviews of the effectiveness, applicability, other effects, economic impact, and barriers to use of selected population-based interventions intended to improve vaccination coverage. The related systematic reviews are linked by a common conceptual approach. These reviews form the basis for recommendations by the Task Force on Community Preventive Services (the Task Force) regarding the use of these selected interventions. The Task Force recommendations are presented on pp. 92-96 of this issue.

2. **Hawksley B, Carnwell R, Callwood I. A literature review of the public health roles of health visitors and school nurses. Br J Community Nurs 2003;8(10):447-54.**
   Abstract: This paper describes a two-stage review relating to the family-centred public health role of health visitors and the child-centred public health role of school nurses. During the first stage, literature was searched using CINAHL and Medline databases and two models were used to frame the literature analysis. The findings of this analysis were, however, disappointing. Although many policy documents advocate development of the family-centred public health role of health visitors and the child-centred public health role of school nurses, there was no overwhelming evidence of reports of these approaches in health visiting and school nursing practice. The second stage of the review comprised a content analysis of West Midlands community trusts' strategic development plans. Seventeen plans were analysed. Of these, only two were 'formal' plans, the remainder being fragmented documentation related to plans for the development of health visiting and school nursing services. It may be concluded from the analysis that NHS trusts are beginning to adopt ideas from the rhetoric of national policy documents. Additionally, public health practice initiatives form an integrated part of most of the trust strategic development plans that the researchers examined.

HJEMMEBESØK

1. **Bennett C, Macdonald G, Dennis JA, Coren E, Patterson J, Astin M, et al. Home-based support for disadvantaged adult mothers. Cochrane Database of Systematic Reviews 2008 Issue 1. Art. No.: CD003759. DOI: 10.1002/14651858.CD003759.pub3.**
   Abstract: BACKGROUND: Babies born to socio-economically disadvantaged mothers are at higher risk of a range of problems in infancy. Home visiting programs are thought to improve outcomes, both for mothers and children, largely through advice and support. OBJECTIVES: To assess the effectiveness of home visiting programmes for women who have recently given birth and who are socially or economically disadvantaged. SEARCH STRATEGY: We searched the following electronic databases: The Cochrane Central Register of Controlled Trials (CENTRAL) (Issue 3, 2006); MEDLINE (1966 to March 2006); EMBASE (1980 to 2006 week 12); CINAHL (1982 to March week 4 2006); PsycINFO (1872 to March week 4 2006); ASSIA (1987 to March 2006); LILACS (1982 to March 2006); and Sociological Abstracts(1963 to March 2006). We searched grey literature using ZETOC (1993 to March 2006); Dissertation Abstracts International (late 1960s to 2006); and SIGLE (1980 to March 2006). We also undertook communication with published authors about ongoing or unpublished research. SELECTION CRITERIA: Included studies were randomised controlled trials investigating the efficacy of home visiting directed at disadvantaged adult mothers. DATA COLLECTION AND ANALYSIS: Two reviewers (EC and JP or CB) independently assessed titles and abstracts identified in the search for eligibility. Data were extracted and entered into RevMan (EC, JP and CB), synthesised and presented in both written and graphical form (forest plots). Outcomes included in this review were established at the protocol stage by an international steering group. The review does not report on all outcomes reported in included studies. MAIN RESULTS: We included 11 studies with 4751 participants in this review. Data show no statistically significant differences for those receiving home visiting, either for maternal outcomes (maternal depression, anxiety, the stress associated with parenting, parenting skills, child abuse risk or potential or breastfeeding) or child outcomes (preventive health care visits, psychosocial health, language development, behaviour problems or accidental injuries. Evidence about uptake of immunisations is mixed, and the data on child maltreatment difficult to interpret. AUTHORS' CONCLUSIONS: This review suggests that for disadvantaged adult women and their children, there is currently no evidence to support the adoption of home visiting as a means of improving maternal psychosocial health, parenting or outcomes for children. For reasons

discussed in the review, this does not amount to a conclusion that home visiting programmes are ineffective, but indicates a need to think carefully about the problems that home visiting might influence, and improvements in the conduct of outcome studies in this area. HOME VISITING FOR DISADVANTAGED ADULT MOTHERS: Babies born to socio-economically disadvantaged mothers are at higher risk of a range of problems in infancy. Home visiting refers to a wide variety of interventions, delivered in a variety of ways, within different policy contexts and targeted at different populations, with advice and support usually included. Programmes may be provided by professionals (usually nurses) or para-professionals. This review aimed to assess the effectiveness of home visiting programmes as a means of improving outcomes for socio-economically disadvantaged adult mothers and their infants. Eleven studies were identified that met the inclusion criteria for the review, in which a total of 4751 mothers were enrolled. This review suggests that, for disadvantaged adult women and their children, there is currently no evidence to support the adoption of home visiting as a means of improving maternal psychosocial health, parenting or outcomes for children. For reasons discussed in the review, this does not amount to a conclusion that home visiting programmes are ineffective, but indicates a need to think carefully about the problems that home visiting might influence and improvements in the conduct of outcome studies in this area.

2. **Bilukha O, Hahn RA, Crosby A, Fullilove MT, Liberman A, Moscicki E, et al. The effectiveness of early childhood home visitation in preventing violence: a systematic review. Am J Prev Med 2005;28(2 Suppl 1):11-39.**

3. **Blondel B, Breart G. Home visits during pregnancy: consequences on pregnancy outcome, use of health services, and women's situations. Semin Perinatol 1995;19(4):263-71.**
Abstract: This review of eight randomized controlled trials assessed two different types of home visits during pregnancy: (1) those offering social support to high-risk women; and (2) those providing medical care to women with complications. In both categories, pregnancy outcome was not improved when women received home visits. The summary odds ratio for preterm delivery (< 37 weeks) was 1.0 (95% CI: 0.8 to 1.1). Nor did the home visits decrease the rate of hospital admission for women with complications (mainly threatened preterm labor or toxemia); the corresponding summary odds ratio was 0.9 (95% CI: 0.7 to 1.2). Nevertheless in some trials home visits had positive effects on women (medical knowledge, support levels, health habits, and satisfaction). The randomized controlled trials provide little evidence that programs offering home visits are effective in improving either pregnancy outcome or the use of health services. A better integration of hospital and home services might allow a more rational use of health services for women with complications. In addition, we need to define more precisely the content of home visits providing social support. For this, further research is required on how emotional support, health education, and advice influence the health of women and infants and mother-child interactions.

4. **Blondel B, Mellier G. Les visites a domicile pendant la grossesse: revue des essais randomises et questions soulevees [Home visits during pregnancy: review of randomized trials and open questions]. J Gynecol Obstet Biol Reprod (Paris) 1996;25(5):515-22.**
Abstract: Objectif. Revue des essais contrôlés randomisés concernant les visites à domicile pendant la grossesse. Méthode. Les essais ont été identifiés à partir de deux bases de données. Sept essais ont été retenus et classés en deux catégories : les essais orientés sur le soutien social et les essais orientés sur la surveillance médicale. Résultats. Les visites à domicile orientées vers le soutien social entraînent une diminution légère de la prématurité à la limite de la signification. En cas de pathologie pendant la grossesse, la surveillance à domicile ne diminue ni la prématurité, ni les hospitalisations. En général, les visites à domicile ont un effet positif sur les femmes en termes de soutien social, comportement de santé, connaissances médicales et satisfaction. Conclusion. Pour les femmes avec pathologie, l'absence d'effet sur les hospitalisations peut être dû à un manque de coordination entre les services hospitaliers et les services de surveillance à domicile. Pour les femmes à haut risque en raison de facteurs pyschosociaux, les essais publiés répondent mal aux questions posées. Il faudrait évaluer des interventions qui intégrent mieux les connaissances sur les effets éventuels du soutien social sur la santé à la naissance et les relations mère-enfant.

5. **Ciliska D, Hayward S, Thomas H, Mitchell A, Dobbins M, Underwood J, Rafael A, Martin E. The effectiveness of home visiting as a delivery strategy for public health nursing interventions: a systematic overview. Working paper series; 94-7. Hamilton, ON, Canada: McMaster University, 1994.**
OBJECTIVES: To examine the effectiveness of public health nursing (PHN) interventions offered through the strategy of home visiting. RESULTS: Seventy-seven articles were quality assessed, and of these, 14 articles (11 studies, 4,434 patients) of strong or moderate quality were included in the review. There were 3 RCTs (2,685 patients), 6 controlled clinical trials (1,597 patients) and 2 cohort studies (152 patients). A summary of the narrative synthesis suggests the following: there were no negative effects of home visiting; there was positive effect of home visiting on physical health, mental health and development, social health, health habits, knowledge and service utilisation. Some articles suggest no effect or selective effects. No 2 studies have similar interventions and outcomes. Hence the difficulty in presenting coherent results. CONCLUSIONS: There are no negative effects of home visiting, i.e. home visits have not been shown to do

any harm. The studies demonstrate a positive impact of home visiting on physical health, mental health and development, social health, health habits, knowledge and service utilisation. The effects seem to be mediated by the intensity of the intervention and the pre-existing level of health and social status of the client.

6. **Doggett C, Burrett S, Osborn DA. Home visits during pregnancy and after birth for women with an alcohol or drug problem. Cochrane Database Syst Rev 2005, Issue 4. Art. No.: CD004456. DOI: 10.1002/14651858.CD004456.pub2.**
Abstract: BACKGROUND: One potential method of improving outcome for pregnant or postpartum women with a drug or alcohol problem is with home visits. OBJECTIVES: To determine the effects of home visits during pregnancy and/or after birth for pregnant women with a drug or alcohol problem. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Trials Register (30 April 2004), CENTRAL (The Cochrane Library, Issue 2, 2004), MEDLINE (1966 to April 2004), EMBASE (1980 to week 16, 2004), CINAHL (1982 to April 2004), PsycINFO (1974 to April 2004), citations from previous reviews and trials, and contacted expert informants. SELECTION CRITERIA: Studies using random or quasi-random allocation of pregnant or postpartum women with a drug or alcohol problem to home visits. Trials enrolling high-risk women of whom more than 50% were reported to use drugs or alcohol were also eligible. DATA COLLECTION AND ANALYSIS: Assessments of trials were performed independently by all review authors. Statistical analyses were performed using fixed and random-effects models where appropriate. MAIN RESULTS: Six studies (709 women) compared home visits after birth with no home visits. None provided a significant antenatal component of home visits. The visitors included community health nurses, pediatric nurses, trained counsellors, paraprofessional advocates, midwives and lay African-American women. Most studies had methodological limitations, particularly large losses to follow up. There were no significant differences in continued illicit drug use (2 studies, 248 women; relative risk (RR) 0.95, 95% confidence interval (CI) 0.75 to 1.20), continued alcohol use (RR 1.08, 95% CI 0.83 to 1.41) failure to enrol in a drug treatment program (2 studies, 211 women; RR 0.45 95% CI 0.10 to 1.94). There was no significant difference in the Bayley MDI (3 studies, 199 infants; weighted mean difference 2.89, 95% CI -1.17 to 6.95) or Psychomotor Index (WMD 3.14, 95% CI -0.03 to 6.32). Other outcomes reported by one study only included breastfeeding at six months (RR 1.00, 95% CI 0.81 to 1.23), incomplete six-month infant vaccination schedule (RR 1.07, 95% CI 0.58 to 1.96), non-accidental injury and non-voluntary foster care (RR 0.16, 95% CI 0.02 to 1.23), failure to use postpartum contraception (RR 0.41, 95% CI 0.20 to 0.82), child behavioural problems (RR 0.46, 95% CI 0.21 to 1.01), and involvement with child protective services (RR 0.38, 95% CI 0.20 to 0.74). AUTHORS' CONCLUSIONS: There is insufficient evidence to recommend the routine use of home visits for women with a drug or alcohol problem. Further large, high-quality trials are needed, and women's views on home visiting need to be assessed.

7. **Elkan R, Kendrick D, Hewitt M, Robinson JJ, Tolley K, Blair M, et al. The effectiveness of domiciliary health visiting: a systematic review of international studies and a selective review of the British literature. Health Technology Assessment 2000;4(13):1-339.**
The objectives of this review are to: - conduct a systematic review of the effectiveness and cost-effectiveness of domiciliary health visiting (Part I) - conduct a selective review of the British health visiting literature (Part II) - provide recommendations for future research. The following electronic databases were searched: MEDLINE, EMBASE, CINAHL and the Cochrane Library. Several reviews of the existing literature support making the content, duration and intensity of home visits appropriate and sensitive to the needs of clients. It is considered that professional judgement is valid for decisions about where to target home visiting resources. Expectations of home visiting by health visitors should be realistic. Home visiting by itself can be insufficient to bring about radical improvements in health and social outcomes. The literature suggests that non-professional home visitors can play a role, but that they require guidance, supervision and support from professionals. However, more complex difficulties may not be suitable for non-professional home visiting. The evidence suggests that home visiting interventions that are restricted to the pursuit of only a narrow range of outcomes are less effective than more broadly based interventions in which the multiple needs of individuals and families are addressed.

8. **Guterman NB. Enrollment strategies in early home visitation to prevent physical child abuse and neglect and the "universal versus targeted" debate: a meta-analysis of population-based and screening-based programs. Child Abuse Negl 1999;23(9):863-90.**
Abstract: OBJECTIVE: Seeking to discern optimal programmatic strategies and inform the "universal versus targeted" debate in early home visitation services to prevent physical child abuse and neglect, a meta-analysis was conducted examining enrollment approaches in early home visitation studies and their reported outcomes. METHOD: Quantitative meta-analytic techniques were used to compare effect sizes from 19 controlled outcome studies across screening-based and population-based enrollment strategies. Effect sizes were calculated on protective services data and on child maltreatment related measures of parenting. RESULTS: On protective services report data, population-based studies reported a weighted mean effect size attributable to early home visitation of +3.72%, in comparison to -.07% for screening-based studies. On child maltreatment related measures of parenting, population-based studies reported a weighted mean effect size (r) attributable to early home visitation of +.092, in comparison to +.020 for screening-based studies. CONCLUSIONS: The findings indicate that population-based enrollment

strategies appear favorable to screening-based ones in early home visitation programs seeking to prevent physical child abuse and neglect. It may be that psychosocial risk screens serve to enroll higher proportions of families for which early home visitation services are less likely to leverage change, and to exacerbate a mismatch between early home visitation service aims and family needs.

9. **Hodnett ED, Roberts I. Home-based social support for socially disadvantaged mothers. Cochrane Database of Systematic Reviews 1999 Issue 1. Art. No.: CD000107. DOI: 10.1002/14651858.CD000107.**
Abstract: BACKGROUND: Epidemiologic studies indicate that babies born to socio-economically disadvantaged mothers are at higher risk of injury, abuse and neglect, health problems in infancy, and are less likely to have regular well-child care. Home visitation programs have long been advocated as a strategy for improving the health of disadvantaged children. Over the past two decades, a number of randomised trials have examined the effect of home visitation programs on a range of maternal and child health outcomes. The studies in this review evaluate programs which offer additional home based support for socially disadvantaged mothers and their children. OBJECTIVES: Babies born in socio-economic disadvantage are likely to be at higher risk of injury, abuse and neglect, and to have health problems in infancy. The objective of this review was to assess the effects of programs offering additional home-based support for women who have recently given birth and who are socially disadvantaged. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group trials register and the Cochrane Controlled Trials Register. Date of last search: 26 October 1998. SELECTION CRITERIA: Randomised and quasi-randomised trials of one or more post-natal home visits with the aim of providing additional home based support for socially disadvantaged women who had recently given birth, compared to usual care. DATA COLLECTION AND ANALYSIS: Trial quality was assessed. Study authors were contacted for additional information. MAIN RESULTS: Eleven studies, involving 2992 families, were included. Most of the trials had important methodological limitations. Seven trial reports are awaiting further assessment. There was a trend towards reduced child injury rates with additional support, although this was not statistically significant (odds ratio 0.74, 95% confidence interval 0.54 to 1.03). There appeared to be no difference for child abuse and neglect (odds ratio 1.12, 95% confidence interval 0.80 to 1.57), although differential surveillance between visited and non-visited families is an important methodological consideration. Babies in the additional support groups were more likely to have complete well-child immunizations. Based on the results of two trials, there was a trend towards reduced hospitalization, although this was not statistically significant. AUTHORS' CONCLUSIONS: Postnatal home-based support programs appear to have no risks and may have benefits for socially disadvantaged mothers and their children, possibly including reduced rates of child injury. Differential surveillance does not allow easy interpretation of the child abuse and neglect findings.Synopsis pending.

10. **Kendrick D, Elkan R, Hewitt M, Dewey M, Blair M, Robinson J, et al. Does home visiting improve parenting and the quality of the home environment? A systematic review and meta analysis. Arch Dis Child 2000;82(6):443-51.**
Abstract: AIMS: To evaluate the effectiveness of home visiting programmes on parenting and quality of the home environment. DESIGN: Systematic review of the literature of randomised controlled trials and quasi-experimental studies evaluating home visiting programmes involving at least one postnatal visit. SUBJECTS: Thirty four studies reported relevant outcomes; 26 used participants considered to be at risk of adverse maternal or child health outcomes; two used preterm or low birth weight infants; and two used infants with failure to thrive. Only eight used participants not considered to be at risk of adverse child health outcomes. RESULTS: Seventeen studies reported Home Observation for Measurement of the Environment (HOME) scores, 27 reported other measures of parenting, and 10 reported both types of outcome. Twelve studies were entered into the meta analysis. This showed a significant effect of home visiting on HOME score. Similar results were found after restricting the analyses to randomised controlled trials and to higher quality studies. Twenty one of the 27 studies reporting other measures of parenting found significant treatment effects favouring the home visited group on a range of measures. CONCLUSIONS: Home visiting programmes were associated with an improvement in the quality of the home environment. Few studies used UK health visitors, so caution must be exercised in extrapolating the results to current UK health visiting practice. Further work is needed to evaluate whether UK health visitors can achieve similar results. Comparisons with similar programmes delivered by paraprofessionals or community mothers are also needed.

11. **Kendrick D, Hewitt M, Dewey M, Elkan R, Blair M, Robinson J, et al. The effect of home visiting programmes on uptake of childhood immunization: a systematic review and meta-analysis. JPublic Health Med 2000;22(1):90-8.**
Abstract: BACKGROUND: The aim of the study was to evaluate the effectiveness of home visiting programmes on the uptake of childhood immunization. METHODS: A systematic review was carried out of the literature of controlled studies evaluating home visiting programmes involving at least one post-natal visit, which included tasks within the remit of British health visiting and reporting outcomes relevant to British health visiting. Eleven studies were considered, nine of which used socio-economically disadvantaged families. The outcome measure was uptake of a range of childhood immunizations. RESULTS: Eleven studies reported uptake of immunization. Effect sizes from nine studies were included in

the meta-analysis. Fixed effects models demonstrated a significant effect of home visiting for all studies and also for several subgroups of studies, but with significant heterogeneity of effect sizes. A random effects model failed to demonstrate an effect of home visiting. CONCLUSIONS: Home visiting programmes have not been shown to be effective in increasing the uptake of immunization. Other methods of increasing uptake and reducing inequalities in uptake will need to be explored.

12. **Larun L, Lyngstadaas A, Wiik IN, Mørland B. Svangerskap og psykisk helse. Kvinners psykiske helse i forbindelse med svangerskap og første året etter fødsel. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2005. Rapport fra Kunnskapssenteret nr. 2-2005.**
http://www.kunnskapssenteret.no/Publikasjoner/1249.cms
Abstract: Rapporten oppsummerer forskning om effekten av ulike tiltak for å forbygge og/eller behandle depressive symptomer, depresjon og angst hos kvinner i forbindelse med svangerskap, fødsel og de første 12 månedene etter fødsel. Begrepet depresjon er brukt vidt, og rapporten inkluderer forskning om effekt av tiltak både på depressive symptomer og mild, moderat og alvorlig depresjon. Sosial- og helsedirektoratet har bedt Nasjonalt kunnskapssenter for helsetjenesten å lage rapporten, med en tidsramme på seks måneder. Grunnlaget for rapporten er systematisk innhenting, kritisk vurdering og sammenstilling av forskning fra systematiske oversikter der enkeltstudier er systematisk innhentet, kritisk vurdert og sammenstilt. Rapporten er ingen veileder eller retningslinje. Svangerskap, fødsel og tiden etter fødsel er en overgangsfase i livet med forandringer og utfordringer. I denne perioden av livet står glede og forventning i fokus, men den inneholder også fysisk og psykisk belastning. Skillet mellom hva som er en naturlig reaksjon på en stor endring i livet og hva som er sykelig er ikke alltid enkelt (1). Psykisk sykdom under svangerskapet og i tiden etter fødsel (inntil 12 måneder) representer lidelser av varierende alvorlighetsgrad og betyr mye for mors velbefinnende, utvikling av mor-barn relasjonen og for hele familien. Denne oppsummeringen viser: • Det er lite hensiktsmessig med generelle forebyggende psykososiale tiltak for alle gravide og nybakte mødre. Derimot har man funnet gunstig effekt av tiltak rettet mot kvinner med økt risiko for å utvikle depressive symptomer etter fødsel. • Intensive og fleksible hjemmebesøk av helsesøster eller jordmor, tilpasset den enkelte kvinnes behov, kan fremme mental helse og gi lavere forekomst av depresjon etter fødsel. Når det gjelder andre psykososiale, psykologiske eller biologiske tiltak er det ikke entydighet om resultatet eller det er ikke funnet oppsummert forskning av tilfredsstillende kvalitet.

13. **Macdonald G, Bennett C, Dennis JA, Coren E, Patterson J, Astin M, et al. Home-based support for disadvantaged teenage mothers. Cochrane Database of Systematic Reviews 2008 Issue 1. Art. No.: CD006723. DOI: 10.1002/14651858.CD006723.pub2.**
Abstract: BACKGROUND: Babies born to socio-economically disadvantaged mothers are at higher risk of injury, abuse or neglect and health problems than babies born to more affluent mothers; disadvantaged teenage mothers are at particular risk of adverse outcomes. Home-visiting programs are thought to improve outcomes for both mothers and children, largely through advice and support. OBJECTIVES: To assess the effectiveness of home-visiting programmes for women who have recently given birth and who are socially or economically disadvantaged. SEARCH STRATEGY: The following electronic databases were searched: CENTRAL (2006, Issue 3); MEDLINE (1966 to March 2006); EMBASE (1980 to week 12 2006); CINAHL (1982 to March week 4 2006); PsycINFO (1872 to March week 4 2006); ASSIA (1987 to March 2006); LILACS (1982 to March 2006); and Sociological Abstracts (1963 to March 2006). Grey literature was also be searched using ZETOC (1993 to March 2006); Dissertation Abstracts International (late 1960s to 2006); and SIGLE (1980 to March 2006). Communication with published authors about ongoing or unpublished research was also undertaken. SELECTION CRITERIA: Included studies were randomised controlled trials investigating the efficacy of home visiting directed at teenage mothers. DATA COLLECTION AND ANALYSIS: Titles and abstracts identified in the search were independently assessed for eligibility by two review authors (EC and JP or CB). Data were extracted and entered into RevMan (EC, JP and CB), synthesised and presented in both written and graphical form (forest plots). Outcomes included in this review were established at the protocol stage by an international steering group. The review did not report on all outcomes reported in included studies. MAIN RESULTS: Five studies with 1838 participants were included in this review. Data from single studies provided support for the effectiveness of home visiting on some outcomes, but the evidence overall provided only limited support for the effectiveness of home visiting as a means of improving the range of maternal and child outcomes considered in this review. AUTHORS' CONCLUSIONS: This review suggests there is only limited evidence that home-visiting programmes of the kind described in this review can impact positively on the quality of parenting of teenage mothers or on child development outcomes for their offspring. For reasons discussed in the review, this does not amount to a conclusion that home-visiting programmes are ineffective but indicates a need to think carefully about the problems that home visiting might influence and about improvements in the conduct and reporting of outcome studies in this area. HOME-BASED SUPPORT FOR DISADVANTAGED TEENAGE MOTHERS: Whilst it is clear that not all teenage pregnancies are unwanted, and that parenting as a teenager can be experienced positively, teenage parenthood is more likely to be linked to adverse social and health outcomes than parenthood in older mothers; both for mothers and their children. Home visiting refers to a wide variety of interventions delivered in a variety of ways, within different policy contexts and targeted at different populations. Programmes may be provided by professionals (usually nurses) or para-professionals. This review aimed to assess the effectiveness of home-visiting programmes for improving outcomes for teenage mothers and their infants. Five studies were identified that met the inclusion criteria for the review. A total of 1838 teenage mothers were enrolled in

these studies. The evidence suggests there is only limited support for the effectiveness of home visiting as a means of improving maternal life course, parenting or psychosocial outcomes of teenage mothers or for improving a range of developmental and social outcomes for their children.

14. **Malaysian Health Technology Assessment Unit. Home visiting in public health. Kuala Lumpur: Malaysian Health Technology Assessment Unit (MHTAU), 2000.**
Home visitation or health visiting has been widely used as an intervention strategy in health care services in many countries. It has been defined as "... planned activities aimed at the promotion of health and prevention of disease. It therefore contributes substantially to individual and social well-being, by focusing attention at various times on either an individual, a social group or a community" (Cowley, 1998). Home visiting in the Family Health programme in Malaysia mainly involves various categories of public health nursing personnel namely public health nurses, staff nurses, community nurses, assistant nurses and midwives rendering services in accordance with their capacities, roles and functions. OBJECTIVE: To assess the effectiveness, efficiency and cost effectiveness of home visiting. SCOPE OF ASSESSMENT: The following was the scope of the assessment: i) Confined to home visiting in health care services ii) Home visiting only by public health nurses, and not other categories of personnel Home visiting specifically in the areas of child health, pregnancy and postnatal care, elderly care, nutrition and mental health are considered. CONCLUSIONS: After reviewing the literature, it was found that home visiting has positive effects in many aspects of health care. While some studies were inconclusive or did not support positive effects, there were no negative effects of home visiting reported.

15. **McNaughton DB. A synthesis of qualitative home visiting research. Public Health Nurs 2000;17(6):405-14.**
Abstract: Over the past decade, a body of qualitative research has been developed which describes the home visiting practice of public health nurses (PHNs) to maternal-child clients. This article reports a synthesis of these studies. The purpose of the synthesis was to identify common elements and differences between the research reports that would lead to theory development or support of existing theories. Methods were based on Miles and Huberman's (1994) text on qualitative data analysis. Results of the synthesis indicated that building and preserving relationships with the client is the central focus of home visiting and provides a foundation for problem identification and problem solving. Clients control access to their homes as well as the information they are willing to share with the nurse. The goals of home visiting relate to empowering mothers, supporting their independence and decision making. Similarities to Peplau's theory of Interpersonal Relations and Cox's Interaction Model of Client Health Behavior (IMCHB) are noted.

16. **McNaughton DB. Nurse home visits to maternal-child clients: a review of intervention research. Public Health Nurs 2004;21:207-19.**
Abstract**:** Home visiting has been considered a promising strategy for addressing the multiple needs of families at risk. Research reviews are a valuable resource for researchers, policymakers, and practitioners who develop and support new home-visiting interventions. This review examines 13 research studies published between the years of 1980 and 2000 that test the effectiveness of home-visiting interventions using professional nurses as home visitors. Findings indicate that a wide range of client problems are addressed during home visits using a variety of nursing interventions. Missing from most of the reports is a clear theoretical link between the client problem addressed, the nursing intervention, and target outcomes. About half of the studies were successful in achieving desired outcomes. Future research should be directed by middle-range practice theory, clearly explicate the nursing intervention being tested, use power analysis to determine sample size, and report reliability and validity of dependent variable measures with culturally diverse samples.

17. **Roberts I, Kramer MS, Suissa S. Does home visiting prevent childhood injury? A systematic review of randomised controlled trials. BMJ 1996;312(7022):29-33.**
Abstract: OBJECTIVE--To quantify the effectiveness of home visiting programmes in the prevention of child injury and child abuse. DESIGN--Systematic review of 11 randomised controlled trials of home visiting programmes. Pooled odds ratios were estimated as an inverse variance weighted average of the study specific odds ratios. SETTING--Randomised trials that were available by April 1995. SUBJECTS--The trials comprised 3433 participants. RESULTS--Eight trials examined the effectiveness of home visiting in the prevention of childhood injury. The pooled odds ratio for the eight trials was 0.74 (95% confidence interval 0.60 to 0.92). Four studies examined the effect of home visiting on injury in the first year of life. The pooled odds ratio was 0.98 (0.62 to 1.53). Nine trials examined the effect of home visiting on the occurrence of suspected abuse, reported abuse, or out of home placement for child abuse. Because of the potential for bias in outcome reporting in these studies, pooled effect estimates were not calculated. CONCLUSIONS--Home visiting programmes have the potential to reduce significantly the rates of childhood injury. The problem of differential surveillance for child abuse between intervention and control groups precludes the use of reported abuse as a valid outcome measure in controlled trials of home visiting.

18. **Sharps PW, Campbell J, Baty ML, Walker KS, Bair-Merritt MH. Current evidence on perinatal home visiting and intimate partner violence. J Obstet Gynecol Neonatal Nurs 2008;37(4):480-90.**

Abstract: OBJECTIVE: To describe current evidence on home visiting interventions for pregnant or postpartum women with specific intimate partner violence assessment and content. DATA SOURCES: Online bibliographic databases including PubMed, CINAHL Plus, and Web of Science and a hand search of bibliographies of relevant articles. STUDY SELECTION: Original research and intervention studies were included that contained (a) a well-described prenatal and/or postpartum home visitation; (b) an assessment of perinatal intimate partner violence; and (c) quantitative data describing health outcomes for the women and their infants. DATA EXTRACTION: The search yielded 128 articles, and 8 relevant articles met all of the inclusion criteria. Nonresearch, nonintervention, and international articles were excluded. DATA SYNTHESIS: No perinatal home visiting interventions were designed to address intimate partner violence. Programs that screened for intimate partner violence found high rates, and the presence of intimate partner violence limited the ability of the intervention to improve maternal and child outcomes. CONCLUSIONS: Perinatal home visitation programs likely improve pregnancy and infant outcomes. Home visiting interventions addressing intimate partner violence in nonperinatal population groups have been effective in minimizing intimate partner violence and improving outcomes. This suggests that perinatal home visiting programs adding specific intimate partner violence interventions may reduce intimate partner violence and improve maternal and infant health. Continued rigorous research is needed.

19. **Shaw E, Levitt C, Wong S, Kaczorowski J, The McMaster University Postpartum Research Group. Systematic review of the literature on postpartum care: effectiveness of postpartum support to improve maternal parenting, mental health, quality of life, and physical health. Birth 2006;33(3):210-20.**
Abstract: BACKGROUND: Postpartum support is recommended to prevent infant and maternal morbidity. This review examined the published evidence of the effectiveness of postpartum support programs to improve maternal knowledge, attitudes, and skills related to parenting, maternal mental health, maternal quality of life, and maternal physical health. METHODS: MEDLINE, Cinahl, PsycINFO, and the Cochrane Library were searched for randomized controlled trials of interventions initiated from immediately after birth to 1 year in postnatal women. The initial literature search was done in 1999 and was enhanced in 2003 and 2005. Studies were categorized based on the the above outcomes. Data were extracted in a systematic manner, and the quality of each study was reviewed. RESULTS: In the 1999 search, 9 studies met the inclusion criteria. The 2003 and 2005 searches identified 13 additional trials for a total of 22 trials. Universal postpartum support to unselected women at low risk did not result in statistically significant improvements for any outcomes examined. Educational visits to a pediatrician showed statistically significant improvements in maternal-infant parenting skills in low-income primiparous women. In women at high risk for family dysfunction and child abuse, nurse home visits combined with case conferencing produced a statistically significant improvement in home environment quality using the HOME (Home Observation for Measurement of the Environment) program. Similarly, in women at high risk for either family dysfunction or postpartum depression, home visitation or peer support, respectively, produced a statistically significant reduction in Edinburgh Postnatal Depression Scale scores (difference -2.23, 95% CI -3.72 to -0.74, p= 0.004; and 15.0% vs 52.4%, OR 6.23, 95% CI 1.40 to 27.84, p= 0.01, respectively). Educational programs reduced repeat unplanned pregnancies (12.0% vs 28.3%, p= 0.003) and increased effective contraceptive use (RR 1.35, 95% CI 1.09 to 1.68, p= 0.007). Maternal satisfaction was higher with home visitation programs. CONCLUSIONS: No randomized controlled trial evidence was found to endorse universal provision of postpartum support to improve parenting, maternal mental health, maternal quality of life, or maternal physical health. There is some evidence that high-risk populations may benefit from postpartum support.

20. **Sweet MA, Appelbaum MI. Is home visiting an effective strategy? A meta-analytic review of home visiting programs for families with young children. Child Dev 2004;75(5):1435-56.**
Abstract: Home visiting programs for families with young children have been in effect for many years; however, this is the first comprehensive meta-analytic effort to quantify the usefulness of home visits as a strategy for helping families across a range of outcomes. Sixty home visiting programs contributed data to analysis within 5 child and 5 parent outcome groups. Standardized effect sizes were computed for each end-of-treatment outcome measure, for each treatment versus control contrast. Weighted mean standardized effect sizes ranged from -.043 to.318; 6 of the 10 significantly differed from 0. No one program characteristic consistently affected effect sizes across outcome groups. The extent to which these findings have practical use for the field is discussed.

KOSTHOLD

1. **Ciliska D, Miles E, O'Brien MA, Turl C, Tomasik HH, Donovan U, et al. The effectiveness of community interventions to increase fruit and vegetable consumption in people four years of age and older. Ontario Ministry of Health, Region of Hamilton-Wentworth, Social and Public Health Services Division, 1999.**
Abstract: Objectives: Increasing dietary intake of fruits and vegetables has been proposed as an effective means of reducing morbidity and mortality related to cardiovascular disease and cancer. The systematic review sought to answer the question: what is the effectiveness of community interventions to increase fruit and vegetable consumption in people four years of age and older? Are there differences in outcome by target group, by preparation of the intervenor, or by site, intensity or theoretical basis of the intervention? Methods: A search was conducted of the electronic databases from the first year of their existence to 1998. Key public health-related journals were hand-searched to the first issue of 1993 and key nutrition journals were hand-searched back to 1988. Relevant references were retrieved from bibliographies. Each article retrieved was rated for relevance and validity by two independent readers then data abstraction was done by two people for the studies that rated as strong or moderate. All tools used for the three phases had been pretested. Results: One hundred and eighty-nine articles were retrieved. Sixty were rated as relevant. After validity rating, one was rated 'strong', 17 'moderate' and 42 'weak'. Four studies were targeted to parents of young children, six to school-aged children, five to adults. The outcomes of the interventions varied by intensity and clarity of the messages more than by age of target group, or site of the intervention. There is support for use of peer educators and paraprofessionals with low-income mothers, although a study of direct comparison of two groups led by a professional nutritionist versus a paraprofessional has not been found. The most effective interventions gave clear messages about increasing fruit and vegetable consumption; incorporated multiple strategies that reinforced the messages; involved the family; were more intensive; were provided over a longer period of time, rather than one or two contacts; and were based on a theoretical framework. Conclusions: People in public health positions of making decisions about nutrition interventions need to give priority to those interventions that are multi-pronged, flexible, open to input from target groups and theoretically based. Careful and co-operative, multi-site evaluation should be done in order to guide future programs.

2. **Cockroft nP, Cade JE. Interventions for increasing fruit and vegetable consumption in pre-school children. Cochrane Database of Systematic Reviews (Protocols) 2009, Issue 1.**
Abstract: This is the protocol for a review and there is no abstract. The objectives are as follows:To assess the effectiveness of educational, experiential, health promotion and/or psychological/family/behavioural therapy/counselling/management interventions that focused on fruit and/or vegetable consumption, and were designed to promote an increase in fruit and/or vegetable consumption, in pre-school children.

3. **de Oliveira MI, Camacho LA, Tedstone AE. Extending breastfeeding duration through primary care: a systematic review of prenatal and postnatal interventions. J Hum Lact 2001;17(4):326-43.**
Abstract: This literature review provides an overview of the effectiveness of strategies and procedures used to extend breastfeeding duration. Interventions carried out during pregnancy and/or infant care conducted in primary health care services, community settings, or hospital clinics were included. Interventions covering only the delivery period were excluded. Interventions that were most effective in extending the duration of breastfeeding generally combined information, guidance, and support and were long term and intensive. During prenatal care, group education was the only effective strategy reported. Home visits used to identify mothers' concerns with breastfeeding, assist with problem solving, and involve family members in breastfeeding support were effective during the postnatal period or both periods. Individual education sessions were also effective in these periods, as was the combination of 2 or 3 of these strategies in interventions involving both periods. Strategies that had no effect were characterized by no face-to-face interaction, practices contradicting messages, or small-scale interventions.

4. **De Sa J, Lock K. Will European agricultural policy for school fruit and vegetables improve public health? A review of school fruit and vegetable programmes. Eur J Public Health 2008;18(6):558-68.**
Abstract: Background: For the first time, public health, particularly obesity, is being seen as a driver of EU agricultural policy. In 2007, European Ministers of Agriculture were asked to back new proposals for school fruit and vegetable programmes as part of agricultural reforms. In 2008, the European Commission conducted an impact assessment to assess the potential impact of this new proposal on health, agricultural markets, social equality and regional cohesion. Methods: A systematic review of the effectiveness of interventions to promote fruit and/or vegetable consumption in children in schools, to inform the EC policy development process. Results: School schemes are effective at increasing both intake and knowledge. Of the 30 studies included, 70% increased fruits and vegetables (FV) intake, with none decreasing intake.

Twenty-three studies had follow-up periods >1 year and provide some evidence that FV schemes can have long-term impacts on consumption. Only one study led to both increased fruit and vegetable intake and reduction in weight. One study showed that school fruit and vegetable schemes can also help to reduce inequalities in diet. Effective school programmes have used a range of approaches and been organized in ways which vary nationally depending on differences in food supply chain and education systems. Conclusions: EU agriculture policy for school fruits and vegetables schemes should be an effective approach with both public health and agricultural benefits. Aiming to increase FV intake amongst a new generation of consumers, it will support a range of EU policies including obesity and health inequalities.

5. **Hannula L, Kaunonen M, Tarkka MT. A systematic review of professional support interventions for breastfeeding. J Clin Nurs 2008;17(9):1132-43.**
Abstract: OBJECTIVES: The objectives of this systematic review were first, to describe how breastfeeding is professionally supported during pregnancy, at maternity hospitals and during the postnatal period. Secondly, to find out how effective interventions are in supporting breastfeeding. BACKGROUND: Breastfeeding is an effective way to promote the health of infants. In many countries, the rates for breastfeeding remain lower than recommended. Many studies have examined breastfeeding promotion interventions; some of them are successful and some fail. It is important to find effective combinations of support. DESIGN: Systematic review. METHODS: Search of CINAHL, Medline and Cochrane Central Register databases were conducted for data collection. The search was limited to articles published in Finnish, Swedish and English between the year 2000 and March 2006, focusing on breastfeeding and breastfeeding support interventions. Two reviewers independently analysed 36 articles in the final analysis. RESULTS: Interventions expanding from pregnancy to the intrapartum period and throughout the postnatal period were more effective than interventions concentrating on a shorter period. In addition, intervention packages using various methods of education and support from well-trained professionals are more effective than interventions concentrating on a single method. CONCLUSIONS: During pregnancy, the effective interventions were interactive, involving mothers in conversation. The Baby Friendly Hospital Initiative (BFHI) as well as practical hands off -teaching, when combined with support and encouragement, were effective approaches. Postnatally effective were home visits, telephone support and breastfeeding centres combined with peer support. Relevance to clinical practice. Professionals need breastfeeding education and support of their organisations to act as breastfeeding supporters. The BFHI -programme is effective and it would be wise to include the core components of the programme in breastfeeding promotion interventions. Mothers benefit from breastfeeding encouragement and guidance that supports their self-efficacy and feelings of being capable and empowered, and is tailored to their individual needs.

6. **Howerton MW, Bell BS, Dodd KW, Berrigan D, Stolzenberg-Solomon R, Nebeling L. School-based nutrition programs produced a moderate increase in fruit and vegetable consumption: meta and pooling analyses from 7 studies. J Nutr Educ Behav 2007;39:186-96.**
Abstract: OBJECTIVE: To evaluate, through study- and individual-level analyses of data from 7 studies, the effectiveness of school-based nutrition interventions on child fruit and vegetable (FV) consumption. DESIGN: To find original studies on school-based nutrition interventions, the authors searched electronic databases from 1990 to 2002. First authors of the 13 eligible studies were contacted to request their data. Data from 7 studies were received for inclusion in this pooled analysis. SETTING: Schools. PARTICIPANTS: 8156 children were matched from pretest to posttest. Participants were primarily elementary school-aged (75.5%) and white (66%), and 50.4% were males. MAIN OUTCOME MEASURES: Net FV difference and net FV relative change (%). ANALYSIS: Data were analyzed at both the study and individual levels. A fitted multivariable fixed-effects model was used to analyze the role of potential covariates on FV intake. Statistical significance was set at alpha = .05. RESULTS: At the individual level, the net difference in FV consumption was 0.45 (95% CI 0.33-0.59) servings; the net relative change was 19% (95% CI 0.15-0.23) servings. CONCLUSIONS AND IMPLICATIONS: School-based nutrition interventions produced a moderate increase in FV intake among children. These results may have implications for chronic disease prevention efforts, including cardiovascular disease and cancer.

7. **Kristjansson B, Petticrew M, MacDonald B, Krasevec J, Janzen L, Greenhalgh T, et al. School feeding for improving the physical and psychosocial health of disadvantaged students. Cochrane Database of Systematic Reviews 2007, Issue 1. Art. No.: CD004676. DOI: 10.1002/14651858.CD004676.pub2.**
Abstract: BACKGROUND: Early malnutrition and/or micronutrient deficiencies can adversely affect physical, mental, and social aspects of child health. School feeding programs are designed to improve attendance, achievement, growth, and other health outcomes. OBJECTIVES: The main objective was to determine the effectiveness of school feeding programs in improving physical and psychosocial health for disadvantaged school pupils . SEARCH STRATEGY: We searched a number of databases including CENTRAL (2006 Issue 2), MEDLINE (1966 to May 2006), EMBASE (1980 to May 2006), PsycINFO (1980 to May 2006) and CINAHL (1982 to May 2006). Grey literature sources were also searched. Reference lists of included studies and key journals were handsearched and we also contacted selected experts in the field. SELECTION CRITERIA: Data from randomized controlled trials (RCTs), non-randomised controlled

clinical trials (CCTs), controlled before and after studies (CBAs), and interrupted time series studies (ITSs) were included. Feeding had to be done in school; the majority of participants had to be socio-economically disadvantaged. DATA COLLECTION AND ANALYSIS: Two reviewers assessed all searches and retrieved studies. Data extraction was done by one of four reviewers and reviewed by a second. Two reviewers independently rated quality. If sufficient data were available, they were synthesized using random effects meta-analysis, adjusting for clustering if needed. Analyses were performed separately for RCTs and CBAs and for higher and lower income countries. MAIN RESULTS: We included 18 studies. For weight, in the RCTs and CBAs from Lower Income Countries, experimental group children gained an average of 0.39 kg (95% C.I: 0.11 to 0.67) over an average of 19 months and 0.71 kg (95% C.I.: 0.48 to 0.95) over 11.3 months respectively. Results for weight were mixed in higher income countries. For height, results were mixed; height gain was greater for younger children. Attendance in lower income countries was higher in experimental groups than in controls; our results show an average increase of 4 to 6 days a year. Math gains were consistently higher for experimental groups in lower income countries; in CBAs, the Standardized Mean Difference was 0.66 (95% C.I. = 0.13 to 1.18). In short-term studies, small improvements in some cognitive tasks were found. AUTHORS' CONCLUSIONS: School meals may have some small benefits for disadvantaged children. We recommend further well-designed studies on the effectiveness of school meals be undertaken, that results should be reported according to socio-economic status, and that researchers gather robust data on both processes and carefully chosen outcomes. SCHOOL FEEDING FOR IMPROVING THE PHYSICAL AND PSYCHOSOCIAL HEALTH OF DISADVANTAGED SCHOOLCHILDREN: Early malnutrition and/or micronutrient deficiencies can negatively affect many aspects of child health and development. School feeding programs are designed to provide food to hungry children and to improve their physical, mental and psychosocial health. This is the first systematic review on the topic of school feeding. Eighteen studies were included in this review; nine were performed in higher income countries and nine in lower income countries. In the highest quality studies (randomized controlled trials (RCTs) from low income countries, children who were fed at school gained an average of 0.39 kg more than controls over 19 months; in lower quality studies (controlled before and after trials (CBAs)), the difference in gain was 0.71 kg over 11.3 months. Children who were fed at school attended school more frequently than those in control groups; this finding translated to an average increase of 4 to 6 days a year per child. For educational and cognitive outcomes, children who were fed at school gained more than controls on math achievement, and on some short-term cognitive tasks.Results from higher income countries were mixed, but generally positive. For height, results from lower income countries were mixed; in RCTs, differences in gains were important only for younger children, but results from the CBAs were large and significant overall. Results for height from high Income countries were mixed, but generally positive. School meals may have small physical and psychosocial benefits for disadvantaged pupils. We recommend that further well-designed studies on the effectiveness of school meals be undertaken, that results should be reported according to the socio-economic status of the children who take part in them, and that researchers gather robust data on outcomes that directly reflect effects on physical, social, and psychological health.

8. **McArthur DB. Heart healthy eating behaviors of children following a school-based intervention: a meta-analysis. Issues Compr Pediatr Nurs 1998;21(1):35-48.**
Abstract: The purpose of this meta-analysis was to estimate the effects of school-based interventions on heart healthy eating behaviors of fourth and fifth grade students. The overall effect size (d value) across 12 studies was .24. The 95% confidence interval ranged from .174 to .301. It can be concluded that the school-based cardiovascular health promotion programs had a significant effect on the heart healthy eating behaviors of student participants. Recommendations include identification of reliable measures and inclusion of culturally diverse populations in future studies

9. **Reinar LM, Nylund HK, Nordheim L, Aarum AKO, Jamtvedt G. Kan tiltak i skolen og lokalsamfunn påvirke barn og unge til å spise mer frukt og grønt? Oslo: Nasjonelt kunnskapssenter for helsetjenesten, 2004. Rapport fra Kunnskapssenteret nr 12 - 2004.**
http://www.kunnskapssenteret.no/Publikasjoner/1518.cms
Abstract: Det er et mål å øke inntaket av frukt og grønnsaker i den norske befolkningen. En målgruppe er barn og unge. Dette er en nasjonal satsing, og flere tiltak retter seg mot skolen. En betydelig økning av frukt og grønnsaker i kostholdet kan redusere risikoen for kreftsykdommer og hjerte- og kar sykdommer i befolkningen. Denne rapporten er skrevet på grunnlag av en metode som går ut på å finne, kritisk vurdere og sammenstille kunnskap fra systematiske oversikter. Denne oppsummerte forskningen viser: - Skolebaserte programmer med hensikt å fremme sunne kostvaner har en liten, men klar, positiv effekt på matvanene til elevene. - Intervensjoner med sammensatte tiltak og høy intensitet som foregår over lengre tidsrom, virker best. - Ernæringsopplysning alene i skolen kan i begrenset grad påvirke barns kostvaner. Økt kunnskap alene endrer ikke nødvendigvis holdninger og atferd. Programmer som bruker sosial læringsteori og involverer elevene, virker bedre enn ren ”kateterundervisning”. - Ungdoms kostvaner lar seg ikke påvirke i samme grad som hos yngre aldersgrupper, men kunnskapsnivået øker i alle aldersgrupper. - Virkningen av å bruke medelever i undervisning og som rollemodeller (”peers”) er uklar. Forskningen er i hovedsak basert på annen atferd enn påvirkning av inntak av frukt og grønnsaker. - Det er lettere å få jenter til å spise mer frukt og grønnsaker enn det er å få gutter til å spise mer. Det er lettere å øke konsumet av frukt enn av grønnsaker. - Ungdom er mer opptatt av hva de liker og ikke liker enn hva som er sunt. - Ingen studier kan vise til økt forbruk av frukt og grønt opp mot et mål om ”Fem om dagen”.

Det vil si at de fleste barn og unge i studiene spiser mindre frukt og grønt enn det som anbefales, også etter at tiltak er iverksatt. - I Norge brukes massemediekampanjer og pris som tiltak i tillegg til strategier i skolene. Vi fant ikke systematiske oversiktsartikler hvor disse tiltakene er vurdert alene, men bruk av massemedia og tiltak rettet mot familier er med i enkelte av de inkluderte studiene.

10. **Tedstone A, Dunce N, Aviles M, Shetty P, Daniels L. Effectiveness of interventions to promote healthy feeding in infants under one year of age. Health Promotion Effectiveness Reviews; 9. London: Health Education Authority, 1998**
Abstract: This publication reviews the effectiveness of healthy eating interventions to promote healthy feeding of infants under one year of age. Good feeding and weaning practice is important for infants under one year of age, as their diet may influence both their present and future health status through vulnerability to nutrition-related diseases. This review provides some evidence for the effectiveness of interventions to improve frequency of, and knowledge about, breastfeeding.

FYSISK AKTIVITET

1. **Dobbins M, De Corby K, Robeson P, Husson H, Tirilis D. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6-18. Cochrane Database of Systematic Reviews 2009 Issue 1. Art. No.: CD007651. DOI: 10.1002/14651858.CD007651.**
Abstract: BACKGROUND: The World Health Organization estimates that 1.9 million deaths worldwide are attributable to physical inactivity. Chronic diseases associated with physical inactivity include cancer, diabetes and coronary heart disease. OBJECTIVES: The purpose of this systematic review is to summarize the evidence of the effectiveness of school-based interventions in promoting physical activity and fitness in children and adolescents. SEARCH STRATEGY: The search strategy included searching several databases. In addition, reference lists of included articles and background papers were reviewed for potentially relevant studies, as well as references from relevant Cochrane reviews. Primary authors of included studies were contacted as needed for additional information. SELECTION CRITERIA: To be included, the intervention had to be relevant to public health practice, implemented, facilitated, or promoted by staff in local public health units, implemented in a school setting and aimed at increasing physical activity, report on outcomes for children and adolescents (aged 6 to 18 years), and use a prospective design with a control group. DATA COLLECTION AND ANALYSIS: Standardized tools were used by two independent reviewers to rate each study's methodological quality and for data extraction. Where discrepancies existed discussion occurred until consensus was reached. The results were summarized narratively due to wide variations in the populations, interventions evaluated and outcomes measured. MAIN RESULTS: 13,841 titles were identified and screened and 482 articles were retrieved. Multiple publications on the same project were combined and counted as one project, resulting in 395 distinct project accounts (studies). Of the 395 studies 104 were deemed relevant and of those, four were assessed as having strong methodological quality, 22 were of moderate quality and 78 were considered weak. In total 26 studies were included in the review. There is good evidence that school-based physical activity interventions have a positive impact on four of the nine outcome measures. Specifically positive effects were observed for duration of physical activity, television viewing, VO2 max, and blood cholesterol. Generally school-based interventions had no effect on leisure time physical activity rates, systolic and diastolic blood pressure, body mass index, and pulse rate. At a minimum, a combination of printed educational materials and changes to the school curriculum that promote physical activity result in positive effects. AUTHORS' CONCLUSIONS: Given that there are no harmful effects and that there is some evidence of positive effects on lifestyle behaviours and physical health status measures, ongoing physical activity promotion in schools is recommended at this time. SCHOOL-BASED INTERVENTIONS FOR PROMOTING PHYSICAL ACTIVITY AND FITNESS IN CHILDREN AND ADOLESCENTS: Current evidence suggests that school-based physical activity interventions may be effective in the development of healthy lifestyle behaviours among children and adolescents that will then translate into reduced risk for many chronic diseases and cancers in adulthood. The evidence also suggests that the best primary strategy for improving the long-term health of children and adolescents through exercise may be creating lifestyle patterns of regular physical activity that carry over to the adult years.It is estimated that as many at 1.9 million deaths worldwide are attributable to physical inactivity, and that inactivity is a key risk factor in the development of most chronic diseases and cancers.This is alarming particularly because it is known that physical activity patterns track from childhood into adulthood; that children are increasingly exhibiting risk factors for cardiovascular disease, such as obesity, elevated blood lipids, and hypertension, conditions which are known to track into adulthood; and that atherosclerotic fatty streaks in the coronary arteries, which are indicative of coronary heart disease, have been found postmortem in children.This review included 26 studies that evaluated the impact of combinations of school-based interventions focused on increasing physical activity among children and adolescents. Participants were between the ages of 6 to18 living in Australia, South America,

Europe and North America.There is good evidence that school-based physical activity interventions are effective in increasing duration of physical activity, reducing blood cholesterol and time spent watching television and increasing VO2 max. VO2 max, known as maximal oxygen uptake or aerobic capacity, reflects the physical fitness level of an individual and generally increases as fitness levels improve. These interventions are not effective in increasing the percentage of children and adolescents who are physically active during leisure time, or in reducing systolic and diastolic blood pressure, body mass index, and pulse rate. At a minimum, a combination of printed educational materials and changes to the school curriculum that promote physical activity result in positive effects for four of the nine outcomes.

2. **Salmon J, Booth ML, Phongsavan P, Murphy N, Timperio A. Promoting physical activity participation among children and adolescents. Epidemiol Rev 2007;29:144-59.**
Abstract: With global increases in the prevalence of overweight and obesity among children and adolescents, there has never been a more urgent need for effective physical activity programs. The aim of this narrative review is to summarize the evidence of the effectiveness of interventions that report physical activity outcomes in children aged 4–12 years and adolescents aged 13–19 years. A systematic search of electronic databases identified 76 interventions. Most interventions were delivered via the school setting (57 interventions), nine through the family setting, six via primary care, and four in community- or Internet-based settings. Children's physical activity interventions that were most effective in the school setting included some focus on physical education, activity breaks, and family strategies. Interventions delivered in the family setting were not highly effective, but many were pilot studies. The use of motivationally tailored strategies and program delivery in the primary care setting showed promise among adolescents. Many studies had methodological and reporting flaws (e.g., no baseline data, poor study design, physical activity measures of unknown reliability and validity, and poor reporting of sample size, response rates, attrition/retention, compliance, year of intervention, and duration of intervention). Publications reporting the results of evaluations of intervention studies should follow the Consolidated Standards of Reporting Trials guidelines or, for nonrandomized studies, should follow the Transparent Reporting of Evaluations with Nonrandomized Designs guidelines. Further evidence of the effectiveness of interventions promoting young people's physical activity in family and community settings is needed.

3. **Thomas H, Ciliska D, Micucci S, Wilson-Abra J, Dobbins M. Effectiveness of physical activity enhancement and obesity prevention programs in children and youth. City of Hamilton: Public Health and Community Services Department, 2004.**
Abstract: The purpose of this systematic literature review is to provide some national policy direction related to the effectiveness of interventions for promoting healthy weight, preventing overweight/obesity and increasing physical activity among school aged children and youth. This review consists of several components. An overall comprehensive literature search for primary studies between January 1985 and June 2003 was carried out. The literature was divided into five topics: improving nutritional intake, reducing physical inactivity, increasing physical activity, multi-faceted interventions including improving nutrition, increasing physical activity and impacting the school environment, and school environmental interventions. Over 1,100 articles were retrieved. All articles were reviewed for relevance using standardized criteria. Those that were relevant (n=425) were then assessed for methodological quality. All relevant studies are reported in the tables. Only those with strong methodological rigour are described in the text. One should exercise caution when viewing the results of the weaker studies as they have several threats to internal and external validity. Both Randomized Controlled Trials (RCTs) and cohort studies were included. The RCTs were, in general, stronger than the cohort studies. The most frequent limitations of the RCTs included potential selection bias, lack of blinding of outcome assessors, lack of sample size calculation, and inappropriate analysis in that many investigators allocated students by school and then analyzed outcomes by individual. As well, many investigators did not report the consistency of the intervention or the amount of the intervention received by study participants. Few studies provided any long term follow-up to assess whether positive impacts were sustained. The other difficulty is that when studies reported statistically significant differences in outcomes, the actual differences were small and their clinical significance was unknown. Although the theory underlying many interventions was not implicitly stated, it appeared that many were based on either social cognitive or ecological theory. A few studies were found that used the environ mental/systems based approach. Although none of these studies met the relevance criteria for this review, some examples of work in this area are included in the environmental section as illustrations of possible future work. Few studies reported the effect of culture, socioeconomic status and individual level of risk on outcomes. In attempting to identify factors contributing to obesity/overweight in children and youth, several investigators have noted the differences in rates based on cultural differences and on socioeconomic status. Of these factors, socioeconomic status may be the most important. Many of the studies involved elementary school children. About one third focused on adolescents. The effectiveness of parental involvement had mixed results. One study demonstrated that teacher preparation positively impacted on the amount of physical activity students engaged in during physical education classes. However, classroom teachers led most of the interventions. The results of the review are that positive outcomes are modest at best and many results are inconsistent between studies. Based on this review of the literature, the following are recommendations for policy, program delivery and research.

4. **van Sluijs EMF, McMinn AM, Griffin SJ. Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. BMJ 2007;335(7622):703.**
Abstract: OBJECTIVE: To review the published literature on the effectiveness of interventions to promote physical activity in children and adolescents. DESIGN: Systematic review. DATA SOURCES: Literature search using PubMed, SCOPUS, Psychlit, Ovid Medline, Sportdiscus, and Embase up to December 2006. Review methods Two independent reviewers assessed studies against the following inclusion criteria: controlled trial, comparison of intervention to promote physical activity with no intervention control condition, participants younger than 18 years, and reported statistical analyses of a physical activity outcome measure. Levels of evidence, accounting for methodological quality, were assessed for three types of intervention, five settings, and three target populations. RESULTS: The literature search identified 57 studies: 33 aimed at children and 24 at adolescents. Twenty four studies were of high methodological quality, including 13 studies in children. Interventions that were found to be effective achieved increases ranging from an additional 2.6 minutes of physical education related physical activity to 283 minutes per week of overall physical activity. Among children, limited evidence for an effect was found for interventions targeting children from low socioeconomic populations, and environmental interventions. Strong evidence was found that school based interventions with involvement of the family or community and multicomponent interventions can increase physical activity in adolescents. CONCLUSION: Some evidence was found for potentially effective strategies to increase children's levels of physical activity. For adolescents, multicomponent interventions and interventions that included both school and family or community involvement have the potential to make important differences to levels of physical activity and should be promoted. A lack of high quality evaluations hampers conclusions concerning effectiveness, especially among children.

OVERVEKT

1. **De Mello ED, Luft VC, Meyer F. Childhood obesity - Towards effectiveness. J Pediatr (Rio J) 2004;80(3):173-82.**
Abstract: Objective: To review therapeutic approaches to childhood obesity and also its diagnosis and prevention. Sources of data: Searches were performed of scientific papers held on the MEDLINE, Ovid, Highwire and Scielo databases. Keywords utilized were: "childhood obesity" and a variety of combinations of this term with "treatment", "prevention" and "consequence". The search returned papers including review articles, observational studies, clinical trials and consensus statements. Bibliographical references in these articles were also investigated if it was perceived that they were relevant. Data was collected from 1998 to 2003. Summary of the findings: While a number of different Brazilian prevalence studies were found, few gave details of the results of educational programs in our country. Conclusions: Childhood obesity must be prevented through prescriptive diets from birth throughout childhood. Educational programs that might be applicable to primary health care or schools should receive further study.

2. **Kropski JA, Keckley PH, Jensen GL. School-based obesity prevention programs: an evidence-based review. Obesity (Silver Spring) 2008;16(5):1009-18.**
Abstract: OBJECTIVE: This review seeks to examine the effectiveness of school-based programs for reducing childhood overweight or obesity. METHODS AND PROCEDURES: A systematic review of the research literature published since 1990 was conducted to identify experimental or quasi-experimental school-based curricular or environmental preventive interventions, with evaluation>or=6 months after baseline, which reported outcomes in terms of a measure of overweight. RESULTS: Fourteen studies were identified, including one involving a nutrition-only program, two physical activity promotion interventions and eleven studies combining nutrition and physical activity components. Most studies (n=10) offered weak (grade 2) quality evidence. One study offered strong (grade 4) evidence reducing the odds ratio for overweight in girls only, while four grade 2 studies reported significant improvements in BMI or at-risk-for overweight or overweight prevalence in boys, girls, or both. Twelve studies reported significant improvement in at least one measure of dietary intake, physical activity, and/or sedentary behavior. DISCUSSION: Our ability to draw strong conclusions as to the efficacy of school-based obesity prevention programs is limited by the small number of published studies and by methodological concerns. Qualitative analysis suggests programs grounded in social learning may be more appropriate for girls, while structural and environmental interventions enabling physical activity may be more effective for boys. High-quality evaluation protocols should be considered essential components of future programs.

3. **Lissau I. Prevention of overweight in the school arena. Acta Paediatr 2007;96:12-8.**
Abstract: This paper gives an overview of studies with the main purpose to intervene against obesity in children at the school arena. Through databases and Cochrane reviews, 14 studies fulfilled the criteria for inclusion. Most of the studies are American and none were performed in Scandinavia. The European

studies were performed in Germany and in the United Kingdom. The studies, which had a significant effect on overweight were 'Dance for Health', 'Planet Health', 'San Jose Study', 'Kiel Obesity Prevention Study', 'Healthy Schools' programme, 'El Paso Catch', and 'Medical College of Georgia FitKid Project'. The studies differ greatly in regards to age group, type of and length of intervention and type and amount of actions. Furthermore, the measures used to evaluate the effect differed. It seems to be important to use several measures of obesity in order to accurately detect a possible effect. In conclusion, half of the studies were successful and had an effect on either overweight or obesity. Much more research is needed in order to effectively prevent paediatric obesity.

4. **Shaya FT, Flores D, Gbarayor CM, Wang J. School-based obesity interventions: a literature review. J Sch Health 2008;78(4):189-96.**
Abstract: BACKGROUND: Childhood obesity is an impending epidemic. This article is an overview of different interventions conducted in school settings so as to guide efforts for an effective management of obesity in children, thus minimizing the risk of adult obesity and related cardiovascular risk. METHODS: PubMed and OVID Medline databases were searched for school-based obesity interventions with anthropometric measures in children and adolescents between the ages of 7 and 19 years from June 1986 to June 2006. Studies were reviewed by duration, type of intervention, and defined qualitative and quantitative measures, resulting in a yield of 51 intervention studies. RESULTS: The interventions ranged from 4 weeks in length to as long as 8 continuing years. In total, 15 of the intervention studies exclusively utilized physical activity programs, 16 studies exclusively utilized educational models and behavior modification strategies, and 20 studies utilized both. In addition, 31 studies utilized exclusively quantitative variables like body mass indices and waist-to-hip ratios to measure the efficacy of the intervention programs, and another 20 studies utilized a combination of quantitative and qualitative measures that included self-reported physical activity and attitude toward physical activity and the tested knowledge of nutrition, cardiovascular health, and physical fitness. A total of 40 studies achieved positive statistically significant results between the baseline and the follow-up quantitative measurements. CONCLUSIONS: No persistence of positive results in reducing obesity in school-age children has been observed. Studies employing long-term follow-up of quantitative and qualitative measurements of short-term interventions in particular are warranted.

5. **Small L, Anderson D, Melnyk BM. Prevention and early treatment of overweight and obesity in young children: a critical review and appraisal of the evidence. Pediatr Nurs 2007;33(2):149-52,155-61, 127.**

6. **Stuart WP, Broome ME, Smith BA, Weaver M. An integrative review of interventions for adolescent weight loss. J Sch Nurs 2005;21(2):77-85.**
Abstract: The number of overweight adolescents aged 12-19 has tripled during the past 2 decades. Although health risks associated with obesity in adolescence and adulthood are well documented in the literature, little is known about the efficacy of interventions to reduce health risks of this group. The purpose of this study was to conduct a systematic review to describe the scope, domain, and effectiveness of weight loss interventions with overweight adolescents. English-language journal articles published in nursing, psychology, nutrition, medicine, and exercise physiology literature between 1980 and 2003 were retrieved. Seventeen studies using comparison or control groups and interventions directed at reductions in adolescent body mass index or body weight were identified. Descriptive findings of those studies are reported here. Five specific limitations of these studies emerged from the analysis of the interventions: the study findings have not been validated by replication, the samples failed to include adequate representation of Latino and African American male participants, family participation in studies has been inconsistent and infrequent, there is a need for attention to study dropout rates (with attrition reported as high as 45%), and there is a need for conceptual frameworks to guide the studies.

7. **Summerbell CD, Waters E, Edmunds L, Kelly Sarah AM, Brown T, Campbell KJ. Interventions for preventing obesity in children. Cochrane Database of Systematic Reviews 2005, Issue 3. Art. No.: CD001871. DOI: 10.1002/14651858.CD001871.pub2.**
Abstract: BACKGROUND: Obesity prevention is an international public health priority. The prevalence of obesity and overweight is increasing in child populations throughout the world, impacting on short and long-term health. Obesity prevention strategies for children can change behaviour but efficacy in terms of preventing obesity remains poorly understood. OBJECTIVES: To assess the effectiveness of interventions designed to prevent obesity in childhood through diet, physical activity and/or lifestyle and social support. SEARCH STRATEGY: MEDLINE, PsycINFO, EMBASE, CINAHL and CENTRAL were searched from 1990 to February 2005. Non-English language papers were included and experts contacted. SELECTION CRITERIA: Randomised controlled trials and controlled clinical trials with minimum duration twelve weeks. DATA COLLECTION AND ANALYSIS: Two reviewers independently extracted data and assessed study quality. MAIN RESULTS: Twenty-two studies were included; ten long-term (at least 12 months) and twelve short-term (12 weeks to 12 months). Nineteen were school/preschool-based interventions, one was a community-based intervention targeting low-income families, and two were family-based interventions targeting non-obese children of obese or overweight parents.Six of the ten long-term studies combined dietary education and physical activity interventions; five resulted in no difference in overweight status

between groups and one resulted in improvements for girls receiving the intervention, but not boys. Two studies focused on physical activity alone. Of these, a multi-media approach appeared to be effective in preventing obesity. Two studies focused on nutrition education alone, but neither were effective in preventing obesity.Four of the twelve short-term studies focused on interventions to increase physical activity levels, and two of these studies resulted in minor reductions in overweight status in favour of the intervention. The other eight studies combined advice on diet and physical activity, but none had a significant impact.The studies were heterogeneous in terms of study design, quality, target population, theoretical underpinning, and outcome measures, making it impossible to combine study findings using statistical methods. There was an absence of cost-effectiveness data. AUTHORS' CONCLUSIONS: The majority of studies were short-term. Studies that focused on combining dietary and physical activity approaches did not significantly improve BMI, but some studies that focused on dietary or physical activity approaches showed a small but positive impact on BMI status. Nearly all studies included resulted in some improvement in diet or physical activity. Appropriateness of development, design, duration and intensity of interventions to prevent obesity in childhood needs to be reconsidered alongside comprehensive reporting of the intervention scope and process. INTERVENTIONS FOR PREVENTING OBESITY IN CHILDREN: The current evidence suggests that many diet and exercise interventions to prevent obesity in children are not effective in preventing weight gain, but can be effective in promoting a healthy diet and increased physical activity levels.Being very overweight (obese) can cause health, psychological and social problems for children. Children who are obese are more likely to have weight and health problems as adults. Programmes designed to prevent obesity focus on modifying one or more of the factors considered to promote obesity.This review included 22 studies that tested a variety of intervention programmes, which involved increased physical activity and dietary changes, singly or in combination. Participants were under 18 and living in Asia, South America, Europe or North America. There is not enough evidence from trials to prove that any one particular programme can prevent obesity in children, although comprehensive strategies to address dietary and physical activity change, together with psycho-social support and environmental change may help. There was a trend for newer interventions to involve their respective communities and to include evaluations.Future research might usefully assess changes made on behalf of entire populations, such as improvements in the types of foods available at schools and in the availability of safe places to run and play, and should assess health effects and costs over several years.The programmes in this review used different strategies to prevent obesity so direct comparisons were difficult. Also, the duration of the studies ranged from 12 weeks to three years, but most lasted less than a year

SPISEFORSTYRRELSER

1. **Dalle GR. School-based prevention programs for eating disorders: achievements and opportunities. Disease Management and Health Outcomes 2003;11:579-93.**
Abstract: Scarce resources are dedicated to research on school-based prevention programs for eating disorders. Despite this, however, recent years have witnessed an abundance of publications on controlled prevention trials. We now have a cumulative body of knowledge available to guide future developments in the prevention of eating disorders. Medline and PsychInfo were searched for the years 1985-2002 to find relevant publications for this review. Nineteen universal and ten targeted school-based prevention programs were identified and then evaluated. The results obtained by the controlled trials evaluated reassure parents, teachers, and stakeholders in the healthcare sector that school-based eating disorder prevention programs do not have harmful effects on student attitudes and behaviors. Targeted prevention programs have obtained promising results in high-risk individuals. Other positive effects have been obtained using an interactive format. Universal prevention programs have unfortunately been disappointing in their ability to change unhealthy behaviors. Results can be improved by gaining a greater understanding of those risk factors which are most strongly linked to eating disorders and most susceptible to change. A broad range of interventions is needed for further consideration. Promising results from the field of eating disorder prevention and from modern risk factor research could build a new generation of universal prevention trials for eating disorders without the methodological limitations seen in the current literature and with real effectiveness in achieving the goal of reducing the prevalence of eating disorders in the general population.

2. **Seierstad A, Langengen IW, Nylund HK, Reinar LM, Jamtvedt G. Forebygging og behandling av spiseforstyrrelser. Rapport fra Kunnskapssenteret nr. 13-2004. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2004.**
http://www.kunnskapssenteret.no/Publikasjoner/1519.cms
Abstract: Denne rapporten baseres på seks systematiske oversikter og oppsummerer forskning om effekt av forebyggende og behandlende tiltak mot spiseforstyrrelser. Kunnskapsoppsummeringen skal være med og danne et pålitelig beslutningsgrunnlag ved anbefaling og utøvelse av praksis.

FORELDREVEILEDNING

1. **Akinbami LJ, Cheng TL, Kornfeld D. A review of teen-tot programs: comprehensive clinical care for young parents and their children. Adolescence 2001;36(142):381-93.**
Abstract: Comprehensive clinical programs for teenage mothers and their children, also known as teen-tot programs, have been a promising intervention to improve outcomes of teenage childbearing and parenting. However, much remains unknown regarding the efficacy of such programs. We reviewed four published evaluations of programs that provided medical care, counseling, contraception, guidance for parenting, and assistance with staying in school. The evaluations reported moderate success in preventing repeat pregnancies, helping teen mothers continue their education, and improving teen and infant health over 6 to 18 months. However, the evaluations had limitations that may have reduced or accentuated observed effectiveness. Teen-tot programs will continue to face the challenges of sustaining adequate long-term interventions and evaluations, and reducing the high attrition rate among program participants. It is concluded that increased support and funding for teen-tot programs and more complete evaluations are warranted.

2. **Dennis CL, Creedy D. Psychosocial and psychological interventions for preventing postpartum depression. Cochrane Database Syst Rev 2004, Issue 4. Art. No.: CD001134. DOI: 10.1002/14651858.CD001134.pub2.**
Abstract: BACKGROUND: The cause of postpartum depression remains unclear, with extensive research suggesting a multi-factorial aetiology. However, epidemiological studies and meta-analyses of predictive studies have consistently demonstrated the importance of psychosocial and psychological variables. While interventions based on these variables may be effective treatment strategies, theoretically they may also be used in pregnancy and the early postpartum period to prevent postpartum depression. OBJECTIVES: Primary: to assess the effect of diverse psychosocial and psychological interventions compared with usual antepartum, intrapartum, or postpartum care to reduce the risk of developing postpartum depression. Secondary: to examine (1) the effectiveness of specific types of psychosocial and psychological interventions, (2) the effectiveness of individual versus group-based interventions, (3) the effects of intervention onset and duration, and (4) whether interventions are more effective in women selected with specific risk factors. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group trials register (January 27 2004), the Cochrane Depression, Anxiety and Neurosis Group trials register (October 2003), the Cochrane Central Register of Controlled Trials (October 2003), MEDLINE (1966 to 2004), EMBASE (1980 to 2004) and CINAHL (1982 to 2004). We scanned secondary references and contacted experts in the field. SELECTION CRITERIA: All published and unpublished randomised controlled trials of acceptable quality comparing a psychosocial or psychological intervention with usual antenatal, intrapartum, or postpartum care. DATA COLLECTION AND ANALYSIS: Both reviewers participated in the evaluation of methodological quality and data extraction. Additional information was sought from several trial researchers. Results are presented using relative risk for categorical data and weighted mean difference for continuous data. MAIN RESULTS: Fifteen trials, involving over 7600 women, were included. Overall, women who received a psychosocial intervention were equally likely to develop postpartum depression as those receiving standard care (relative risk (RR) 0.81, 95% confidence interval (CI) 0.65 to 1.02). One promising intervention appears to be the provision of intensive postpartum support provided by public health nurses or midwives (RR 0.68, 95% CI 0.55 to 0.84). Identifying mothers 'at-risk' assisted the prevention of postpartum depression (RR 0.67, 95% CI 0.51 to 0.89). Interventions with only a postnatal component appeared to be more beneficial (RR 0.76, 95% CI 0.58 to 0.98) than interventions that also incorporated an antenatal component. While individually-based interventions may be more effective (RR 0.76, 95% CI 0.59 to 1.00) than those that are group-based, women who received multiple-contact intervention were just as likely to experience postpartum depression as those who received a single-contact intervention. REVIEWERS' CONCLUSIONS: Overall psychosocial interventions do not reduce the numbers of women who develop postpartum depression. However, a promising intervention is the provision of intensive, professionally-based postpartum support.

3. **Doughty, C. Effective strategies for promoting attachment between young children and their parents. Christchurch: New Zealand Health Technology Assessment (NZHTA), 2007.**
Abstract: Author's objectives: This Technical Brief aimed to systematically identify and appraise international evidence on the effectiveness of specific interventions for promoting attachment between young children and their parents. Author's conclusions: Changes reported in attachment security were generally in a direction consistent with attachment theory; however effect sizes were relatively modest. Less broad interventions that target sensitive maternal behaviour are among those that are the most successful both at improving insensitive parenting and promoting better infant attachment security. Results suggest that the most effective interventions do not always use a large number of sessions with families, in fact fewer contacts may be more effective. There is good evidence supporting the use of behaviourally focused interventions and these types of interventions, with or without video feedback are effective regardless of the presence or absence of multiple problems in the family. Highly intensive interventions with numerous

sessions focusing on sensitivity, representation and support may not be as effective as less intensive approaches. Overall, evidence from primary and secondary research shows that a variety of types of intervention for enhancing maternal sensitivity and to a lesser extent attachment security are effective, with nearly all of the studies appraised in this review involving the use of some form of home visiting to deliver the intervention.

4. **Levitt C, Shaw E, Wong S, Kaczorowski J, McMaster University Postpartum Research Group. Systematic review of the literature on postpartum care: effectiveness of interventions for smoking relapse prevention, cessation, and reduction in postpartum women. Birth 2007;34(4):341-7.**
Abstract: BACKGROUND: Many women stop smoking during pregnancy and relapse again either later in the pregnancy or in the postpartum period. Smoking is harmful to mothers, and environmental tobacco smoke is harmful for children. This systematic review examined the published evidence for the effectiveness of postpartum interventions that prevent relapse (current persons who have stopped but start smoking again), improve cessation rates (current smokers who stop smoking), and reduce smoking (number of cigarettes smoked per day) in postpartum women. METHODS: MEDLINE, CINAHL, PsycINFO, and the Cochrane Library were searched for randomized controlled trials of interventions initiated from immediately after birth to 1 year in postpartum women. The initial literature search was done in 1999 and enhanced in 2003 and 2005. Randomized controlled trials that examined relapse prevention, smoking cessation, or smoking reduction interventions in the postpartum period were reviewed in this report. Data were extracted in a systematic manner, and the quality of each study was reviewed. RESULTS: Five papers were published based on three trials for which data were extracted and summarized. Our review of these trials showed no statistically significant benefits of advice materials and counseling interventions in hospital (Vancouver), pediatricians' offices (Portland), or child health centers (Stockholm) on relapse prevention, cessation rates, or smoking reduction in the postpartum period. Although the interventions had little effect on the major smoking outcomes, some positive attitudinal and knowledge changes were reported. CONCLUSION: This review found no evidence from the randomized controlled trial literature to date to support implementing postpartum smoking cessation interventions, such as providing advice materials and counseling, insofar as they were delivered in the trials reviewed.

5. **Lumley J, Austin MP, Mitchell C. Intervening to reduce depression after birth: a systematic review of the randomized trials. Int J Technol Assess Health Care 2004;20(2):128-44.**
Abstract: A systematic review and meta-analysis of randomized trials of nonpharmaceutical and nonhormonal interventions to reduce postnatal depression was carried out to summarize the effectiveness of interventions grouped in terms of the nature and timing of the intervention and whether the trial population was universal, selective, or indicated.

6. **Priest N, Roseby R, Waters E, Polnay A, Campbell R, Spencer N, et al. Family and carer smoking control programmes for reducing children's exposure to environmental tobacco smoke. Cochrane Database of Systematic Reviews 2008, Issue 4. Art. No.: CD001746. DOI: 10.1002/14651858.CD001746.pub2.**
Abstract: BACKGROUND: Children's exposure to other people's cigarette smoke (environmental tobacco smoke, or ETS) is associated with a range of adverse health outcomes for children. Parental smoking is a common source of children's exposure to ETS. Preventing exposure to cigarette smoke in infancy and childhood has significant potential to improve children's health worldwide. OBJECTIVES: To determine the effectiveness of interventions aiming to reduce exposure of children to ETS. SEARCH STRATEGY: We searched the Cochrane Tobacco Addiction Group trials register and conducted additional searches of two health and education databases not included in this specialised register. Date of the most recent search: October 2007. SELECTION CRITERIA: Interventions tested using controlled trials with or without random allocation were included in this review if the interventions addressed participants (parents and other family members, child care workers and teachers) involved with the care and education of infants and young children (aged 0-12 years). All mechanisms for reduction of children's environmental tobacco smoke exposure, and smoking prevention, cessation, and control programmes were included. These include smoke-free policies and legislation, health promotion, social-behavioural therapies, technology, education and clinical interventions. DATA COLLECTION AND ANALYSIS: Two authors independently assessed studies and extracted data. Due to heterogeneity of methodologies and outcomes, no summary measures were possible and results were synthesised using narrative summaries. MAIN RESULTS: Thirty-six studies met the inclusion criteria. Four interventions were targeted at populations or community settings, 16 studies were conducted in the 'well child' healthcare setting and 13 in the 'ill child' healthcare setting. Two further studies conducted in paediatric clinics do not make clear whether the visits are to well or ill children, and another includes both well and ill child visits. Nineteen of these studies are from North America and 12 in other high income countries. Five studies are from low- or middle-income countries. In 17 of the 36 studies there was reduction of ETS exposure for children in both intervention and comparison groups. In only 11 of the 36 studies was there a statistically significant intervention effect. Four of these successful studies employed intensive counselling interventions targeted to smoking parents. We found little evidence of difference in effectiveness of interventions between the well infant, child respiratory illness and other child illness settings as contexts for parental smoking cessation interventions. One

successful intervention was in the school setting, targeting the ETS exposure of children from smoking fathers. AUTHORS' CONCLUSIONS: While brief counselling interventions have been identified as successful ifor adults when delivered by physicians, this cannot be extrapolated to adults as parents in child health settings. However, there is limited support for more intensive counselling interventions for parents in such contexts. There is no clear evidence of differences between the respiratory, non-respiratory ill child, well child and peripartum settings as contexts for reduction of children's ETS exposure. CAN INTERVENTIONS FOR PARENTS AND PEOPLE CARING FOR CHILDREN REDUCE CHILDREN'S EXPOSURE TO TOBACCO SMOKE: Currently the evidence does not determine which interventions are most effective for decreasing parental smoking and preventing exposure to tobacco smoke in childhood. Children exposed to cigarette smoke are at greater risk of lung problems, infections and serious complications including sudden infant death syndrome. Preventing exposure to cigarette smoke in infancy and childhood might therefore significantly improve children's health worldwide. Although several interventions, including parental education and counselling programmes, have been used to try to reduce children's tobacco smoke exposure, their effectiveness has not been clearly demonstrated. The review was unable to determine that one intervention reduced parental smoking and child exposure more effectively than others, although four studies were identified that reported intensive counselling provided in clinical settings was effective.

7. **Thomas RE, Baker Philip RA, Lorenzetti D. Family-based programmes for preventing smoking by children and adolescents. Cochrane Database of Systematic Reviews 2007, Issue 1. Art. No.: CD004493. DOI: 10.1002/14651858.CD004493.pub2.**
Abstract: BACKGROUND: There is evidence that children's decisions to smoke are influenced by family and friends. OBJECTIVES: To assess the effectiveness of interventions to help family members to strengthen non-smoking attitudes and promote non-smoking by children and other family members. SEARCH STRATEGY: We searched 14 electronic bibliographic databases, including the Cochrane Tobacco Addiction Group specialized register, MEDLINE, EMBASE, PsycINFO and CINAHL. We also searched unpublished material, and the reference lists of key articles. We performed both free-text Internet searches and targeted searches of appropriate web sites, and we hand-searched key journals not available electronically. We also consulted authors and experts in the field. The most recent search was performed in November 2007. SELECTION CRITERIA: Randomized controlled trials (RCTs) of interventions with children (aged 5-12) or adolescents (aged 13-18) and family members to deter the use of tobacco. The primary outcome was the effect of the intervention on the smoking status of children who reported no use of tobacco at baseline. Included trials had to report outcomes measured at least six months from the start of the intervention. DATA COLLECTION AND ANALYSIS: We reviewed all potentially relevant citations and retrieved the full text to determine whether the study was an RCT and matched our inclusion criteria. Two authors independently extracted study data and assessed them for methodological quality. The studies were too limited in number and quality to undertake a formal meta-analysis, and we present a narrative synthesis. MAIN RESULTS: We identified 22 RCTs of family interventions to prevent smoking. We identified six RCTs in Category 1 (minimal risk of bias on all counts); ten in Category 2 (a risk of bias in one or more areas); and six in Category 3 (risks of bias in design and execution such that reliable conclusions cannot be drawn from the study).Considering the sixteen Category 1 and 2 studies together: (1) four of the nine that tested a family intervention against a control group had significant positive effects, but one showed significant negative effects; (2) one of the five RCTs that tested a family intervention against a school intervention had significant positive effects; (3) none of the seven that compared the incremental effects of a family plus a school programme to a school programme alone had significant positive effects; (4) the one RCT that tested a family tobacco intervention against a family non-tobacco safety intervention showed no effects; and (5) the trial that used general risk reduction interventions found the group which received the parent and teen interventions had less smoking than the one that received only the teen intervention, and in the trial of CD-ROMs to reduce alcohol use, both groups which received the alcohol reduction intervention had less smoking than the control. In neither trial was there a tobacco intervention, but tobacco outcomes were measured.For the included trials the amount of implementer training and the fidelity of implementation are related to positive outcomes, but the number of sessions is not. AUTHORS' CONCLUSIONS: Some well-executed RCTs show family interventions may prevent adolescent smoking, but RCTs which were less well executed had mostly neutral or negative results. There is thus a need for well-designed and executed RCTs in this area. DOES PREVENTING CHILDREN FROM STARTING TO SMOKE REDUCE THE NUMBER OF PEOPLE DAMAGING THEIR HEALTH BY SMOKING: Children and adolescents' likelihood of starting to smoke may be influenced by the behaviour of their families, and it may be possible to help family members strengthen non-smoking attitudes and promote non-smoking in children and other family members. Some high quality studies show that family interventions may help to prevent adolescent smoking, but less well-conducted trials had mostly neutral or negative findings. How well the programme staff are trained and how well they deliver the programme may be related to effectiveness, but the number of sessions in the programme does not seem to make a difference

TIDLIG INTERVENSJON

1. **Brunton G, Thomas H. The effectiveness of public health strategies to reduce or prevent the incidence of low birth weight in infants born to adolescents: a systematic review. Hamilton, ON, Canada: City of Hamilton, Social and Public Health Services Division. Effective Public Health Practice Project, 2001.**
Abstract: Author's objectives: To determine the effectiveness of public health, health promotion, and primary care strategies to reduce or prevent the incidence of low birth weight in infants born to adolescents up to 19 years of age. Author's conclusions: Some home- and clinic-based interventions that focus on health education and support strategies directed to pregnant adolescents can have significant effects on reducing low birth weight in infants. More rigorous research, including studies that benefit from the adolescents' input, is needed to determine the appropriate philosophy underlying effective interventions, as well as to evaluate adolescent-specific interventions.

2. **Hodnett ED, Fredericks S. Support during pregnancy for women at increased risk of low birthweight babies. Cochrane Database of Systematic Reviews 2003, Issue 3. Art. No.: CD000198. DOI: 10.1002/14651858.CD000198.**
Abstract: BACKGROUND: Studies consistently show a relationship between social disadvantage and low birthweight. Many countries have programs offering special assistance to women thought to be at risk for giving birth to a low birthweight infant. These programs may include advice and counseling (about nutrition, rest, stress management, alcohol and recreational drug use), tangible assistance (eg transportation to clinic appointments, help with household responsibilities), and emotional support. The programs may be delivered by multidisciplinary teams of health professionals, by specially trained lay workers, or by a combination of lay and professional workers. OBJECTIVES: The objective of this review was to assess the effects of programs offering additional social support for pregnant women who are believed to be at risk for giving birth to preterm or low birthweight babies. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group trials register (30 September 2005). SELECTION CRITERIA: Randomized trials of additional support during at-risk pregnancy by either a professional (social worker, midwife, or nurse) or specially trained lay person, compared to routine care. Additional support was defined as some form of emotional support (eg counseling, reassurance, sympathetic listening) and information or advice or both, either in home visits or during clinic appointments, and could include tangible assistance (eg transportation to clinic appointments, assistance with the care of other children at home). DATA COLLECTION AND ANALYSIS: We independently assessed trial quality and extracted data. Double data entry was performed. We contacted study authors to request additional information. MAIN RESULTS: Eighteen trials, involving 12,658 women, were included. The trials were generally of good to excellent quality, although three used an allocation method likely to introduce bias. Programs offering additional social support for at-risk pregnant women were not associated with improvements in any perinatal outcomes, but there was a reduction in the likelihood of caesarean birth and an increased likelihood of elective termination of pregnancy. Some improvements in immediate maternal psychosocial outcomes were found in individual trials. AUTHORS' CONCLUSIONS: Pregnant women need the support of caring family members, friends, and health professionals. While programs which offer additional support during pregnancy are unlikely to prevent the pregnancy from resulting in a low birthweight or preterm baby, they may be helpful in reducing the likelihood of caesarean birth. SUPPORT DURING PREGNANCY FOR WOMEN AT INCREASED RISK OF LOW BIRTHWEIGHT BABIES: Programs offering additional support during pregnancy were not effective in reducing number of babies born too early and babies with low birthweights.Babies born to mothers in socially disadvantaged situations are more likely to be small and so have health problems. Programs providing emotional support, practical assistance, and advice have been offered in addition to usual care. Women who received additional support during pregnancy were less likely to have a caesarean birth and some were more likely to choose to terminate the pregnancy. However, the additional support did not reduce the likelihood of giving birth too early or that the baby was smaller than expected. There may be benefits in terms of lower anxiety and feeling better about their care.

3. **Kakad M. The effect of early intervention programmes for families at risk, on the psychiatric outcomes of small children aged 3 and under. Oslo: Nasjonalt kunnskapssenter fra helsetjenesten, 2006. Rapport fra Kunnskapssenteret nr 04 - 2006.**
http://www.kunnskapssenteret.no/Publikasjoner/1034.cms
Abstract: Background: Norwegian authorities wish to approach small children in families at risk more systematically and proactively. This summary of available research will be a part of a larger report that evaluates one of the initiatives in the Government's Action plan for child and adolescent mental health. Main question: What is the effect of early intervention on the mental health of small children (aged three and under) in families at risk? Method: We searched for systematic reviews and health technology assessments of randomised controlled trials of early interventions evaluated and recommended internationally. We looked for reviews that attempted to assess the effect on mental health in small children

aged three years or less in families at risk. Results: We included five systematic reviews, but none of them evaluated mental health outcomes in small children. Based on these systematic reviews, we identified 11 relevant randomised trials, most of which reported cognitive or behavioural outcomes. Population, intervention and outcomes varied a lot between these studies. Conclusion: This summary shows that there is currently little systematic research available on the effect of early interventions on the mental health of small children aged three years or less. Thus it is not possible to conclude what effect early interventions may have on the mental health of small children. We found some evidence that developmental programs aimed at teenage mothers and their children can benefit the children's cognitive development. The research also indicates that educational programs for parents can improve behaviour for children with behavioural problems, but this does not include autistic children.

4. **Kelsey A, Robinson M. 'But they don't see the whole child. Br J Gen Pract 1999;49(438):4-5.**

5. **Reinar LM, Kornør H, Langengen IW, Markestad T. Tiltak for oppfølging av for tidlig fødte barn. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2006. Rapport fra Kunnskapssenteret nr 07 - 2006.**
http://www.kunnskapssenteret.no/Publikasjoner/1029.cms
Abstract: Bakgrunn: Barn som blir født for tidlig, er mer utsatt for sykdom, fysiske funksjonshemninger, atferdsproblemer og andre psykiske vansker og lærevansker enn barn født til rett tid. Problemstilling: Hva er effekten av forebyggende tiltak, tidlig intervensjon og behandling for barn født prematurt, med og uten ulike funksjonshemninger? Hva er effekten av foreldrestøttende tiltak for familier med premature barn? Metode: Vi lette systematisk etter relevante oversikter i flere databaser høsten 2005, og fant seks systematiske oversikter som er oppsummert her. Resultater: • Det er gjort få studier av hvordan tidlig oppfølging og målrettede tiltak påvirker de premature barna senere i livet. Resultatene her er basert på dokumentasjonsgrunnlag av moderat til lav kvalitet. • Såkalt Developmental care på nyfødtavdeling kan bedre spiseresultater på kort sikt for premature barn. Barna hadde også noe mindre behov for hjelp til å puste og hadde totalt sett litt kortere sykehusopphold. Disse tiltakene (som NIDCAP) bedret også utviklingsnevrologiske resultater ved 12 og 24 måneders alder.
• Alderstilpassede tiltak er nyttig for barn med risiko for å utvikle funksjonshemninger, indikerer resultatene. Ulike stressreduserende tiltak på nyfødtavdeling var gunstig for ernæring og respirasjon. Spesifikke og generelle utviklingsprogrammer hadde positiv effekt på motorisk utvikling. Bedringen var større når tiltakene ble satt i gang tidlig. • Kengurumetoden var trygg for premature og kan være gunstig for ammingen hos en del barn, men det er uklart om metoden bedrer vektutviklingen hos barn. • Vi vet ikke sikkert om massasje er nyttig for premature barn, fordi kvaliteten på de relevante enkeltstudiene var mangelfull. Konklusjon: Vi kan ikke konkludere med særlig tyngde for noen av tiltakene som er vurdert i denne rapporten. Så å si alle de systematiske oversiktene beskrev mangel på relevante og pålitelige studier. Det betyr at det er store kunnskapshull på feltet.

6. **Wiggins M, Oakley A, Roberts I, Turner H, Rajan L, Austerberry H, et al. The Social Support and Family Health Study: a randomised controlled trial and economic evaluation of two alternative forms of postnatal support for mothers living in disadvantaged inner-city areas. Health Technol Assess 2001;8(32):iii-iix.**
Abstract: OBJECTIVES: To determine whether increased postnatal support could influence maternal and child health outcomes. DESIGN: This was a randomised controlled trial comparing maternal and child health outcomes for women offered either of the support interventions with those for control women receiving standard services only. Outcome data were collected through questionnaires distributed 12 and 18 months postrandomisation. Process data were also collected. There was also an integral economic evaluation. SETTING AND PARTICIPANTS: Women living in deprived enumeration districts in selected London boroughs were eligible for the trial if they gave birth between 1 January and 30 September 1999. RESULTS: The 731 participants were found to be well matched in terms of socio-economic characteristics and health and support variables (14% of the participants were non-English speaking). Response rates at the two follow-up points were 90% and 82%. At both points there were no differences that could not be attributed to chance on the primary outcomes of maternal depression, child injury or maternal smoking. At the first follow-up, there was reduced use of general practitioners by support health visitor (SHV) children, but increased use of NHS health visitors and social workers by mothers. At the second follow-up, both community group support (CGS) and SHV mothers had less use of midwifery services (fewer were pregnant), and SHV mothers were less worried about their child's health and development. Uptake of the CGS intervention was low: 19%, compared with 94% for the SHV intervention. Satisfaction with the intervention among women in the SHV group was high. Based on the assumptions and conditions of the costing methods, the economic evaluation found no net economic cost or benefit of choosing either of the two interventions. CONCLUSIONS: There was no evidence of impact on the primary outcomes of either intervention. The SHV intervention was popular with women, and was associated with improvement in some of the secondary outcomes. This suggests that greater emphasis on the social support role of health visitors could improve some measures of family well-being. Possible areas for future research include a systematic review of social support and its effect on health; developing and testing other postnatal models of support that match more closely the age of the baby and the changing patterns of mothers' needs; evaluating other strategies for mobilising 'non-professional' support; developing and testing more culturally specific support interventions; developing more culturally appropriate standardised measures of

health outcomes; providing longer term follow-up of social support interventions; and exploring the role of social support on the delay in subsequent pregnancy.

BARSELGRUPPER

1. **Wade K, Cava M, Douglas C, Feldman L, Irving H, O'Brien M A, Sims-Jones N, Thomas H. A systematic review of the effectiveness of peer/paraprofessional 1:1 interventions targeted towards mothers (parents) of 0-6 year old children in promoting positive maternal (parental) and/or child health/developmental outcomes. Dundas, ON, Canada: Ontario Ministry of Health, Region of Hamilton-Wentworth, Social and Public Health Services Division. Effective Public Health Practice Project, 1999.**
Abstract: Author's objectives: To assess the evidence for the effectiveness of peer and paraprofessional one-to-one (1:1) interventions targeted towards mothers (parents) of 0 to 6 year old children in promoting positive maternal (parental) and/or child health and developmental outcomes. Author's conclusions: Peer/paraprofessional 1:1 interventions can have a positive impact on child development and parent child interaction, particularly when the intervention is of high intensity beginning in the antenatal period and the peer/paraprofessional intervention is embedded in multifaceted interventions. The evidence is tentative for an impact on health care utilisation, child health status, child abuse and neglect, and maternal psychosocial health status. The long-term effect remains unknown.

BARNEHAGEN/FØRSKOLEN

1. **Bryant D, Vizzard LH, Willoughby M, Kupersmidt J. A review of interventions for preschoolers with aggressive and disruptive behavior. Early Educ Dev 1999;10(1):47-68.**
Abstract: Reviews the research on the efficacy of prevention and intervention programs for aggressive behavior among preschoolers who are otherwise typically developing. Summarizes some key characteristics of 17 studies: (1) model/treatment focus; (2) target sample; (3) design; (4) reliability; (5) treatment description; (6) duration and follow-up; and (7) results (if any).

2. **Mann V, Buffett C, Campbell M, Lee K, O'Donnell R. Effectiveness of day care centre infection control interventions. Dundas, ON, Canada: Ontario Ministry of Health, Region of Hamilton-Wentworth, Social and Public Health Services Division. Effective Public Health Practice Project, 1999.**
Abstract: Objectives: Children attending day care centres have been shown to be at greater risk to acquire infections than children cared for in the family home environment. The challenge to health unit staff is to ensure that the day care centre providers are aware of infection prevention and control practices and that the appropriate measures are taken to protect themselves and the children attending the day care centres. The purpose of this study was to summarize evidence on the effectiveness of infection control interventions in day care centres. Methods: A comprehensive literature search was performed. Retrieved articles were relevance tested, and those that passed were then assessed for quality and the data extracted and synthesized. Results: Of the 13 relevant articles captured, three were rated ‘moderate’ and included in this review. The remaining ten articles rated as ‘weak’, and were excluded. The three interventions identified and found to be effective included: 1) educational sessions with frequent reinforcement of practices, 2) immunization status monitoring and follow-up by public health nurses, and 3) exclusion and treatment policies for controlling Giardia infections. In the third intervention, a strict exclusion and treatment policy, was found to be no more effective in preventing Giardia infections than two other less stringent exclusion and treatment policies. Conclusions: Evidence was found that some public health infection prevention and control practice interventions are effective in day care centre settings.

3. **Zoritch B, Roberts I, Oakley A. Day care for pre-school children. Cochrane Database of Systematic Reviews 2000, Issue 3. Art. No.: CD000564. DOI: 10.1002/14651858.CD000564.**
Abstract: BACKGROUND: The debate about how, where and by whom young children should be looked after is one which has occupied much social policy and media attention in recent years. Mothers undertake most of the care of young children. Internationally, out-of-home day-care provision ranges widely. These different levels of provision are not simply a response to different levels of demand for day-care, but reflect cultural and economic interests concerning the welfare of children, the need to promote mothers' participation in paid work, and the importance of socialising children into society's values. At a time when a

decline in family values is held responsible for a range of social problems, the day-care debate has a special prominence. OBJECTIVES: To quantify the effects of out-of-home day-care for preschool children on educational, health and welfare outcomes for children and their families. SEARCH STRATEGY: Randomised controlled trials of day-care for pre-school children were identified using electronic databases, hand searches of relevant literature, and contact with authors. SELECTION CRITERIA: Studies were included in the review if the intervention involved the provision of non-parental day care for children under 5 years of age, and the evaluation design was that of a randomised or quasi-randomised controlled trial. DATA COLLECTION AND ANALYSIS: A total of eight trials were identified after examining 920 abstracts and 19 books. The trials were assessed for methodological quality. MAIN RESULTS: Day-care increases children's IQ, and has beneficial effects on behavioural development and school achievement. Long-term follow up demonstrates increased employment, lower teenage pregnancy rates, higher socio-economic status and decreased criminal behaviour. There are positive effects on mothers' education, employment and interaction with children. Effects on fathers have not been examined. Few studies look at a range of outcomes spanning the health, education and welfare domains. Most of the trials combined non-parental day-care with some element of parent training or education (mostly targeted at mothers); they did not disentangle the possible effects of these two interventions. The trials had other significant methodological weaknesses, pointing to the importance of improving on study design in this field. All the trials were carried out in the USA. AUTHORS' CONCLUSIONS: Day care has beneficial effect on children's development, school success and adult life patterns. To date, all randomised trials have been conducted among disadvantaged populations in the USA. The extent to which the results are generaliseable to other cultures and socioeconomic groups has yet to be evaluated. DAY CARE FOR PRE-SCHOOL CHILDREN: Day care has beneficial effect on children's development, school success and adult life patterns. However, to date, all randomised trials have been conducted among disadvantaged populations in the USA. The extent to which the results are generaliseable to other cultures and socioeconomic groups has not yet been established.

SKADER/ULYKKER (FOREBYGGING)

1. **Kendrick D, Barlow J, Hampshire A, Stewart-Brown S, Polnay L. Parenting interventions and the prevention of unintentional injuries in childhood: systematic review and meta-analysis. Child Care Health Dev 2008;34(5):682-95.**
Abstract: OBJECTIVES: To evaluate the effectiveness of parenting interventions in preventing unintentional injury and increasing parental safety practices. DATA SOURCES: A range of medical and social science electronic databases were searched. Abstracts from the first to seventh World conferences on injury prevention and control and the journal Injury Prevention were hand searched. REVIEW METHODS: Randomized controlled trials (RCTs), non-randomized controlled trials (non-RCTs) and controlled before and after studies, providing parenting interventions to parents of children aged 0-18 years and reporting injuries, safety equipment or safety practices were included. Studies were selected, data extracted and quality appraised independently by two reviewers. Pooled relative risks were estimated using random effect models. RESULTS: Fifteen studies (11 RCTs) were included, 11 of which were home visiting programmes and two of which were paediatric practice-based interventions. Thirteen studies recruited families at risk of adverse child health outcomes. Intervention arm families had a significantly lower risk of injury (RR 0.82, 95% CI 0.71-0.95), as measured by self-report of medically or non-medically attended injury. Several studies found fewer home hazards, a home environment more conducive to child safety, or a greater number of safety practices in intervention arm families. CONCLUSIONS: Parenting interventions, most commonly provided within the home, using multi-faceted interventions appear to be effective in reducing unintentional child injury. Further research is required to explore the mechanisms by which parenting interventions reduce injury, the features of interventions that are necessary to reduce injury, and their generalizability to different population groups.

2. **NHS Centre for Reviews and Dissemination. Preventing unintentional injuries in children and young adolescents. Eff Health Care 1996;2(5): 1-16.**
Abstract: Background: Accidental injury to children and young adolescents was a major public health problem receiving little attention at national or international level. The prevention of accidents was identified as a key area in Health of the Nation, which set a target of reducing the death rate for adolescents by one third by the year 2005. This review of world literature on the subject of childhood accidents, was commissioned with a view to providing information about the most effective health promotion interventions. Findings: - A Health of the Nation target is to reduce by one third the death rate from unintentional injury in children aged 14 and under by the year 2005. - There is good evidence that the use of cycle helmets and child care seat restraints can reduce serious injury to children involved in road traffic accidents. - Urban road safety measures such as the provision of crossing patrollers, measures to redistribute traffic and improve the safety of individual roads can reduce the rate and severity of childhood accidents. - The use of safety devices in the home such as smoke detectors, child restraint containers and

thermostat control for tap water can reduce the risks of home injuries. Targeting of households at higher risk combined with home visits, education and the free distribution of devices is likely to make the most impact. - Educational programmes by themselves appear to have little effect. However, a number of community programmes which involve local participation and use a broad range of interventions have been effective at reducing childhood injuries from a wide variety of causes. These need to be based on accurate data derived from surveillance systems.

SCREENING

1. **Cuijpers P, Van Straten A, Smits N, Smit F. Screening and early psychological intervention for depression in schools: Systematic review and meta-analysis. Eur Child Adolesc Psychiatry 2006;15(5):300-7.**
Abstract: Depression in children and adolescents is considerably undertreated, and the school may be a good setting for identifying and treating depression. We conducted a meta-analysis of studies in which students were screened for depression, and those with depressive symptoms were treated with a psychological intervention. Only randomised controlled trials were included. Eight studies met the inclusion criteria. Five studies focused on younger children (7-14 years) and three studies were aimed at adolescents (12-19 years). In total 5803 students were screened, of whom 7.2% were included in the intervention studies (95% CI: 7.1-7.3). The 'numbers-needed-to-screen' was 31 (95% CI: 27-32), which means that 31 students had to be screened in order to generate one successfully treated case of depression. The effects of the psychological treatments at post-test were compared to control conditions in the 8 studies comprising 12 contrast groups, with a total of 413 students. The mean effect size was 0.55 (95% CI: 0.35-0.76). There were not enough studies to examine whether specific psychotherapies were superior to other psychotherapies. Although the number of studies is small and their quality is limited, screening and early intervention at schools may be an effective strategy to reduce the burden of disease from depression in children and adolescents. More research on the (negative) effects of these interventions is needed.

2. **Davis A, Bamford J, Wilson I, Ramkalawan T, Forshaw M, Wright S. A critical review of the role of neonatal hearing screening in the detection of congenital hearing impairment. Health Technol Assess (Rockv) 1997;1(10):1-177.**

3. **Fothergill A, Satherley P, Webber I. A systematic review on the effectiveness of school nurse implemented mental health screening available for adolescents in schools. J Psychiatr Ment Health Nurs 2003;10(5):625-6.**

4. **Hviding K. Kartleggingsverktøy og instrumenter for tidlig avdekking av utviklings-, atferds- og psykososiale vansker hos barn 0-6 år. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2005. Rapport fra Kunnskapssenteret nr 10 – 2005.**
http://www.kunnskapssenteret.no/Publikasjoner/1198.cms
Abstract: Om rapporten: Barn og unge er en prioritert gruppe i Opptrappingsplanen for psykisk helse 1999–2008. Det er i dag lite kunnskap om hvilke atferdsformer blant de yngste barna som er forstadier til senere tilpasningsvansker, og hvordan dette kan avdekkes. Denne rapporten er laget for Sosial og helsedirektoratet og er et bidrag i oppfølgingen av opptrappingsplanen. Målet med rapporten er å kartlegge metoder og instrumenter for å oppdage barn med høy risiko for utviklingsavvik i alderen 0–6 år, til bruk ved helsestasjonene. Rapporten legger vekt på metoder brukt i Norge, men også internasjonale metoder er omtalt. Hovedfunn: • Gjennomgangen viser et mangelfullt kunnskapsgrunnlag om metoder som kan brukes i tidlig vurdering av utviklingsavvik hos barn i førskolealderen (0–6 år). • Kartlegging av norske forhold tyder på at det brukes flere ulike metoder. Den regionale variasjonen er stor, kompetansen ved helsestasjonene er ulikt fordelt og mye tyder på at tilfeldigheter avgjør valg av metode. • Det er internasjonal enighet om at eksisterende metoder ikke tilfredsstiller gjeldende kriterier til kartleggingsverktøy for populasjonsscreening. • Å screene førskolebarn for utviklingsvansker og atferdsproblemer reiser etiske spørsmål fordi det ikke er dokumentert at slike program fører til mer nytte enn skade. • Det er behov for forskning om forekomst og årsaksforhold, diagnostiske kriterier og effekter av tiltaket. Om litteraturen: • Det finnes ingen gullstandard for å sammenlikne metoder, og det er få studier med langtidsresultater. • Det stilles vanligvis høyere krav til sensitivitet og spesifisitet for metoder som skal brukes i populasjonsscreening enn flere av metodene kan vise til. • Metoder basert på foreldrenes vurderinger ser ut til å være like hensiktsmessige som mer omfattende kartleggingsverktøy, men de er mindre spesifikke med tanke på videre henvisning.

5. **Jepson R, Clegg A, Forbes C, Lewis R, Sowden A, Kleijnen J. The determinants of screening uptake and interventions for increasing uptake: a systematic review. Health Technol Assess (Rockv) 2000;4(14):1-133.**

6. **Law J, Boyle J, Harris F, Harkness A, Nye C. Screening for speech and language delay: A systematic review of the literature. Health Technol Assess (Rockv) 1998;2(9):vii-179.**
Abstract: Background: This report concerns the identification and treatment of children with primary speech and language delays, that is delays which cannot be attributed to other conditions such as hearing loss or other more general developmental disabilities. Such delays are important because they cause concern to parents, because they are commonly associated with behavioural and other difficulties in the pre-school period and because they constitute a risk factor for subsequent poor school performance, and for a wide range of personal and social difficulties for the individuals concerned. It is unclear, given the current state of knowledge, whether such delays represent varying levels of a single condition or a number of different conditions with diverse aetiologies. Currently the identification and treatment of speech and language delays fall within the remit of the health services in the early years of life and most health trusts have in place informal procedures for identifying such delays. The educational services and those responsible for providing nursery and child-care services also have a considerable role to play in the process of identification and management of these children. This review aims to provide the information needed to help decide whether universal screening for speech and language delays should be implemented within the NHS. Objectives: Four domains (prevalence, natural history, intervention and screening) were identified as being key to a review of screening issues, with the following objectives being stated: to undertake a systematic review of research into the value of screening and intervention for speech and language delays in children up to the age of 7 years; to identify priority areas in need of further investigation; to provide evidence-based direction for the future provision of services. Methods: The review was carried out using structured guidelines for systematic reviews. These are described in detail in the full report. Results: Prevalence: The number of potential cases of primary speech and language delay is high, with a median figure of 5.95% reported for delays in either speech or language. There has been little attempt to tie this evidence into prediction of subsequent case status, and there is little published evidence to support the perception that either the total number of children with language delay declines in real terms across the age range, or that prevalence has been rising over recent years. Natural history: The natural history data indicate that a substantial proportion of children identified on the basis of expressive delay alone are likely to have difficulties which resolve spontaneously in the pre-school period. However, the data do not, at this stage, make it possible to predict at the time of identification, which of the children with expressive delay are likely to have persistent problems. A poorer prognosis has been consistently identified for children with expressive/receptive delays. The picture for older children is clouded by the lack of evidence from samples that have received no additional educational or therapeutic support. Nonetheless it is clear from follow-up studies of treated samples that children identified as having language difficulties in the first year of primary school are likely to have difficulties which persist through to secondary school. Intervention: Results from randomised controlled trials (RCTs) and quasi-experimental designs reveal positive and statistically significant effects of intervention relative to untreated controls in all areas of speech and language skills. Comparable results for direct (clinician-administered) and indirect treatment were observed in the case of expressive language. In contrast, direct intervention was more effective in the case of speech, whereas indirect intervention was more effective in the case of receptive language. Data from the single-subject experimental designs were synthesised and provide confirmatory evidence for the positive effects of intervention. The data in particular provide evidence for the generalisation of treatment effects. However, the data reviewed do not provide information about long-term outcomes of intervention, nor of the likelihood of intervention reducing prevalence in a given population. Similarly, it is not possible to draw conclusions about the effects of subject variables such as socio-economic status or age upon the relative value of interventions. Screening: The screening evidence indicates that, although a considerable number of assessments have been shown to perform adequately in terms of their productivity, few studies compare the performance of two or more screening tests when applied to one population, nor do they compare single screening measures across different populations. It is difficult, therefore, to make judgements about the relative value of different procedures. In general, specificity is higher than sensitivity, suggesting that it is easier to determine who is not a case than to establish who is. Parent-focused measures appear to be as useful as specific tests of child behaviour. Interpretation is further complicated by the considerable variation in the cut-offs adopted on the range of reference 'gold-standard' measures, suggesting that there remains considerable disagreement as to what proportion of the population should be considered cases. There have been no explicit attempts to benchmark the target population in terms of prevalence estimates, the prediction of case status or the impact of the intervention. Conclusions: It is clear that early speech and language delay should be a cause for concern to those involved with child health surveillance because of the problems for the individual child, because it may indicate other co- morbid conditions such as hearing loss, developmental and behavioural difficulties, and because of the implications it may have for literacy and socialisation in school. The fact that there is not sufficient evidence to merit the introduction of universal screening does not imply that speech and language delay should not be identified, for example, by less formal methods. Implications for policy: The review suggests that more attention might be shown to the role of parents in identifying children with speech and language delay. Primary-care workers (health visitors, general practitioners, school nurses and nursery staff) should be involved in eliciting parental concerns and in making appropriate observations of children's communication behaviours. This would require formal training in delayed speech and language development and risk factors pertaining to it. Appropriate information would also have to be made available to parents to allow them to play an active role in judging need. Given the reported value of indirect approaches to intervention there is a case for widening the range of professionals able to promote good interactive practice in parents

of young children. Speech and language therapists as a professional group are in a good position to play an active role in disseminating this information and coordinating such services. Children who do not respond to such primary prevention could then be given access to speech and language therapy services and appropriately structured nursery input. Recommendations for research: There are many gaps in the literature, and the review identified a number of research priorities. The impact of speech and language delay needs to be examined, both as an explanatory and a response variable across time in prospective cohort studies. RCTs need to be designed to examine the medium- and long-term effects of well described models of intervention. These should include an appropriate range of outcome measures including, where possible, economic analysis. There is a need for the development of a screening measure that combines data on risk factors with parental report and professional observation, and for the examination of its value in different sections of the population. The predictive ability of different models of early identification and intervention needs to be examined. Further details of conclusions and recommendations are given in the full report.

7. **Malaysian Health Technology Assessment Unit. Screening for hearing loss in infants. Kuala Lumpur: Malaysian Health Technology Assessment Unit (MHTAU), 2004.**

8. **National Coordinating Centre for Health Technology Assessment. Current practice, accuracy, effectiveness and cost-effectiveness of the school entry hearing screen. Health Technol Assess (Rockv) 2007;11(32):1-168, iii-iv.**
Abstract: OBJECTIVES: To describe and analyse in detail current practice of school entry hearing screening (SES) in the UK. DATA SOURCES: Main electronic databases were searched up to May 2005. REVIEW METHODS: A national postal questionnaire survey was addressed to all leads for SES in the UK, considering current practice in terms of implementation, protocols, target population and performance data. Primary data from cohort studies in one area of London were examined. A systematic review of alternative SES tests, test performance and impact on outcomes was carried out. Finally, a review of published studies on costs, plus economic modelling of current and alternative programmes was prepared. RESULTS: The survey suggested that SES is used in most of England, Wales and Scotland; just over 10% of respondents have abandoned the screen; others are awaiting national guidance. Coverage of SES is variable, but is often over 90% for children in state schools. Referral rates are variable, with a median of about 8%. The test used for the screen is the pure tone sweep test but with wide variation in implementation, with differing frequencies, pass criteria and retest protocols; written examples of protocols were often poor and ambiguous. There is no national approach to data collection, audit and quality assurance, and there are variable approaches at local level. The screen is performed in less than ideal test conditions and resources are often limited, which has an impact on the quality of the screen. The primary cohort studies show that the prevalence of permanent childhood hearing loss continues to increase through infancy. Of the 3.47 in 1000 children with a permanent hearing loss at school screen age, 1.89 in 1000 required identification after the newborn screen. Newborn hearing screening is likely to reduce significantly the yield of SES for permanent bilateral and unilateral hearing impairments; yield had fallen from about 1.11 in 1000 before newborn screening to about 0.34 in 1000 for cohorts that had had newborn screening, of which only 0.07 in 1000 were unilateral impairments. Just under 20% of permanent moderate or greater bilateral, mild bilateral and unilateral impairments, known to services as 6-year-olds or older, remained to be identified around the time of school entry. No good-quality published comparative trials of alternative screens or tests for SES were identified and studies concerned with the relative accuracy of alternative tests are difficult to compare and often flawed by differing referral criteria and case definitions; with full pure tone audiometry as the reference test, the pure tone sweep test appears to have high sensitivity and high specificity for minimal, mild and greater hearing impairments, better than alternative tests for which evidence was identified. There is insufficient evidence regarding possible harm of the screen. There were no published studies identified that examined the possible effects of SES on longer term outcomes. No good-quality published economic evaluations of SES were identified and a universal SES based on pure tone sweep tests was associated with higher costs and slightly higher quality-adjusted life-years (QALYs) compared with no screen and other screen alternatives; the incremental cost-effectiveness ratio for such a screen is around 2500 pounds per QALY gained; the range of expected costs, QALYs and net benefits was broad, indicating a considerable degree of uncertainty. Targeted screening could be more cost-effective than universal school entry screening; however, the lack of primary data and the wide limits for variables in the modelling mean that any conclusions must be considered indicative and exploratory only. A national screening programme for permanent hearing impairment at school entry meets all but three of the criteria for a screening programme, but at least six criteria are not met for screening for temporary hearing impairment. CONCLUSIONS: The lack of good-quality evidence in this area remains a serious problem. Services should improve quality and audit screen performance for identification of previously unknown permanent hearing impairment, pending evidence-based policy decisions based on the research recommendations. Further research is needed into a number of important areas including the evaluation of an agreed national protocol for services delivering SES to make future studies and audits of screen performance more directly comparable.

9. **Nelson H, Nygren P, McInerny Y. Screening for family and intimate partner violence. Systematic Evidence Review; 28. Rockville, MD, USA: Agency for Healthcare**

Research and Quality, 2004
Abstract: Context: Family and intimate partner violence occurs commonly in the U.S. and causes important health problems. Although the clinician's role in identification and intervention is considered a professional and legal responsibility, the effectiveness of these efforts is unclear. Objective: To examine evidence on the performance of screening procedures and interventions in the primary care setting in reducing harm from family and intimate partner violence for children, women, and elderly adults. Data Sources: MEDLINE®, PsycINFO, CINAHL, Health & Psychosocial Instruments, ERIC, AARP Ageline, and the Cochrane Controlled Trials Register, reference lists of systematic reviews, and experts. Study Selection: Included studies had English-language abstracts, were applicable to U.S. clinical practice, described abuse and neglect in women, children, or elderly adults, were conducted in or linked to primary care, obstetrics/gynecology, or emergency department settings, and included a clinician in the process of assessment or intervention. Data Extraction: We extracted selected information about study design, patient samples and settings, methods of assessment or intervention, and clinical endpointsand applied a set of criteria to evaluate study quality. Data Synthesis: No studies directly addressed the effectiveness of screening in a healthcare setting in reducing harm, or described the adverse effects of screening and interventions. All instruments designed to screen for child abuse and neglect were directed to parents, particularly pregnant women. These had fairly high sensitivity but low specificity. Several brief instruments designed to identify women with intimate partner violence compared well to longer previously validated instruments. We found few studies of screening for elder abuse and neglect. A randomized controlled trial with 15-years follow-up indicated that nurse home visits during pregnancy and for 2-years postpartum for low-income women improved abuse and neglect outcomes for children. Studies of interventions for children of other ages, women who are not pregnant, and elderly adults are lacking. Conclusions: Screening and interventions for child abuse are directed to parents during prenatal and postpartum periods. Several brief screening instruments have been tested for women, but interventions are lacking. Few instruments and no interventions were identified for elderly adults.

10. **Nelson HD, Nygren P, Walker M, Panoscha R. Screening for speech and language delay in preschool children: systematic evidence review for the US Preventive Services Task Force - Screening. Pediatrics 2006;117(2):e298-e319.**
Abstract: BACKGROUND: PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275). Published in the public domain by the American Academy of Pediatrics.Speech and language development is a useful indicator of a child's overall development and cognitive ability and is related to school success. Identification of children at risk for developmental delay or related problems may lead to intervention services and family assistance at a young age, when the chances for improvement are best. However, optimal methods for screening for speech and language delay have not been identified, and screening is practiced inconsistently in primary care. PURPOSE: We sought to evaluate the strengths and limits of evidence about the effectiveness of screening and interventions for speech and language delay in preschool-aged children to determine the balance of benefits and adverse effects of routine screening in primary care for the development of guidelines by the US Preventive Services Task Force. The target population includes all children up to 5 years old without previously known conditions associated with speech and language delay, such as hearing and neurologic impairments. METHODS: Studies were identified from Medline, PsycINFO, and CINAHL databases (1966 to November 19, 2004), systematic reviews, reference lists, and experts. The evidence review included only English-language, published articles that are available through libraries. Only randomized, controlled trials were considered for examining the effectiveness of interventions. Outcome measures were considered if they were obtained at any time or age after screening and/or intervention as long as the initial assessment occurred while the child was ≤5 years old. Outcomes included speech and language measures and other functional and health outcomes such as social behavior. A total of 745 full-text articles met our eligibility criteria and were reviewed. Data were extracted from each included study, summarized descriptively, and rated for quality by using criteria specific to different study designs developed by the US Preventive Services Task Force. RESULTS: The use of risk factors for selective screening has not been evaluated, and a list of specific risk factors to guide primary care physicians has not been developed or tested. Sixteen studies about potential risk factors for speech and language delay in children enrolled heterogeneous populations, had dissimilar inclusion and exclusion criteria, and measured different risk factors and outcomes. The most consistently reported risk factors included a family history of speech and language delay, male gender, and perinatal factors. Other risk factors reported less consistently included educational levels of the mother and father, childhood illnesses, birth order, and family size. The performance characteristics of evaluation techniques that take ≤10 minutes to administer were described in 24 studies relevant to screening. Studies that were rated good to fair quality reported wide ranges of sensitivity and specificity when compared with reference standards (sensitivity: 17–100%; specificity: 45–100%). Most of the evaluations, however, were not designed for screening purposes, the instruments measured different domains, and the study populations and settings were often outside of primary care. No "gold standard" has been developed and tested for screening, reference standards varied across studies, few studies compared the performance of ≥2 screening techniques in 1 population, and comparisons of a single screening technique across different populations are lacking. Fourteen good- and fair-quality randomized, controlled trials of interventions reported significantly improved speech and language outcomes compared with control groups. Improvement was demonstrated in several domains including articulation, phonology, expressive language, receptive language, lexical acquisition, and syntax among children in all age groups studied and across multiple therapeutic settings. Improvement in other functional outcomes such as

socialization skills, self-esteem, and improved play themes were demonstrated in some, but not all, of the 4 studies that measured them. In general, studies of interventions were small and heterogeneous, may be subject to plateau effects, and reported short-term outcomes based on various instruments and measures. As a result, long-term outcomes are not known, interventions could not be compared directly, and generalizability is questionable. CONCLUSIONS: Use of risk factors to guide selective screening is not supported by studies. Several aspects of screening have been inadequately studied to determine optimal methods, including which instrument to use, the age at which to screen, and which interval is most useful. Trials of interventions demonstrate improvement in some outcome measures, but conclusions and generalizability are limited. Data are not available addressing other key issues including the effectiveness of screening in primary care settings, role of enhanced surveillance by primary care physicians before referral for diagnostic evaluation, non–speech and language and long-term benefits of interventions, and adverse effects of screening and interventions.

11. **NHS Centre for Reviews and Dissemination. Pre-school hearing, speech, language and vision screening. Eff Health Care 1998;4(2): 1-12.**

12. **Nygren P, Nelson HD, Klein J. Screening children for family violence: a review of the evidence for the US Preventive Services Task Force. Ann Fam Med 2004;2(2):161-9.**
Abstract: BACKGROUND: We wanted to evaluate the benefits and harms of screening children in primary health care settings for abuse and neglect resulting from family violence by examining the evidence on the performance of screening instruments and the effectiveness of interventions. METHODS: We searched for relevant studies in MEDLINE, PsycINFO, CINAHL, ERIC, Cochrane Controlled Trials Register, and reference lists. English language abstracts with original data about family violence against children focusing on screening and interventions initiated or based in health care settings were included. We extracted selected information about study design, patient populations and settings, methods of assessment or intervention, and outcome measures, and applied a set of criteria to evaluate study quality. RESULTS: All instruments designed to screen for child abuse and neglect were directed to parents, particularly pregnant women. These instruments had fairly high sensitivity but low specificity when administered in high-risk study populations and have not been widely tested in other populations. Randomized controlled trials of frequent nurse home visitation programs beginning during pregnancy that address behavioral and psychological factors indicated improved abuse measures and outcomes. No studies were identified about interventions in older children or harms associated with screening and intervention. CONCLUSIONS: No trials of the effectiveness of screening in a health care setting have been published. Clinician referrals to nurse home visitation during pregnancy and in early childhood may reduce abuse in selected populations. There are no studies about harms of screening and interventions.

13. **Powell C, Wedner S, Hatt SR. Vision screening for correctable visual acuity deficits in school-age children and adolescents. Cochrane Database of Systematic Reviews 2004, Issue 4. Art. No.: CD005023. DOI: 10.1002/14651858.CD005023.pub2.**
Abstract: BACKGROUND: Although the benefits of vision screening seem intuitive the value of such programmes in junior and senior schools has been questioned. In addition to this, there exists a lack of clarity regarding the optimum age for screening and frequency at which to carry out screening. OBJECTIVES: The objective of this review was to evaluate the effectiveness of vision screening programmes carried out in schools in reducing the prevalence of undetected, correctable visual acuity deficits due to refractive error in school-age children. SEARCH STRATEGY: We searched the Cochrane Central Register of Controlled Trials (CENTRAL), which contains the Cochrane Eyes and Vision Trials Register, in The Cochrane Library (2006, Issue 1), MEDLINE (1966 to March 2006) and EMBASE (1980 to March 2006). No language or date restrictions were placed on these searches. SELECTION CRITERIA: We planned to include randomised controlled trials, including randomised cluster controlled trials. DATA COLLECTION AND ANALYSIS: Two review authors independently assessed study abstracts identified by the electronic searches. No trials were identified that met the inclusion criteria. MAIN RESULTS: As no trials were identified, no formal analysis was performed. A narrative synthesis of other retrieved studies was undertaken in order to explain current practice. AUTHORS' CONCLUSIONS: At present there are no robust trials available that allow the benefits of school vision screening to be measured. The disadvantage of attending school with a visual acuity deficit also needs to be quantified. The impact of a screening programme will depend on the geographical and socio-economic setting in which it is conducted. There is, therefore, clearly a need for well-planned randomised controlled trials to be undertaken in various settings so that the potential benefits and harms of vision screening can be measured. SCREENING SCHOOL AGED CHILDREN AND ADOLESCENTS FOR REDUCED VISION CAUSED BY THE NEED FOR GLASSES: Worldwide, the leading cause of reduced vision in children is an unidentified need for them to wear glasses. The reduced vision that results from abnormal focusing (refractive error) can cause the children to screw up their eyes and complain of headaches. Reduced vision may affect academic performance, choice of occupation and socio-economic status in adult life. Genetic and environmental factors are known to affect the development of refractive error; it is also more common in certain racial groups. Short sightedness has become the commonest eye condition. The need to correct refractive error is determined by its effect on vision. Normal vision can usually be restored by wearing corrective glasses or contact lenses. However, there is some evidence that correction may cause an error to persist where it

might otherwise have resolved or reduced naturally. Vision screening is used widely but is concentrated in developed countries; in developing countries it may serve the purpose of providing access to health care. The value of screening after school entry has been queried. Programmes vary with regard to testing personnel, set threshold for failure, frequency and setting. The disability caused by a vision deficit has not been quantified and the optimum age and number of occasions for screening have not been established. The aim of this review was to find studies that evaluated the effectiveness of school vision screening programmes in first identifying children with reduced vision. No eligible randomised studies were found. There is a clear need for reliable evidence to measure the effectiveness of vision screening. A narrative synthesis of other retrieved studies was undertaken in order to explain current practice.

14. **Seierstad A. Høyde- og vektmåling av barn og unge. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2006. Rapport fra Kunnskapssenteret nr 19 – 2006.**
http://www.kunnskapssenteret.no/Publikasjoner/595.cms
Abstract: Bakgrunn: Overvekt og fedme er et stort og økende folkehelseproblem og omtales som en global fedmeepidemi. Barn og unge rammes i stor grad. Denne rapporten oppsummerer relevant forskning om effekt av høyde- og vektmålinger knyttet til overvekt og fedme. Problemstillinger: Hvilken effekt har måling av høyde og vekt på overvekt, undervekt og spiseforstyrrelser? Hva er forholdet mellom nytte, skade og kostnad ved ulike målemetoder? Er det sammenheng mellom overvekt som barn og overvekt som voksen? Metode: Vi søkte systematisk etter litteratur i ti databaser. Søket omfattet høyde- og vektmålinger av barn og unge i alderen 0 til 20 år. Relevante utfallsmål var overvekt, undervekt og spiseforstyrrelser og kostnad og ressursbruk ved å måle. Resultater: Tre systematiske oversikter og 15 studier møtte våre kriterier for studiedesign, populasjon, tiltak og utfallsmål, av totalt 6280 treff i litteratursøket. Konklusjon: Det er gjort lite forskning på nytten av rutinemessige målinger av høyde og vekt hos barn og unge. Rutinemessige målinger gir mulighet for å sette inn forebyggende og behandlende tiltak tidlig. •Forskningen kan ikke svare oss på om rutinemessige målinger har noen hensikt utover å avdekke vekstproblemer og overvåke barn og unges vekstutvikling. •Vanlig måling av høyde og vekt er best egnet til å fange opp overvekt og undervekt. • Selvrapportert høyde og vekt gir store feil, særlig når ungdom rapporterer. • To systematiske oversikter antyder at overvekt i barneårene øker risiko for å utvikle overvekt som voksen. • Vi fant ikke forskning som har vurdert kostnad og skade ved ulike måleprogram, og heller ikke forskning om når og hvor ofte barn og unge bør måles.

15. **Westwood M, Fayter D, Hartley S, Rithalia A, Butler G, Glasziou P, et al. Childhood obesity: should primary school children be routinely screened? A systematic review and discussion of the evidence. Arch Dis Child 2007;92(5):416-22.**
Abstract: BACKGROUND: Population monitoring has been introduced in UK primary schools in an effort to track the growing obesity epidemic. It has been argued that parents should be informed of their child's results, but is there evidence that moving from monitoring to screening would be effective? We describe what is known about the effectiveness of monitoring and screening for overweight and obesity in primary school children and highlight areas where evidence is lacking and research should be prioritised. DESIGN: Systematic review with discussion of evidence gaps and future research. DATA SOURCES: Published and unpublished studies (any language) from electronic databases (inception to July 2005), clinical experts, Primary Care Trusts and Strategic Health Authorities, and reference lists of retrieved studies. REVIEW METHODS: We included any study that evaluated measures of overweight and obesity as part of a population-level assessment and excluded studies whose primary outcome measure was prevalence. RESULTS: There were no trials assessing the effectiveness of monitoring or screening for overweight and obesity. Studies focussed on the diagnostic accuracy of measurements. Information on the attitudes of children, parents and health professionals to monitoring was extremely sparse. CONCLUSIONS: Our review found a lack of data on the potential impact of population monitoring or screening for obesity and more research is indicated. Identification of effective weight reduction strategies for children and clarification of the role of preventative measures are priorities. It is difficult to see how screening to identify individual children can be justified without effective interventions.

UNGDOMSHELSE

1. **Black DR, Tobler NS, Sciacca JP. Peer helping/involvement: an efficacious way to meet the challenge of reducing alcohol, tobacco, and other drug use among youth? J Sch Health 1998;68(3):87-93.**
Abstract: Peer-led drug prevention programs for middle school youth are reviewed as to whether or not they are a vital resource in an overall effort to minimize the use of alcohol, tobacco, and other drugs (ATOD). The paper focuses on the following: a) results of a 120-study meta-analysis of school-based drug prevention programs and positive program features; b) considerations for falsely concluding that peer programs are ineffective; c) features of two model or stellar programs that compared interactive (peer

leadership) to teacher/researcher-led (non-interactive) programs that followed National Peer Helpers Association (NPHA) Programmatic Standards; and d) suggestions for designing and implementing high-quality, peer-led programs. The authors conclude that interactive peer interventions for middle school students are statistically superior to non-interactive didactic, lecture programs led by teachers/researchers. Programs implemented according to NPHA Programmatic Standards may eliminate Type II (false negative) and III ("implementation failure" or ineffectively designed and implemented program) errors. Opportunities for prudent application of well-designed peer programs appropriately implemented and evaluated must remain a salient priority.

2. **DiCenso A, Guyatt G, Willan A, Griffith L. Interventions to reduce unintended pregnancies among adolescents: systematic review of randomised controlled trials. BMJ 2002;324:1426-30.**
Abstract: Objective: To review the effectiveness of primary prevention strategies aimed at delaying sexual intercourse, improving use of birth control, and reducing incidence of unintended pregnancy in adolescents. Data sources: 12 electronic bibliographic databases, 10 key journals, citations of relevant articles, and contact with authors. Study selection: 26 trials described in 22 published and unpublished reports that randomised adolescents to an intervention or a control group (alternate intervention or nothing). Data extraction: Two independent reviewers assessed methodological quality and abstracted data. Data synthesis: The interventions did not delay initiation of sexual intercourse in young women (pooled odds ratio 1.12; 95% confidence interval 0.96 to 1.30) or young men (0.99; 0.84 to 1.16); did not improve use of birth control by young women at every intercourse (0.95; 0.69 to 1.30) or at last intercourse (1.05; 0.50 to 2.19) or by young men at every intercourse (0.90; 0.70 to 1.16) or at last intercourse (1.25; 0.99 to 1.59); and did not reduce pregnancy rates in young women (1.04; 0.78 to 1.40). Four abstinence programmes and one school based sex education programme were associated with an increase in number of pregnancies among partners of young male participants (1.54; 1.03 to 2.29). There were significantly fewer pregnancies in young women who received a multifaceted programme (0.41; 0.20 to 0.83), though baseline differences in this study favoured the intervention. Conclusions: Primary prevention strategies evaluated to date do not delay the initiation of sexual intercourse, improve use of birth control among young men and women, or reduce the number of pregnancies in young women.

3. **Franklin C, Grant D, Corcoran J, O'Dell MP, Bultman L. Effectiveness of prevention programs for adolescent pregnancy: a meta-analysis. J Marriage Fam 1997;59(3):551-67.**
Using meta-analysis, the authors analyzed 32 outcome studies on the primary prevention of adolescent pregnancy and examined several moderator variables in relationship to the findings. Three outcome variables - sexual activity, contraceptive use and pregnancy rates or childbirths - were analyzed as three separate and independent meta-analyses. Results indicate that the pregnancy prevention programs that the authors examined have no effect on the sexual activity of adolescents. They found sufficient evidence to support the efficacy of pregnancy prevention programs for increasing use of contraceptives. A smaller but significant amount of evidence supports program effectiveness in reducing pregnancy rates.

4. **Hviding K. Ambulante psykiatriske helsetjenester til barn og ungdom som alternativ til institusjonsbehandling. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2006. Rapport fra Kunnskapssenteret nr 22 - 2006.**
http://www.kunnskapssenteret.no/Publikasjoner/582.cms
Abstract: Bakgrunn: Fagfolk er enige om at barn og unge med alvorlige psykiske vansker i størst mulig grad bør behandles i sitt nærmiljø. Internasjonalt har tjenester i økende grad blitt desentralisert, parallelt med utvikling av innovative metoder og modeller for ambulant psykiatrisk behandling. Problemstilling: Hva er effekten av psykiatrisk ambulant behandling av barn og unge med alvorlige psykiske vansker? Vi har oppsummert tilgjengelig forskning på bestilling fra Regionsenter for barn og unges psykisk helse, Helseregion øst og sør. Metode: Vi søkte etter systematiske oversikter, kontrollerte randomiserte studier, kontrollerte før og etter-studier og tidsserier i internasjonale databaser fram til juni 2006. Studier som oppfylte forhåndsbestemte kriterier for relevans og kvalitet ble kritisk vurdert og sammenfattet. Vi fant lite forskning om effekter av ambulant behandling av barn og unge med alvorlig psykiatrisk diagnose, eller i akutt psykiatrisk situasjon. Det er gjort få studer, og resultatene spriker. Vi fant ikke noe relevant forskning om effekter av ambulant behandling for barn og unge med spiseforstyrrelse, anoreksi eller bulimi. Resultater: Vi fant seks systematiske oversikter som oppsummerte flere av de samme enkeltstudiene. I tillegg fant vi elleve nye kontrollerte studier. Alle studiene var av moderat til god kvalitet. Nytten av ambulant behandling er best dokumentert for barn og ungdom med alvorlige atferdsvansker og antisosial atferd. Sammensatte metoder som Multisystemisk terapi (MST), Parent Management Training (PMT) og behandlingsfosterhjem (Treatment Foster Care) minsker vold, voldelig atferd og antall lovbrudd. Flere barn og unge fortsetter også å bo hjemme. Konklusjon: Kunnskapsgrunnlaget er per i dag utilstrekkelig til å avgjøre om ambulant behandling er bedre enn institusjonsbehandling for barn og unge med alvorlige psykiske vansker. Utbygging av nærmiljøbaserte behandlingsmetoder må inntil videre bygge på positive erfaringer fra fagfeltet.

5. **Kirby D, Short L, Collins J, Rugg D, Kolbe L, Howard M, et al. School-based programs to reduce sexual risk behaviors: a review of effectiveness. Public Health Rep 1994;109:339-60.**

Abstract: This review was undertaken in recognition of the mounting public health and social problems associated with adolescent sexual behavior and the importance of basing school-affiliated programs designed to reduce sexual risk-taking behavior on sound research. The authors were commissioned by the Division of Adolescent and School Health within the Centers for Disease Control and Prevention, Public Health Service, to review carefully the research on these programs and to assess their impact on behavior. The authors identified 23 studies of school-based programs that were published in professional journals and measured program impact on behavior. They then summarized the results of those studies, identifying the distinguishing characteristics of effective programs, and citing important research questions to be addressed in the future. Not all sex and AIDS education programs had significant effects on adolescent sexual risk-taking behavior, but specific programs did delay the initiation of intercourse, reduce the frequency of intercourse, reduce the number of sexual partners, or increase the use of condoms or other contraceptives. These effective programs have the potential to reduce exposure to unintended pregnancy and sexually transmitted disease, including HIV infection. These programs should be replicated widely in U.S. schools. Additional research is needed to improve the effectiveness of programs and to clarify the most important characteristics of effective programs.

6. **La Torre G, Chiaradia G, Ricciardi G. School-based smoking prevention in children and adolescents: Review of the scientific literature. J Public Health 2005;13(6):285-90.**
Abstract: The aim of this study was to review all systematic reviews and meta-analyses of school-based interventions to prevent children and adolescents starting smoking. We searched MEDLINE, EMBASE, The Cochrane Database and Tobacco Review group registers, Psyclnfo, and the ERIC database. The keywords used for the search were: school-based, smoking prevention, children, adolescents, meta-analysis, systematic review. We found seven specifically relevant meta-analyses. They give evidence of a decreased prevalence of smoking among students exposed to social influence programmes compared to students in control groups. The mean difference between groups exposed to the programmes and those not exposed (at the school or classroom level) ranges from 5% to 60%, with a duration of 1-4 years. In conclusion, in order to achieve a higher level of effectiveness it is widely recognized that smoking prevention programmes should have the following components: sustained application, booster sessions over several years; reinforcement in the community; involvement of parents and the mass media; programming smoking prevention activities within a more comprehensive school health promotion programme.

7. **Muller-Riemenschneider F, Bockelbrink A, Reinhold T, Rasch A, Greiner W, Willich SN. Long-term effectiveness of behavioural interventions to prevent smoking among children and youth. Tob Control 2008;17:301-12.**
Abstract: Objectives: To evaluate the long-term effectiveness of recent behavioural interventions in the prevention of cigarette use among children and youth and to compare the effectiveness of different school-based, community-based and multisectorial intervention strategies. Methods: A structured search of databases and a manual search of reference lists was conducted. Randomised controlled trials published in English or German between August 2001 and August 2006 targeting youths up to 18 years of age were assessed independently by two researchers according to predefined inclusion criteria and with regard to methodological quality. Data abstraction was performed and crosschecked by two researchers. Where appropriate, pooled effect estimates were calculated and tested in sensitivity analyses. Results: Of 3555 articles, 35 studies met the inclusion criteria. The follow-up duration ranged from 12 months to 120 months. Although the overall effectiveness of prevention programs showed considerable heterogeneity, the majority of studies reported some positive long-term effects for behavioural smoking prevention programs. There was evidence that community-based and multisectorial interventions were effective in reducing smoking rates; in contrast, the evidence for school-based programs alone was inconclusive. Regardless of the type of intervention, the reductions observed in smoking rates were only modest. Conclusions: The present work identified moderate evidence for the effectiveness of behavioural interventions to prevent smoking. Although evidence for the effectiveness of school-based interventions was inconclusive, evidence for the effectiveness of community-based and multisectorial interventions was somewhat stronger. Future research should investigate the effectiveness of specific intervention components and the cost-effectiveness of interventions analysed in methodologically high-quality studies.

8. **Myrhaug HT, Ekeland E, Bundz E, Langengen IN, Nylund HK. Kan skoleprogram påvirke kunnskap om psykisk helse hos ungdom? Notat. Oslo: Nasjonalt Kunnskapssenter for helsetjenesten, 2005.**
http://www.kunnskapssenteret.no/Publikasjoner/2235.cms
Abstract: I notatet oppsummeres kunnskap om virkningen av skoleprogrammer som skal fremme kunnskap om og holdninger til psykisk helse blant ungdom i alderen 13-20 år. Den er basert på sekundærlitteratur; systematiske oversikter og metodevurderinger, det vil si HTA-rapporter (Health Technology Assessment). Notatet utgjør to månedsverk. Undersøkelser viser at omkring 10% av unge i Norge har så store psykiske problemer at de trenger profesjonell hjelp. Hvis vi tar med mindre alvorlige tilfeller, er forekomsten av psykiske plager og lidelser det dobbelte. Omkring tre av fire personer kjenner noen godt som har hatt psykiske lidelser i løpet av de siste tre årene. Forskning viser at folk mangler kunnskap om hva psykiske lidelser er. De viktigste funnene er: Selvmordsforebyggende skoleprogram kan

øke kunnskap om selvmord og gi kunnskap om hvor man skal søke hjelp. Det er behov for gode enkeltstudier som vurderer om skolebaserte programmer øker kunnskapen om og bedrer holdninger til psykisk helse hos ungdom. Kunnskapsgrunnlaget er for svakt til at vi kan avgjøre om skolebaserte programmer forebygger depresjon hos ungdom, og om selvmordsforebyggende skoleprogram virker negativt på gutter. Funnene er basert på to systematiske oversikter og to HTA-rapporter (Health Technology Assessment). Den ene HTA-rapporten inkluderte enkeltstudier som ikke var relevante for oss, og vi har derfor ikke tatt med resultatene fra denne HTA-rapporten. Alle de fire oversiktene er metodisk gode, men baserer seg på enkeltstudier av varierende metodisk kvalitet. Dette medfører at vi har vært forsiktige i tolkningen av resultater. I Opptrappingsplanen for psykisk helse (1999-2008) er et av målene å øke befolkningens kunnskap om psykisk helse for å forebygge sykdom, fremme kunnskap og redusere fordommer. *Sosial- og helsedirektoratet* har testet ut noen program utviklet for å fremme kunnskap om og holdninger til psykisk helse i skolen. Sosial- og helsedirektoratet ba *Nasjonalt kunnskapssenter for helsetjenesten* å kartlegge kunnskapsgrunnlaget for tilsvarende program i andre land, før disse undervisningsoppleggene tas i bruk i større skala.

9. **NHS Centre for Reviews and Dissemination. Preventing and reducing the adverse effects of unintended teenage pregnancies. Centre for Reviews and Dissemination (CRD), 1997; Eff Health Care 3(1).**
Abstract: Author's objectives: This report summarises the research evidence on approaches to preventing and alleviating the direct negative health and social effects of teenage pregnancy. Author's conclusions: Teenage pregnancy is associated with increased risk of poor social, economic and health outcomes for both mother and child. A factor strongly associated with deferring pregnancy is a good general education. The health and development of teenage mothers and their children has been shown to benefit from programmes promoting access to antenatal care, targeted support by health visitors, social workers or 'lay mothers' and provision of social support, educational opportunities and pre-school education. School-based sex education can be effective in reducing teenage pregnancy especially when linked to access to contraceptive services. The most reliable evidence shows that it does not increase sexual activity or pregnancy rates. Contraceptives when used properly are highly cost effective and can result in significant savings. Increasing the availability of contraceptive clinic services for young people is associated with reduced pregnancy rates. Contraceptive services should be based on an assessment of local needs and ensure accessibility and confidentiality.

10. **Oakley A, Fullerton D, Holland J, Arnold S, France-Dawson M, Kelley P, et al. Sexual health education interventions for young people: a methodological review. BMJ 1995;310:158-62.**
Abstract: Objectives: To locate reports of sexual health education interventions for young people, assess the methodological quality of evaluations, identify the subgroup with a methodologically sound design, and assess the evidence with respect to the effectiveness of different approaches to promoting young people's sexual health. Design: Survey of reports in English by means of electronic databases and hand searches for relevant studies conducted in the developed world since 1982. Papers were reviewed for eight methodological qualities. The evidence on effectiveness generated by studies meeting four core criteria was assessed. Judgments on effectiveness by reviewers and authors were compared. Papers: 270 papers reporting sexual health interventions. Main outcome measure: The methodological quality of evaluations. Results: 73 reports of evaluations of sexual health interventions examining the effectiveness of these interventions in changing knowledge, attitudes, or behavioural outcomes were identified, of which 65 were separate outcome evaluations. Of these studies, 45 (69%) lacked random control groups, 44 (68%) failed to present preintervention and 38 (59%) postintervention data, and 26 (40%) omitted to discuss the relevance of loss of data caused by drop outs. Only 12 (18%) of the 65 outcome evaluations were judged to be methodologically sound. Academic reviewers were more likely than authors to judge studies as unclear because of design faults. Only two of the sound evaluations recorded interventions which were effective in showing an impact on young people's sexual behaviour. Conclusions: The design of evaluations in sexual health intervention needs to be improved so that reliable evidence of the effectiveness of different approaches to promoting young people's sexual health may be generated.

11. **Reinar LM, Tørnby L, Nordheim L, Nylund HK, Jamtvedt G, Bjørndal A. Røykeforebyggende tiltak blant barn og unge. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2004. Rapport fra Kunnskapssenteret nr 11 - 2004.**
http://www.kunnskapssenteret.no/Publikasjoner/1516.cms
Abstract: Det er et mål i det forebyggende helsearbeidet å hindre eller utsette røykestart hos barn og unge. Nikotin er et sterkt avhengighetsskapende stoff, og røyking er assosiert med mange helseskader. Ungdomsårene er en tid da mange begynner å røyke. I åttende klasse røyker 3,2 prosent av elevene daglig, mens det i 10. klasse er 16, 9 prosent av elevene som røyker fast. Over halvparten av tidligere og nåværende dagligrøykere opplyser at de begynte å røyke daglig før de var 18 år. I denne rapporten stiller vi spørsmålet om det finnes tiltak som kan forebygge eller utsette røykestart blant barn og unge. Rapporten er en kunnskapsoppsummering basert på eksisterende systematiske oversikter over tobakksforebygging blant barn og unge. For å finne forskningsbaserte svar søkte vi etter systematiske oversikter over effekt av tiltak rettet mot barn og unge i den hensikt å forebygge eller utsette røykestart og snusbruk. Rapporten er en oppdatering av "Røykeforbyggende tiltak blant barn og unge" som ble publisert via Internett i desember

2001 (www.kikk.no). I desember 2003 gjorde vi nye søk i Cochrane Library of Systematic Reviews og i DARE. Etter kvalitetsvurdering ble ni systematiske oversikter inkludert. Funnene av disse kan oppsummeres slik: - Bare informasjon og undervisning om negative virkninger av tobakksbruk påvirker ikke røykeatferd hos barn og unge. - På kort sikt kan skoleprogrammer som bygger på teorier om sosial innflytelse redusere røyking og forebygge røykestart. - Å bli tidlig utsatt for tobakksindustriens markedsføring øker risikoen for at ungdom begynner å røyke i alderen 8 til 17 år. - Bruk av skoleelever/jevnaldrende rollemodeller("peers") i skoleprogrammer kan antakelig påvirke røykeatferd. - Sammensatte tiltak (massemedia, røykeforbud, kontrolltiltak, pris, tiltak rettet mot foreldre) vil i noen grad påvirke røykeatferd. - Det er antakelig slik at massemediekampanjer kan forebygge røyking, hvis de gjentas over flere år og er intensive. - Kontroll av overholdelse av aldersgrense rettet mot dem som selger tobakk kan redusere salg til mindreårige på kort sikt. - Det er antakelig sammenheng mellom pris og tobakksbruk for ungdom, men her mangler vi norske studier. Mange av de vurderte tiltakene viser at barn og unge kan påvirkes, men det er få tiltak som evner å dokumentere langvarig effekt. Det finnes ingen enkel oppskrift for hvordan man skal forebygge røykestart blant barn og unge. Samtidig ser det ut til at det er hensiktsmessig å kombinere ulike tiltak. Fra 2002 til 2003 sank røyking blant norsk ungdom i alderen 16 til 24 år fra 28 til 23 prosent. Disse tallene baserer seg på et lite utvalg. Det gjenstår derfor å se hvorvidt dette var starten på en ny trend, eller et tilfeldig utslag på en årlig statistikk.

12. **Silva M. The effectiveness of school-based sex education programs in the promotion of abstinent behavior: a meta-analysis. Health Educ Res 2002;17(4):471-81.**
Abstract: This review presents the findings from controlled school-based sex education interventions published in the last 15 years in the US. The effects of the interventions in promoting abstinent behavior reported in 12 controlled studies were included in the meta-analysis. The results of the analysis indicated a very small overall effect of the interventions in abstinent behavior. Moderator analysis could only be pursued partially because of limited information in primary research studies. Parental participation in the program, age of the participants, virgin-status of the sample, grade level, percentage of females, scope of the implementation and year of publication of the study were associated with variations in effect sizes for abstinent behavior in univariate tests. However, only parental participation and percentage of females were significant in the weighted least-squares regression analysis. The richness of a meta-analytic approach appears limited by the quality of the primary research. Unfortunately, most of the research does not employ designs to provide conclusive evidence of program effects. Suggestions to address this limitation are provided.

13. **Skara S, Sussman S. A review of 25 long-term adolescent tobacco and other drug use prevention program evaluations. Prev Med 2003;37(5):451-74.**
Abstract: BACKGROUND: Although the initial effectiveness of psychosocial strategies programming in preventing smoking and other drug abuse among adolescents has been well established through literature reviews and meta-analyses, much less evidence exists for the long-term follow-up success of these interventions. The primary goal of this paper, therefore, is to summarize the effectiveness of published program evaluation studies that have followed adolescents across the transitional period between junior high and high school for a period of at least 2 years. METHODS: Studies for inclusion in this review were accessed primarily through a computerized search of Medline, Healthstar, and PsychINFO databases. Intervention studies that met five core criteria were retained for review. Two authors independently abstracted data on study characteristics, methodology, and program outcomes. RESULTS: Search results yielded 25 studies suitable for examination. The majority of these studies reported significant program effects for long-term smoking, alcohol, and marijuana outcomes, while indicating a fairly consistent magnitude of program effects. CONCLUSIONS: This review provides long-term empirical evidence of the effectiveness of social influences programs in preventing or reducing substance use for up to 15 years after completion of programming. However, this conclusion is still somewhat tenuous given the lack of significant program effects reported in several studies and the great variability that existed in the level of internal and external validity across all studies.

14. **Sowden AJ, Stead LF. Community interventions for preventing smoking in young people. Cochrane Database of Systematic Reviews 2003, Issue 1. Art. No.: CD001291. DOI: 10.1002/14651858.CD001291.**
Abstract: BACKGROUND: Decisions to smoke are made within a broad social context. Community interventions use co-ordinated, widespread, multi-component programmes to try and influence behaviour. OBJECTIVES: To determine the effectiveness of community interventions in preventing the uptake of smoking in young people. SEARCH STRATEGY: The Tobacco Addiction group specialised register, Medline and other health, psychology and public policy electronic databases were searched, the bibliographies of identified studies were checked and contact was made with content area specialists. Searches were updated in September 2002. SELECTION CRITERIA: Randomised and non randomised controlled trials that assessed the effectiveness of multi-component community interventions compared to no intervention or to single component or school-based programmes only. Reported outcomes had to include smoking behaviour in young people under the age of 25 years. DATA COLLECTION AND ANALYSIS: Information relating to the characteristics and the content of community interventions, participants, outcomes and methods of the study was extracted by one reviewer and checked by a second. Studies were combined using qualitative

narrative synthesis. MAIN RESULTS: Seventeen studies were included in the review, 46 studies did not meet all of the inclusion criteria. All studies used a controlled trial design, with six using random allocation of schools or communities. Of thirteen studies which compared community interventions to no intervention controls, two, which were part of cardiovascular disease prevention programmes, reported lower smoking prevalence. Of three studies comparing community interventions to school-based programmes only, one found differences in reported smoking prevalence. One study reported a lower rate of increase in prevalence in a community receiving a multi-component intervention compared to a community exposed to a mass media campaign alone. One study reported a significant difference in smoking prevalence between a group receiving a media, school and homework intervention compared to a group receiving the media component only. AUTHORS' CONCLUSIONS: There is some limited support for the effectiveness of community interventions in helping prevent the uptake of smoking in young people. SOME EVIDENCE THAT COORDINATED, MULTI-COMPONENT COMMUNITY PROGRAMS CAN LOWER SMOKING RATES IN YOUNG PEOPLE: The decision to start (or continue) smoking is made within a broad social context, affected by many factors. Community interventions use coordinated, widespread, multi-component programs to try and influence people's behaviour. Community members are often involved in determining and/or implementing programs. These include age restrictions on tobacco purchase, programs for prevention of disease (like heart disease), mass media and school programs. The review of trials found some evidence that coordinated multi-component programs can reduce smoking among young people, and do so more effectively than single strategies alone.

15. **Strunk JA. The effect of school-based health clinics on teenage pregnancy and parenting outcomes: an integrated literature review. J Sch Nurs 2008;24:13-20.**
Abstract: Teenage pregnancy outcomes have become an increasing concern in the United States. Education and support of pregnant teens are critical factors that may determine good or poor pregnancy outcomes. Poor outcomes may include low birth weight, developmental delays, and poor academic performance. Although the number of teenagers experiencing pregnancy and parenting has declined in the U.S., school-based health clinics can be used to provide support and guidance designed to avoid the negative outcomes associated with teenage pregnancy and parenting. By having school-based health clinics, nurse practitioners and school nurses can provide much needed services to pregnant and parenting teens. These services should include educational support, counseling, and community resources. This inquiry provides a metasynthesis of the literature and will review, examine, and summarize the literature relating to the effect of school-based clinics on teenage pregnancy and parenting outcomes.

16. **Tingle LR, DeSimone M, Covington B. A meta-evaluation of 11 school-based smoking prevention programs. J Sch Health 2003;73(2):64-7.**
Abstract: Eleven school-based smoking prevention programs were subjected to a meta-evaluation. Criteria for the meta-evaluation included: 1) adequacy of the research design, 2) evidence of reliability, 3) evidence of validity, 4) appropriate statistical analyses and interpretations, 5) reporting of effect sizes or practical significance, 6) accounting for attrition, and 7) tracking of fidelity to the program. A three-point rating scale was used ranging from 0-2. Criteria with the best ratings were research design and statistical analysis. The lowest ratings occurred for reliability and validity. The remainder of the criteria ranged between 1 and 2 with minor factors accounting for the difference in ratings. Recommendations include increasing the number of evaluations that included tests of reliability and validity and calculated effect size estimates.

17. **West SL, O'Neal KK. Project D. Am J Public Health 2004;94(6):1027-9.**
Abstract: OBJECTIVES: We provide an updated meta-analysis on the effectiveness of Project D.A.R.E. in preventing alcohol, tobacco, and illicit drug use among school-aged youths. METHODS: We used meta-analytic techniques to create an overall effect size for D.A.R.E. outcome evaluations reported in scientific journals. RESULTS: The overall weighted effect size for the included D.A.R.E. studies was extremely small (correlation coefficient = 0.011; Cohen d = 0.023; 95% confidence interval = -0.04, 0.08) and nonsignificant (z = 0.73, NS). CONCLUSIONS: Our study supports previous findings indicating that D.A.R.E. is ineffective.

18. **White D, Pitts M. Educating young people about drugs: a systematic review. Addiction 1998;93(10):1475-87.**
Abstract: AIMS: To assess the effectiveness of interventions directed at the prevention or reduction of use of illicit substances by young people or those directed at reducing harm caused by continuing use. DESIGN: A systematic review was conducted. Reports were identified through electronic and hand searching and contact with known workers in the area. Studies were included if they reported evaluations of interventions targeting illicit drug use and provided sufficient detail of the intervention and design of the evaluation to allow judgements to be made of their methodological soundness. Meta-analyses were conducted combining the data of the methodologically sound studies. PARTICIPANTS AND SETTINGS TARGETED BY INTERVENTIONS: Evaluations of interventions were included if their targeted audience included young people aged between 8 and 25 years. Identified evaluations were delivered in a range of settings including: schools and colleges; community settings; the family; medical/therapeutic settings; mass media. MEASUREMENTS: Data extracted from each report included details of design, content and theoretical orientation of intervention, setting of the intervention, target audience, methods, population size, subject

refusal rates, rates of attrition, outcome measures, length of follow-up and findings, including statistical power. FINDINGS: The majority of studies identified were evaluations of interventions introduced in schools and targeting alcohol, tobacco and marijuana simultaneously. These studies were methodologically stronger than interventions targeting other drugs and implemented outside schools. Meta-analyses showed that the impact of evaluated interventions was small with dissipation of programme gains over time. Interventions targeting hard to reach groups have not been evaluated adequately. CONCLUSIONS: Effort needs to be directed towards the development of improved evaluative solutions to the problems posed by these groups. There is still insufficient evidence to assess the effectiveness of the range of approaches to drugs education; more methodologically sound evaluations are required. There is also a need to target interventions to reflect the specific needs and experiences of recipients.

SKOLEHELSETJENESTEN

1. **Adi Y, Killoran A, Janmohamed K, Stewart-Brown S. Systematic review of the effectiveness of interventions to promote mental wellbeing in children in primary education. Report 1: Universal approaches: non-violence related outcomes. Coventry: University of Warwick, 2007.**
Abstract: Author's objectives: To assess the effectiveness of school-based interventions that aim to promote mental well-being amongst children in primary education, and that take a universal approach and are not primarily focused on the prevention of violence or bullying. Author's conclusions: There is good evidence to support the implementation of programmes which include a significant component of teacher training and are offered to children over a prolonged period, and the inclusion of a parenting support component to school mental health promotion programmes.

2. **Bangert-Drowns RL. The effects of school-based substance abuse education-meta-analysis. J Drug Educ 1988;18(3):243-64.**

3. **Barlow J, Stewart-Brown S, Fletcher J. Systematic review of the school entry medical examination. Arch Dis Child 1998;78(4):301-11.**
Abstract: AIMS: To summarise and critically evaluate research conducted in the UK between 1962 and 1996, on the effectiveness and efficiency of the school entry medical (SEM) examination. METHODS: An electronic search of a large number of databases, in conjunction with a search of reference lists, and sources in the grey literature produced a total of 64 studies. RESULTS: Only one overview and 16 primary studies met the review's broad inclusion criteria. The results showed significant differences in the identification and referral of new and ongoing problems not only between the routine and selective SEM but also within the two types of SEM examination. There were also large differences in the numbers of children selected for SEM examination. No study included in the review defined either the methods or the criteria used to identify children as screen positive. No study provided follow up of children after referral to estimate the positive predictive value or yield of the screening, or follow up of the whole cohort to identify false negative cases. CONCLUSION: Data on the effectiveness and efficiency of both the routine and selective SEM examination in accurately identifying children with new or ongoing health problems are not available at the present time. The studies reviewed here demonstrate the fragility of the evidence on which the school entry medical is based, and call into question the ethical basis of this programme.

4. **Berti LC, Zylbert S, Rolnitzky L. Comparison of health status of children using a school-based health center for comprehensive care. J Pediatr Health Care 2001;15(5):244-50.**
Abstract: OBJECTIVE: Our objective was to compare health problems and medical coverage of homeless and housed children who used a school-based health center (SBHC) for comprehensive care. METHODS: Medical charts of homeless children (n = 76) and housed children (n = 232) seen for comprehensive care at an SBHC in New York City during the 1998-99 school year were systematically reviewed and compared. RESULTS: Controlled for ethnicity and medical coverage, homeless children were 2.5 times as likely (P <.001) to have health problems and 3 times as likely (P <.001) to have severe health problems as housed children. The most common health problems identified in the homeless population were asthma (33%), vision (13%), mental health (9%), and acute problems (8%). Lack of medical coverage was evident in 58% of homeless children, compared with 15% of housed children (P <.001). CONCLUSION: Study findings identify homeless children as being at increased risk for health problems and lack of medical coverage. These findings support use of an SBHC for comprehensive care by underserved segments of the population and a need for increased vigilance on the part of health care providers caring for homeless children.

5. **Cardon G, Balague F. Low back pain prevention's effects in schoolchildren: what is the evidence? Eur Spine J 2004;13:663-79.**

Abstract: Given the high prevalence rates of back pain, as early as in childhood, there has been a call for early preventive interventions. To determine which interventions are used to prevent back problems in schoolchildren, as well as what the evidence is for their utility, the literature was searched to locate all investigations that used subjects under the age of 18 and not seeking treatment. Included investigations were specifically designed as an intervention for low back pain (LBP) prevention. Additionally, a literature search was performed for modifiable risk factors for LBP in schoolchildren. The literature-update search was performed within the scope of the "COST Action B13" of the European Commission, approved for the development of European guidelines for the management of LBP. It was concluded that intervention studies in schoolchildren focusing on back-pain prevention are promising but too limited to formulate evidence-based guidelines. On the other hand, since the literature shows that back-pain reports about schoolchildren are mainly associated with psychosocial factors, the scope for LBP prevention in schoolchildren may be limited. However, schoolchildren are receptive to back-care-related knowledge and postural habits, which may play a preventive role for back pain in adulthood. Further studies with a follow-up into adulthood are needed to evaluate the long-term effect of early interventions and the possible detrimental effect of spinal loading at young age.

6. **Cuijpers P. Effective ingredients of school-based drug prevention programs. Addict Behav 2002;27(6):1009-23.**
Abstract: Drug prevention in schools is a top priority in most Western countries and several well-designed studies have shown that prevention programs have the potential of reducing drug use in adolescents. However, most prevention programs are not effective and there are no general criteria available for deciding which program is effective and which is not. In this systematic review of the literature, the current scientific knowledge about which characteristics determine the effectiveness of drug prevention programs is examined. Three types of studies are reviewed: meta-analyses (3 studies were included), studies examining mediating variables of interventions (6 studies), and studies directly comparing prevention programs with or without specific characteristics (4 studies on boosters, 12 on peer-versus adult-led programs, and 5 on adding community interventions to school programs). Seven evidence-based quality criteria were formulated: the effects of a program should have been proven; interactive delivery methods are superior; the "social influence model" is the best we have; focus on norms, commitment not to use, and intentions not to use; adding community interventions increases effects; the use of peer leaders is better; and adding life skills to programs may strengthen effects.

7. **Dobbins M, DeCorby K, Manske S, Goldblatt E. Effective practices for school-based tobacco use prevention. Prev Med 2008;46(4):289-97.**
Abstract: BACKGROUND: Research evidence addressing effectiveness of tobacco use prevention interventions has accumulated since the 1970s. Systematic reviews 1985-2006 were considered, building on previous syntheses and spanning tobacco control and prevention efforts to date. Practitioners' experience was drawn upon to supplement research evidence. METHODS: A systematic, comprehensive approach was used to synthesize published literature evaluating the effectiveness of school-based tobacco use prevention interventions. Systematic reviews conducted on all populations published in English, peer-reviewed journals were included. Reviews were screened for relevance and assessed for methodological quality using pre-tested, standardized tools. The best available evidence was extracted and integrated with experiential evidence from individual interview and focus group results from practitioners involved in tobacco use prevention programming. RESULTS: Considerable consensus among the three evidence sources indicates that school-based tobacco use prevention interventions are effective in reducing smoking prevalence, reducing smoking initiation and intended smoking intentions in the short term. There is adequate evidence from over three decades of research and years of experience to recommend ongoing implementation of school-based tobacco use prevention interventions. CONCLUSION: There is strong evidence that school-based tobacco use prevention programs are largely effective for most tobacco use related outcomes, at least in the short term.

8. **Dobbins M, Lockett D, Michel I, Beyers J, Feldman L, Vohra J, Micucci S. The effectiveness of school-based interventions in promoting physical activity and fitness among children and youth: a systematic review. Hamilton, ON, Canada: City of Hamilton, Social and Public Health Services Division. Effective Public Health Practice Project. 2001**

9. **Early TJ, Vonk ME. Effectiveness of school social work from a risk and resilience perspective. Soc Work Educ 2001;23(1):9-31.**
Abstract: School social workers use a variety of interventions in prevention, treatment, and environmental change, directed at the mental health needs of children. Social work is at the periphery of schools' mission, and as such, has high standards of accountability. To demonstrate the value of social work in schools, we must have evidence of whether school social work practice is effective. This article identifies and reviews 21 controlled outcome studies of school social work practice. School social workers can use these studies as the basis for designing effective interventions in mental health prevention and treatment efforts in schools, including efforts targeted at improving the overall climate of the schools. The review incorporates a risk and resilience perspective to link the demonstrated effects of interventions to the wider body of literature on children's development, especially in regard to mental health.

10. **Ennett ST, Ringwalt CL, Thorne J, Rohrbach LA, Vincus A, Simons-Rudolph A, et al. A comparison of current practice in school-based substance use prevention programs with meta-analysis findings. Prev Sci 2003;4(1):1-14.**
Abstract: The series of seminal meta-analytic studies of school-based substance use prevention program studies conducted by the late Nancy S. Tobler and colleagues concluded that programs with content focused on social influences' knowledge, drug refusal skills, and generic competency skills and that use participatory or interactive teaching strategies were more effective than programs focused on knowledge and attitudes and favoring traditional didactic instruction. The present study compared current school practice against evidence-based standards for "effective content" and "effective delivery," derived from the Tobler findings. Respondents were the lead staff who taught substance use prevention in the 1998-1999 school year in a national sample of public and private schools that included middle school grades (N = 1,795). Results indicate that most providers (62.25%) taught effective content, but few used effective delivery (17.44%), and fewer still used both effective content and delivery (14.23%). Those who taught an evidence-based program (e.g., Life Skills Training, Project ALERT), however, were more likely to implement both effective content and delivery, as were those teachers who were recently trained in substance use prevention and were comfortable using interactive teaching methods. The findings indicate that the transfer to practice of research knowledge about school-based substance use prevention programming has been limited.

11. **Faggiano F, Vigna-Taglianti FD, Versino E, Zambon A, Borraccino A, Lemma P. School-based prevention for illicit drugs use: a systematic review. Prev Med 2008;46(5):385-96.**
Abstract: OBJECTIVE: To evaluate the effectiveness of school-based interventions in preventing or reducing drug use. METHODS: The search strategy was conducted according to the Cochrane Collaboration method, and applied to MEDLINE, EMBASE, ERIC, PSYCHINFO, Cochrane Library, ACP Journal Club, Cochrane Drugs and Alcohol Group Register. RCTs and CCTs evaluating school-based interventions designed to prevent substance use were reviewed. Data were extracted independently by two reviewers. Quality was assessed. Interventions were classified as skills, affective, and knowledge focused. RESULTS: 29 RCTs were included; 28 were conducted in the USA; most were focused on 6th-7th grade students. Compared with usual curricula, skills-based interventions significantly reduce marijuana use (RR=0.82; 95% CI: 0.73, 0.92) and hard drug use (RR=0.45; 95% CI: 0.24, 0.85), and improve decision-making skills, self-esteem, peer pressure resistance (RR=2.05; 95% CI: 1.24, 3.42) and drug knowledge. Compared with usual curricula, affective interventions improve decision-making skills and drug knowledge, and knowledge-focused programs improve drug knowledge. Skills-based interventions are better than affective ones in improved self-efficacy. No differences are evident for skills vs. knowledge-focused programs on drug knowledge. Affective interventions improve decision-making skills and drug knowledge to a higher degree than knowledge-focused programs. CONCLUSION: Skills-based programs help to deter drug use. Well designed, long-term randomised trials, and evaluation of intervention components are required.

12. **Faggiano F, Vigna-Taglianti FD, Versino E, Zambon A, Borraccino A, Lemma P. School-based prevention for illicit drugs' use. Cochrane Database Syst Rev 2005, Issue 2. Art. No.: CD003020. DOI: 10.1002/14651858.CD003020.pub2.**
Abstract: BACKGROUND: Drug addiction is a chronic, relapsing disease. Primary interventions should be aimed to reduce first use, or prevent the transition from experimental use to addiction. School is the appropriate setting for preventive interventions. OBJECTIVES: To evaluate the effectiveness of school-based interventions in improving knowledge, developing skills, promoting change, and preventing or reducing drug use versus usual curricular activities or a different school-based intervention . SEARCH STRATEGY: MEDLINE , EMBASE, ERIC, PSYCHINFO, Cochrane Library, ACP Journal Club, Cochrane Drug and Alcohol Group Register, updated to February 2004, were searched. Bibliography of papers was checked and personal contacts were made to identify other relevant studies. SELECTION CRITERIA: RCTs, CCTs or Controlled Prospective Studies (CPS) evaluating school-based interventions designed to prevent substance use. DATA COLLECTION AND ANALYSIS: Data were selected and extracted independently by two reviewers. Quality was assessed with the CDAG checklist.Interventions were classified as skills, affective, knowledge-focused and other characteristics were also studied (teaching, follow-up implementation, context activation). MAIN RESULTS: 32 studies (29 RCTs and 3 CPSs) were included. 28 were conducted in the USA; most were focused on 6th-7th grade students, and based on post-test assessment. RCTs: (1) Knowledge vs usual curricula: Knowledge focused programs improve drug knowledge (SMD=0.91; 95% CI: 0.42, 1.39).(2) Skills vs usual curricula: Skills based interventions increase drug knowledge (WMD=2.60; 95% CI: 1.17-4.03), decision making skills (SMD=0.78; CI95%: 0.46-1.09), self-esteem (SMD=0.22; CI95%: 0.03-0.40), peer pressure resistance (RR=2.05; CI95%: 1.24-3.42), drug use (RR=0.81; CI95%: 0.64, 1.02), marijuana use (RR=0.82; CI95%: 0.73, 0.92) and hard drug use (RR=0.45; CI95%: 0.24-0.85). (3) Skills vs knowledge: No differences are evident.(4) Skills vs affective: Skills-based interventions are only better than affective ones in self-efficacy (WMD=1.90; CI95%: 0.25, 3.55). (5) Affective vs usual curricula: Affective interventions improve drug knowledge (SMD=1.88; CI95%: 1.27, 2.50) and decision making skills (SMD=1.35; CI95%: 0.79, 1.9). (6) Affective vs knowledge: Affective interventions improve drug knowledge (SMD=0.60; CI95%: 0.18,1.03), and decision making skills (SMD=1.22; CI95%: 0.33, 2.12). Results from CPSs: No statistically significant results emerge from CPSs. AUTHORS' CONCLUSIONS: Skills based programs appear to be effective in deterring early-stage drug use.

The replication of results with well designed, long term randomised trials, and the evaluation of single components of intervention (peer, parents, booster sessions) are the priorities for research. All new studies should control for cluster effect.

13. **Fernandez S, Nebot M, Jane M. [The evaluation of effectiveness of scholastic programs in the prevention of consumption of tobacco, alcohol and cannabis: what do meta-analyses tell us?]. Rev Esp Salud Publica 2002;76(3):175-87.**
Abstract: Consumption of tobacco, alcohol and illegal drugs is a major public health problem in developed countries. The aim of the study is to describe the impact and associated characteristics of preventive programs addressed at those problems in the school setting. Meta-analysis focusing on evaluations of programs focusing on smoking, alcohol and/or cannabis at the school setting are reviewed. The search was done at Cochrane Library and Medline databases of articles published between 1993 and 1999, and including as keywords programs, education, drugs prevention, prevention, smoking, alcohol, school, adolescence, teenagers, young people, evaluation, health education, effectiveness, review, meta-analysis. We found 5 meta-analysis of programs summarizing the effect of preventive programs, most of them dealing with legal and illegal drugs. However, most of the interventions reporting changes in behavior measured only smoking. More effective interventions addressed social influences, used active methodology and were implemented by teachers or peers. The importance of booster sessions, the quality of implementation and thorough evaluation is stressed. Overall, meta-analysis of evaluated programs shows a small effect, although the population impact may be relevant. Some limitations point to new areas of interest for future research.

14. **Fletcher A, Bonell C, Hargreaves J. School effects on young people's drug use: a systematic review of intervention and observational studies. J Adolesc Health 2008;42:209-20.**
Abstract: PURPOSE: This systematic review examined the hypothesis that school institutional factors influence young people's use of drugs. We aimed to (1) identify the effect of school-level changes on drug use and (2) explore the possible mechanisms by which school-level influences on individual drug use might occur. METHODS: Systematic review. Experimental/quasi-experimental studies of "whole-school" drug prevention interventions and longitudinal observational studies on the association between school-level and individual-level school-related exposures and drug use were included. Experimental studies were included because they are the most reliable available source of evidence about causation. Observational studies of school-level and individual-level school-related exposures were included with the aim of providing evidence about a wider range of possible school-level effects and how school-level influences might be mediated by individual-level factors. RESULTS: Experimental studies suggested that changes to the school social environment that increase student participation, improve relationships and promote a positive school ethos may be associated with reduced drug use. School-level and individual-level observational studies consistently reported that disengagement and poor teacher-student relationships were associated with drug use and other risky health behaviors. CONCLUSIONS: There is evidence of school effects on young people's drug use. Interventions that promote a positive school ethos and reduce student disaffection may be an effective complement to drug prevention interventions addressing individual knowledge, skills, and peer norms. Such approaches should now be piloted in a wider range of settings. Further research is also needed to explore mechanisms by which schools may influence young people's drug use.

15. **Gates S, McCambridge J, Smith LA, Foxcroft D. Interventions for prevention of drug use by young people delivered in non-school settings. Cochrane Database of Systematic Reviews 2006, Issue 1. Art. No.: CD005030. DOI: 10.1002/14651858.CD005030.pub2.**
Abstract: BACKGROUND: Interventions intended to prevent or reduce use of drugs by young people may be delivered in schools or in other settings. This review aims to summarise the current literature about the effectiveness of interventions delivered in non schools settings. OBJECTIVES: (1) - To summarise the current evidence about the effectiveness of interventions delivered in non-school settings intended to prevent or reduce drug use by young people under 25; (2) - To investigate whether interventions' effects are modified by the type and setting of the intervention, and the age of young people targeted; (3) - To identify areas where more research is needed. SEARCH STRATEGY: We searched Cochrane Central Register of Controlled Trials (CENTRAL - The Cochrane Library Issue 4, 2004), MEDLINE (1966-2004), EMBASE (1980-2004), PsycInfo (1972-2004), SIGLE (1980-2004), CINAHL (1982-2004) and ASSIA (1987-2004). We searched also reference lists of review articles and retrieved studies. SELECTION CRITERIA: Randomised trials that evaluated an intervention targeting drug use by young people under 25 years of age, delivered in a non-school setting, compared with no intervention or another intervention, that reported substantive outcomes relevant to the review. DATA COLLECTION AND ANALYSIS: Two authors independently assessed trial quality and extracted data. Results were tabulated, as studies were considered too dissimilar to combine using meta-analysis. MAIN RESULTS: Seventeen studies, 9 cluster randomised studies, with 253 clusters, 8 individually randomised studies with 1230 participants, evaluating four types of intervention: motivational interviewing or brief intervention, education or skills training, family interventions and multi-component community interventions. Many studies had methodological drawbacks, especially high levels of loss to follow-up. There were too few studies for firm conclusions. One study of motivational interviewing suggested that this intervention was beneficial on cannabis use. Three

family interventions (Focus on Families, Iowa Strengthening Families Program and Preparing for the Drug-Free Years), each evaluated in only one study, suggested that they may be beneficial in preventing cannabis use. The studies of multi component community interventions did not find any strong effects on drug use outcomes, and the two studies of education and skills training did not find any differences between the intervention and control groups. AUTHORS' CONCLUSIONS: There is a lack of evidence of effectiveness of the included interventions. Motivational interviewing and some family interventions may have some benefit. Cost-effectiveness has not yet been addressed in any studies, and further research is needed to determine whether any of these interventions can be recommended. INTERVENTIONS DELIVERED TO YOUNG PEOPLE IN NON-SCHOOL SETTINGS FOR THE PREVENTION OF DRUG USE: Drug use is widespread among young people including those still at school.Taking drugs is not a medical problem in itself but can affect physical andmental health and social functioning. People may become dependent on drugs, and use of low risk illicit drugs can escalate into use of higher risk drugs. In schools, programs have been introduced to prevent or reduce drug use among young people. Non-school settings for interventions include youth clubs, primary care centres, colleges, with families and in the community. Srategies can target entire populations or be directed at specific groups, often those at high risk. The review authors identified 17 controlled studies, 9 cluster randomised studies with 253 clusters and 8 individually randomised studies with 1230 participants. All but two of the studies were conducted in the USA. The other studies were in the UK and China. Follow-up periods varied from at completion of the intervention to six years. The studies were too few and each intervention too different to draw any firm conclusions on whether non-school based interventions prevent or reduce drug use by young people.The interventions with suggested benefits need further evaluation before it can be firmly established that they are effective. One of two studies of motivational interviewing suggested that this intervention was beneficial on self-reported cannabis use. Three family interventions (Focus on Families, Iowa Strengthening Families Program and Preparing for the Drug-Free Years) were evaluated, in two separate studies, and may have been beneficial in preventing self-reported cannabis use. The latter two programs were compared to the school-based Life Skills Training program. All of the eight studies of family interventions included contact with parents, in family groups or in separate sessions for parents and their children. Multicomponent community interventions did not have any strong effects on drug use. There were five studies, four of which added the community component to a school drug education program. Education and skills training was not effective in two studies. Many of the studies lacked blinding and had high numbers of participants lost to follow up. No study reported cost outcomes.

16. **Gottfredson DC, Wilson DB. Characteristics of effective school-based substance abuse prevention. Prev Sci 2003;4(1):27-38.**
Abstract: This study summarizes, using meta-analytic techniques, results from 94 studies of school-based prevention activities that examined alcohol or other drug use outcomes. It set out to determine what features of school-based substance abuse prevention programs are related to variability in the size of program effects, It asked (1) Which populations (e.g., high risk vs. general population) should be targeted for prevention services? (2) What is the best age or developmental stage for prevention programming? (3) Does program duration matter? and (4) Does the role of the person delivering the service (e.g., teacher, law enforcement officer, peer) matter? The results suggest that targeting middle school aged children and designing programs that can be delivered primarily by peer leaders will increase the effectiveness of school-based substance use prevention programs. The results also imply that such programs need not be lengthy. The evidence related to the targeting issue is sparse, but suggests that, at least for programs teaching social competency skills, targeting higher risk youths may yield stronger effects than targeting the general population. Suggestions for future research are offered.

17. **Hahn R, Fuqua-Whitley D, Wethington H, Lowy J, Liberman A, Crosby A, et al. The effectiveness of universal school-based programs for the prevention of violent and aggressive behavior: a report on recommendations of the Task Force on Community Preventive Services. MMWR Recomm Rep 2007;56(RR-7):1-12.**
Abstract: Universal school-based programs to reduce or prevent violent behavior are delivered to all children in classrooms in a grade or in a school. Similarly, programs targeted to schools in high-risk areas (defined by low socioeconomic status or high crime rates) are delivered to all children in a grade or school in those high-risk areas. During 2004-2006, the Task Force on Community Preventive Services (Task Force) conducted a systematic review of published scientific evidence concerning the effectiveness of these programs. The results of this review provide strong evidence that universal school-based programs decrease rates of violence and aggressive behavior among school-aged children. Program effects were demonstrated at all grade levels. An independent meta-analysis of school-based programs confirmed and supplemented these findings. On the basis of strong evidence of effectiveness, the Task Force recommends the use of universal school-based programs to prevent or reduce violent behavior.

18. **Joronen K, Rankin SH, Astedt-Kurki P. School-based drama interventions in health promotion for children and adolescents: systematic review. J Adv Nurs 2008;63(2):116-31.**
Abstract: AIM: The paper is a report of a review of the literature on the effects of school-based drama interventions in health promotion for school-aged children and adolescents. BACKGROUND: Drama, theatre and role-playing methods are commonly used in health promotion programmes, but evidence of

their effectiveness is limited. The educational drama approach and social cognitive theory is share the assumption that learning is based on self-reflection and interaction between environment and person. However, educational drama also emphasizes learning through the dialectics between actual and fictional contexts. DATA SOURCES: A search was carried out using 10 databases and hand searching for the period January 1990 to October 2006. METHODS: A Cochrane systematic review was conducted. RESULTS: Nine studies met the criteria for inclusion. Their topics included health behaviour (five studies), mental health (two) and social health (two). Actor-performed drama or theatre play followed by group activities was the intervention in five studies, and classroom drama in four studies. Four of the studies were randomized controlled trials and five were non-randomized controlled studies. Four reports gave the theory on which the intervention was based, and in eight studies at least some positive effects or changes were reported, mostly concerning knowledge and attitudes related to health behaviour. The diversity of designs and instruments limited comparisons. CONCLUSION: There is a need for well-designed and theory-based studies that address drama interventions in health promotion for children and families. The challenge is to find or develop a theory, which combines educational, drama and health theories with valid and reliable measurements to examine the effects of the intervention.

19. **Mukoma W, Flisher AJ. Evaluations of health promoting schools: a review of nine studies. Health Promot Internation 2004;19:357-68.**
Abstract: The concept of 'health promoting schools' has been embraced internationally as an effective way of promoting the health of children, adolescents, and the wider school community. It is only recently that attempts have been made to evaluate health promoting schools. This paper reviews evaluations of health promoting schools and draws useful evaluation methodology lessons. The review is confined to school-based interventions that are founded explicitly on the concept of the health promoting school and employ the concept beyond one school domain. We included nine evaluations in this review. Seven of these were published in the peer reviewed scientific literature. Two were unpublished reports. One study was a randomized controlled trial, while a quasi-experimental research design with comparison schools was used in three studies. With three exceptions, combinations of quantitative and qualitative data were collected. There was evidence that the health promoting school has some influence on various domains of health for the school community. It is also possible to integrate health promotion into the school curriculum and policies successfully. However, the evaluation of health promoting schools is complex. We discuss some of the methodological challenges of evaluating health promoting schools and make suggestions for improving future evaluations.

20. **Murray NG, Low BJ, Hollis C, Cross AW, Davis SM. Coordinated school health programs and academic achievement: a systematic review of the literature. J Sch Health 2007;77(9):589-600.**
Abstract: BACKGROUND: Few evaluations of school health programs measure academic outcomes. K-12 education needs evidence for academic achievement to implement school programs. This article presents a systematic review of the literature to examine evidence that school health programs aligned with the Coordinated School Health Program (CSHP) model improve academic success. METHODS: A multidisciplinary panel of health researchers searched the literature related to academic achievement and elements of the CSHP model (health services, counseling/social services, nutrition services, health promotion for staff, parent/family/community involvement, healthy school environment, physical education, and health education) to identify scientifically rigorous studies of interventions. Study designs were classified according to the analytic framework provided in the Guide developed by the Community Preventive Services Task Force. RESULTS: The strongest evidence from scientifically rigorous evaluations exists for a positive effect on some academic outcomes from school health programs for asthmatic children that incorporate health education and parental involvement. Strong evidence also exists for a lack of negative effects of physical education programs on academic outcomes. Limited evidence from scientifically rigorous evaluations support the effect of nutrition services, health services, and mental health programs, but no such evidence is found in the literature to support the effect of staff health promotion programs or school environment interventions on academic outcomes. CONCLUSIONS: Scientifically rigorous evaluation of school health programs is challenging to conduct due to issues related to sample size, recruitment, random assignment to condition, implementation fidelity, costs, and adequate follow-up time. However, school health programs hold promise for improving academic outcomes for children.

21. **Park-Higgerson HK, Perumean-Chaney SE, Bartolucci AA, Grimley DM, Singh KP. The evaluation of school-based violence prevention programs: a meta-analysis. J Sch Health 2008;78(9):465-79.**
Abstract: BACKGROUND: Youth violence and related aggressive behaviors have become serious public health issues with physical, economic, social, and psychological impacts and consequences. This study identified and evaluated the characteristics of successful school-based violence prevention programs. METHODS: Twenty-six randomized controlled trial (RCT), school-based studies that were designed to reduce externalizing, aggressive, and violent behavior between the 1st and 11th grades were analyzed for assessing the effects of 5 program characteristics by comparing results of intervention groups to control groups (no intervention) after intervention using a meta-analysis. Electronic databases and bibliographies were systematically searched, and a standardized mean difference was used for analysis. RESULTS: There

was no significant difference between interventions, although programs that used non-theory-based interventions, focused on at-risk and older children, and employed intervention specialists had slightly stronger effects in reducing aggression and violence. Interventions using a single approach had a mild positive effect on decreasing aggressive and violent behavior (effect size =-0.15, 95% CI =-0.29 to -0.02, p = .03). CONCLUSIONS: Unlike previous individual study findings, this meta-analysis did not find any differential effects for 4 of the 5 program characteristics. In addition, the significant effect noted was contrary to expectation, exemplifying the complexity of identifying effective program strategies. This study adds to the current literature by assessing the program characteristics of RCT studies in an effort to determine what factors may affect school-based violence prevention program success.

22. **Rundall TG, Bruvold WH. A meta-analysis of school-based smoking and alcohol use prevention programs. Health Educ Q 1988;15(3):317-34.**
Abstract: Tobacco and alcohol use among adolescents continue at historically high rates, and school-based interventions designed to deter students from smoking and drinking are increasingly being implemented. This study reports a meta-analysis of 47 smoking and 29 alcohol school-based intervention programs published after 1970. Results indicate that, in general, smoking and alcohol interventions have equally modest effects on immediate behavioral outcomes. Smoking interventions, however, have been more successful than alcohol interventions at altering students' long term behavior. All of the alcohol programs and all but one of the smoking programs reviewed successfully increased knowledge regarding the risks of these behaviors. Attitude change appears to be more difficult to achieve. Twenty-nine of 33 smoking studies and only 19 of 31 alcohol studies successfully changed students' attitudes. Finally, the data indicate that for immediate smoking outcomes and long-term alcohol outcomes innovative interventions relying upon social reinforcement, social norms, and developmental behavioral models are more effective than traditional "awareness" programs designed to inform adolescents about the health risks associated with tobacco and alcohol use. The implications of these findings for future of school-based health promotion programs are discussed.

23. **Spence SH, Shortt AL. Research review: can we justify the widespread dissemination of universal, school-based interventions for the prevention of depression among children and adolescents? J Child Psychol Psychiatry 2007;48:526-42.**
This review examines the evidence concerning the efficacy and effectiveness of universal, school-based interventions designed to prevent the development of depression in children and adolescents. It evaluates the outcomes of research in relation to standards of evidence specified by the Society for Prevention Research (Flay et al., 2005). The limited evidence available brings into doubt the efficacy and effectiveness of current universal, school-based approaches to the prevention of depression, suggesting that the widespread dissemination of such interventions would be premature. Relatively brief programs, that focus specifically on enhancing individual skills and characteristics of the individual in the absence of environmental change, may be insufficient to produce lasting effects in the prevention of depression among children and adolescents.

24. **Steele EJ, Dawson AP, Hiller JE. School-based interventions for spinal pain: a systematic review. Spine 2006;31(2):226-33.**
Abstract: STUDY DESIGN: Systematic review. OBJECTIVES: To establish the effectiveness of school-based spinal health interventions in terms of: 1) improving knowledge about the spine/spinal care; 2) changing spinal care behaviors; and 3) decreasing the prevalence of spinal pain. SUMMARY OF BACKGROUND DATA: Spinal pain is a significant problem in children and adolescents that has been addressed through school-based spinal health interventions. No systematic review has been carried out on this topic to date. METHODS: A systematic literature review sought studies that evaluated school-based spinal health interventions. Using clearly defined study inclusion criteria, 11 databases were searched from their inception to March 2004. To identify further literature, three relevant journals were hand searched, reference lists were checked, and authors of included papers were contacted. Two reviewers independently appraised the quality of identified papers and extracted data regarding intervention and study characteristics, statistical analyses performed, and study results. Data were examined using a narrative synthesis of results, and the outcomes of interest were considered individually (knowledge, behaviors, pain prevalence). RESULTS: Twelve papers were included in this review; all papers received a "weak" quality rating. Results of these studies indicate that school-based spinal health interventions may be effective in increasing spinal care knowledge and decreasing the prevalence of spinal pain. However, overall the evidence is inconclusive regarding spinal care behaviors. CONCLUSIONS: The poor quality of the reviewed studies limits the conclusions that can be made regarding the effectiveness of school-based spinal health interventions.

25. **Stickler GB. Are yearly physical examinations in adolescents necessary? J Am Board Fam Med 2000;13(3):172-7.**
Abstract: BACKGROUND: Recommendations regarding the frequency of routine physical examinations for adolescents have varied from one examination every 2 to 3 years to yearly evaluations. Because none of these recommendations was based on studies regarding the usefulness of such examinations, it was pertinent to review the results of published studies. METHODS: All series of routine school and preathletic

examinations of adolescents published in the English literature from 1943 to 1995 were reviewed. Only reviews of examinations by physicians with or without supervised health professionals were included. RESULTS: Findings included weight, blood pressure, visual acuity, innocent heart murmurs, scoliosis, referral for further testing, and serious abnormalities unknown before examination. A total of 20,047 examinations by 12 different groups of investigators was abstracted. Only 2 adolescents had major, previously unknown findings: 1 boy was blind in one eye and the other had mitral insufficiency. Elevated blood pressures were found in 0.1% to 1.6% of adolescents. Minor findings included acne, caries, myopia, and minor orthopedic problems, but they did not prevent participation in school or sports. CONCLUSIONS: Yearly physical examinations in adolescents are not cost-effective and have practically no value in finding important pathologic conditions. This conclusion would not apply to sexually active teenagers. The value of an examination for health education or detection of mental problems has never been tested in this population. For entrance to school and camps or for sports participation, the review of a questionnaire and screening examinations by allied health providers should be the method of choice unless future studies justify repeated yearly examination of adolescents.

26. **Thomas R. School-based programmes for preventing smoking. Cochrane Database Syst Rev 2002, Issue 4. Art. No.: CD001293. DOI: 10.1002/14651858.CD001293.pub2.**
Abstract: BACKGROUND: Smoking rates in adolescents are rising. Helping young people to avoid starting smoking is a widely endorsed goal of public health, but there is uncertainty about how to do this. Schools provide a route for communicating with a large proportion of young people, and school-based programmes for smoking prevention have been widely developed and evaluated. OBJECTIVES: To review all randomised controlled trials of behavioural interventions in schools to prevent children (aged 5 to12) and adolescents (aged 13 to18) starting smoking. SEARCH STRATEGY: We searched The Cochrane Controlled Trials and Tobacco Review group registers, MEDLINE, EMBASE, Psyclnfo, ERIC, CINAHL, Health Star, Dissertation Abstracts and studies identified in the bibliographies of articles. Individual MEDLINE searches were made for 133 authors who had undertaken randomised controlled trials in this area. SELECTION CRITERIA: Types of studies: those in which individual students, classes, schools, or school districts were randomised to the intervention or control groups and followed for at least six months. Types of participants: Children (aged 5 to12) or adolescents (aged 13 to18) in school settings. Types of interventions: Classroom programmes or curricula, including those with associated family and community interventions, intended to deter use of tobacco. We included programmes or curricula that provided information, those that used social influences approaches, those that taught generic social competence, and those that included interventions beyond the school into the community. We included programmes with a drug or alcohol focus if outcomes for tobacco use were reported. Types of outcome measures: Prevalence of non-smoking at follow-up among those not smoking at baseline. We did not require biochemical validation of self-reported tobacco use for study inclusion. DATA COLLECTION AND ANALYSIS: We assessed whether identified citations were randomised controlled trials. We assessed the quality of design and execution, and abstracted outcome data. Because of the marked heterogeneity of design and outcomes, we did not perform a meta-analysis. We synthesised the data using narrative systematic review. We grouped studies by intervention method (information; social competence; social influences; combined social influences/social competence and multi-modal programmes). Within each category, we placed them into three groups according to validity using quality criteria for reported study design. MAIN RESULTS: Of the 76 randomised controlled trials identified, we classified 16 as category one (most valid). There were no category one studies of information giving alone. There were fifteen category one studies of social influences interventions. Of these, eight showed some positive effect of intervention on smoking prevalence, and seven failed to detect an effect on smoking prevalence. The largest and most rigorous study, the Hutchinson Smoking Prevention Project, found no long-term effect of an intensive 8-year programme on smoking behaviour. There was a lack of high quality evidence about the effectiveness of combinations of social influences and social competence approaches. There was limited evidence about the effectiveness of multi-modal approaches including community initiatives. REVIEWER'S CONCLUSIONS: There is no rigorous test of the effects of information giving about smoking. There are well-conducted randomised controlled trials to test the effects of social influences interventions: in half of the group of best quality studies those in the intervention group smoke less than those in the control, but many studies showed no effect of the intervention. There is a lack of high-quality evidence about the effectiveness of combinations of social influences and social competence interventions, and of multi-modal programmes that include community interventions.

27. **Wainwright P, Thomas J, Jones M. Health promotion and the role of the school nurse: a systematic review. J Adv Nurs 2000;32(5):1083-91.**
Abstract: This paper describes findings from a systematic review of the literature on the effectiveness of school nurses in promoting the health of school children. The paper gives a brief account of the background to the study and the search strategy adopted. Some key findings are presented and discussed. The brief for the review was to seek evidence of effectiveness in the practice of school nurses. The results of the review were disappointing, in that little research of acceptable quality was found and little could be said about effectiveness. The result is therefore a more diffuse review that gives a summary of descriptive research and current views and opinions, although it does also present some pointers for future research. The study was funded by Health Promotion.

28. **Wiefferink CH, Peters L, Hoekstra F, Dam GT, Buijs GJ, Paulussen TGWM. Clustering of health-related behaviors and their determinants: possible consequences for school health interventions. Prev Sci 2006;7(2):127-49.**
Abstract: Characterizing school health promotion is its category-by-category approach, in which each separate health-related behavior is addressed independently. Such an approach creates a risk that extra-curricular activities become overloaded, and that teaching staff are distracted by continuous innovations. Within the health promotion sector there are thus increasing calls for an integrative approach to health-related behaviors. However, a meaningful integrative approach to different lifestyles will be possible only if there is some clustering of individual health-related behaviors and if health-related behaviors have a minimum number of determinants in common. This systematic review aims to identify to what extent the four health-related behaviors smoking, alcohol abuse, safe sex and healthy nutrition cluster; and how their determinants are associated. Potentially modifiable determinants that offer clues for an integrative approach of school health-promotion programs are identified. Besides, the direction in which health educators should look for a more efficient instructional design is indicated.

29. **Wiehe SE, Garrison MM, Christakis DA, Ebel BE, Rivara FP. A systematic review of school-based smoking prevention trials with long-term follow-up. J Adolesc Health 2005;36(3):162-9.**
Abstract: BACKGROUND: Several systematic reviews of school-based smoking prevention trials have shown short-term decreases in smoking prevalence but have not examined long-term follow-up evaluation. The purpose of this study was to conduct a systematic review of rigorously evaluated interventions for school-based smoking prevention with long-term follow-up data. METHODS: We searched online bibliographic databases and reference lists from review articles and selected studies. We included all school-based, randomized, controlled trials of smoking prevention with follow-up evaluation to age 18 or 12th grade and at least 1 year after intervention ended, and that had smoking prevalence as a primary outcome. The primary outcome was current smoking prevalence (defined as at least 1 cigarette in the past month). RESULTS: The abstracts or full-text articles of 177 relevant studies were examined, of which 8 met the selection criteria. The 8 articles included studies differing in intervention intensity, presence of booster sessions, follow-up periods, and attrition rates. Only one study showed decreased smoking prevalence in the intervention group. CONCLUSIONS: Few studies have evaluated the long-term impact of school-based smoking prevention programs rigorously. Among the 8 programs that have follow-up data to age 18 or 12th grade, we found little to no evidence of long-term effectiveness.

30. **Wilson SJ, Lipsey MW. School-based interventions for aggressive and disruptive behavior: update of a meta-analysis. Am J Prev Med 2007;33(2 Suppl):S130-S143.**
Abstract: BACKGROUND: Research about the effectiveness of school-based psychosocial prevention programs for reducing aggressive and disruptive behavior was synthesized using meta-analysis. This work updated previous work by the authors and further investigated which program and student characteristics were associated with the most positive outcomes. METHODS: Two hundred forty-nine experimental and quasi-experimental studies of school-based programs with outcomes representing aggressive and/or disruptive behavior were obtained. Effect sizes and study characteristics were coded from these studies and analyzed. RESULTS: Positive overall intervention effects were found on aggressive and disruptive behavior and other relevant outcomes. The most common and most effective approaches were universal programs and targeted programs for selected/indicated children. The mean effect sizes for these types of programs represent a decrease in aggressive/disruptive behavior that is likely to be of practical significance to schools. Multicomponent comprehensive programs did not show significant effects and those for special schools or classrooms were marginal. Different treatment modalities (e.g., behavioral, cognitive, social skills) produced largely similar effects. Effects were larger for better-implemented programs and those involving students at higher risk for aggressive behavior. CONCLUSIONS: Schools seeking prevention programs may choose from a range of effective programs with some confidence that whatever they pick will be effective. Without the researcher involvement that characterizes the great majority of programs in this meta-analysis, schools might be well-advised to give priority to those that will be easiest to implement well in their settings.

FOREBYGGE MISHANDLING

1. **Coles L. Prevention of physical child abuse: concept, evidence and practice. Community Pract 2008;81(6):18-22.**
Abstract: Given a lack of standardised procedures for preventing child abuse, what can be done in terms of thinking and action about the prevention of physical child abuse in health visiting and community practice? This paper reflects on knowledge gained while undertaking case series research into non-accidental head injury (NAHI), qualitative research with health visitors and mothers and fathers into the feasibility of

preventing NAHI, and work as a team member of the Welsh Child Protection Systematic Review Group. Prevention is an abstract term, with dimensions of an ethical nature, and requires prompt and timely action. To identify when preventive action is required, an understanding is needed of where there is risk, and what benefit or outcome may follow interventions. However, the knowledge in this field is limited, which means that it is wise to be cautious in claiming effectiveness of prevention activity. Nonetheless, if prevention is not seen to be practised, the development of skills and the means to evaluate interventions will not become embedded in the routine care of families with small children, and physical child abuse will not be prevented.

2. **Davis MK, Gidycz CA. Child sexual abuse prevention programs: a meta-analysis. J Clin Child Psychol 2000;29(2):257-65.**
Abstract: Conducted a meta-analytic evaluation of the effectiveness of school-based child abuse prevention programs. Literature searches identified 27 studies meeting inclusion criteria for use in this meta-analysis. The average effect size for all programs studied was 1.07, indicating that children who participated in prevention programs performed 1.07 SD higher than control group children on the outcome measures used in the studies. Analysis of moderator variables revealed significant effects for age, number of sessions, participant involvement, type of outcome measure, and use of behavioral skills training. Most important, programs presented over 4 or more sessions that allowed children to become physically involved produced the highest effect sizes. Although most often used only with younger children, findings suggest that active, long-term programs may be more effective for children of all ages.

3. **Hahn RA, Bilukha OO, Crosby A, Fullilove MT, Liberman A, Moscicki EK, et al. First reports evaluating the effectiveness of strategies for preventing violence: early childhood home visitation. MMWR Recomm Rep 2003;52(RR-14):1-9.**
Abstract: Early childhood home visitation programs are those in which parents and children are visited in their home during the child's first 2 years of life by trained personnel who provide some combination of the following: information, support, or training regarding child health, development, and care. Home visitation has been used for a wide range of objectives, including improvement of the home environment, family development, and prevention of child behavior problems. The Task Force on Community Preventive Services (the Task Force) conducted a systematic review of scientific evidence concerning the effectiveness of early childhood home visitation for preventing several forms of violence: violence by the visited child against self or others; violence against the child (i.e., maltreatment [abuse or neglect]); other violence by the visited parent; and intimate partner violence. On the basis of strong evidence of effectiveness, the Task Force recommends early childhood home visitation for the prevention of child abuse and neglect. The Task Force found insufficient evidence to determine the effectiveness of early childhood home visitation in preventing violence by visited children, violence by visited parents (other than child abuse and neglect), or intimate partner violence in visited families. (Note that insufficient evidence to determine effectiveness should not be interpreted as evidence of ineffectiveness.) No studies of home visitation evaluated suicide as an outcome. This report provides additional information regarding the findings, briefly describes how the reviews were conducted, and provides information that can help in applying the recommended intervention locally.

4. **MacLeod J, Nelson G. Programs for the promotion of family wellness and the prevention of child maltreatment: a meta-analytic review. Child Abuse Negl 2000;24(9):1127-49.**
Abstract: OBJECTIVE: The objectives were to determine the effectiveness of programs in promoting family wellness and preventing child maltreatment and to identify factors that moderate program success. METHOD: Meta-analysis, employing a 3-step model testing procedure, was used to review 56 programs designed to promote family wellness and prevent child maltreatment. RESULTS: The effect sizes for proactive interventions were larger at follow-up than at post-assessment, while the effect sizes for reactive interventions were higher at post-assessment than follow-up. The lowest effect sizes for home visitation programs on child maltreatment were for programs with 12 or fewer visits and less than a 6-month duration. Intensive family preservation programs with high levels of participant involvement, an empowerment/strengths-based approach, and a component of social support had higher effect sizes than programs without those elements. Also, both home visitation and intensive family preservation interventions achieved higher effect sizes with participants of mixed socioeconomic status (SES) than participants with low SES. CONCLUSIONS: The total mean weighted effect size was .41, indicating that outcomes for the intervention group exceed 66% of those in control/comparison groups. The findings from this review demonstrated that child maltreatment can be prevented and that family wellness can be promoted.

5. **MacMillan HL, Canadian Task Force on Preventive Health Care. Preventive health care, 2000 update: prevention of child maltreatment. CMAJ 2000;163(11):1451-8.**
Abstract: OBJECTIVES: To update the 1993 report from the Canadian Task Force on the Periodic Health Examination (now the Canadian Task Force on Preventive Health Care) by reviewing the evidence for the effectiveness of interventions aimed at preventing child maltreatment described in the scientific literature over the past 6 years. OPTIONS: Screening: a variety of techniques including assessment of risk indicators. Prevention: programs including home visitation; comprehensive health care programs; parent education

and support, combined services and programs aimed specifically at preventing sexual abuse. OUTCOMES: Occurrence of one or more of the subcategories of physical abuse, sexual abuse, neglect and emotional abuse in childhood. EVIDENCE: MEDLINE, PSYCINFO, ERIC and several other databases were searched, experts were consulted, and published recommendations were reviewed. Original research articles and overviews that examined screening for or prevention of child maltreatment were included in the update. No meta-analysis was performed because the range of manoeuvres precluded comparability. BENEFITS, HARMS AND COSTS: Because of the high false-positive rates of screening tests for child maltreatment and the potential for mislabelling people as potential child abusers, the possible harms associated with these screening manoeuvres outweigh the benefits. Two randomized controlled trials showed a reduction in the incidence of childhood maltreatment or outcomes related to physical abuse and neglect among first-time disadvantaged mothers and their infants who received a program of home visitation by nurses in the perinatal period extending through infancy. It is expected that a reduction in incidence of child maltreatment and other outcomes will lead to substantial government savings. Evidence remains inconclusive on the effectiveness of a comprehensive health care program, a parent education and support program, or a combination of services in preventing child maltreatment. Education programs designed to teach children prevention strategies to avoid sexual abuse show increased knowledge and skills but not necessarily reduced abuse. VALUES: The systematic review and critical appraisal of the evidence were conducted according to the evidence-based methodology of the Canadian Task Force on Preventive Health Care. RECOMMENDATIONS: There is further evidence of fair quality to exclude screening procedures aimed at identifying individuals at risk of experiencing or committing child maltreatment (grade D recommendation). There is good evidence to continue recommending a program of home visitation for disadvantaged families during the perinatal period extending through infancy to prevent child abuse and neglect (grade A recommendation). The target group for this program is first-time mothers with one or more of the following characteristics: age less than 19 years, single parent status and low socioeconomic status. The strongest evidence is for an intensive program of home visitation delivered by nurses beginning prenatally and extending until the child's second birthday. There is insufficient evidence to recommend a comprehensive health care program (grade C recommendation), a parent education and support program (grade C recommendation) or a combination of home-based services (grade C recommendation) as a strategy for preventing child maltreatment, but these interventions may be recommended for other reasons. There is insufficient evidence to recommend education programs for the prevention of sexual abuse (grade C recommendation); whether such programs reduce the incidence of sexual abuse has not been established. VALIDATION: The members of the Canadian Task Force on Preventive Health Care reviewed the findings of this analysis through an iterative process. The task force sent the final review and recommendations to selected external expert reviewers, and their feedback was incorporated. SPONSORS: The Canadian Task Force on Preventive Health Care is funded through a partnership between the Provincial and Territorial Ministries of Health and Health Canada.

6. **MacMillan HL, MacMillan JH, Offord DR, Griffith L, MacMillan A. Primary prevention of child physical abuse and neglect: a critical review. J Child Psychol Psychiatry 1994;35(5):835-56.**
Abstract: This paper (Part I) and its companion paper (Part II) provide an overview of the primary prevention of child maltreatment. Part I reviews the effectiveness of interventions aimed at the primary prevention of child physical abuse and neglect. Prospective controlled trials published between January 1979 and May 1993 were systematically identified. The quality of each study was determined using criteria which assessed methodological rigor. Interventions aimed at the prevention of physical abuse and neglect were classified into six main categories within the broad group of perinatal and early childhood programs. While many of these programs did not show a reduction in physical abuse or neglect, there is evidence that extended home visitation can prevent physical abuse and neglect among disadvantaged families.

7. **Mytton JA, DiGuiseppi C, Gough D, Taylor RS, Logan S. School-based secondary prevention programmes for preventing violence. Cochrane Database of Systematic Reviews 2006, Issue 3. Art. No.: CD004606. DOI: 10.1002/14651858.CD004606.pub2.**
Abstract: BACKGROUND: Early aggressive behaviour is a risk factor for later violence and criminal behaviour. Despite over 20 years of violence prevention interventions being delivered in the school setting, questions remain regarding the effectiveness of different interventions for children exhibiting aggressive behaviour. OBJECTIVES: To examine the effect of school based violence prevention programmes for children identified as aggressive or at risk of being aggressive. SEARCH STRATEGY: We searched CENTRAL, Cochrane Injuries Group specialised register, MEDLINE, EMBASE, other specialised databases and reference lists of articles. We also contacted authors and organisations to identify any further studies. SELECTION CRITERIA: We included trials meeting the following criteria; 1) participants were randomly assigned to intervention and control groups; 2) outcome data were collected concurrently; 3) participants comprised children in mandatory education identified as exhibiting, or at risk of, aggressive behaviour; 4) interventions designed to reduce aggression, violence, bullying, conflict or anger; 5) school based interventions; 6) outcomes included aggressive behaviour, school and agency responses to acts of aggression, or violent injuries. DATA COLLECTION AND ANALYSIS: Data were collected on design, participants, interventions, outcomes and indicators of study quality. Results of any intervention to no intervention were compared immediately post-intervention and at 12 months using meta-analysis where appropriate. MAIN RESULTS: Of 56 trials identified, none reported data on violent injuries. Aggressive

behaviour was significantly reduced in intervention groups compared to no intervention groups immediately post intervention in 34 trials with data, (Standardised Mean Difference (SMD) = -0.41; 95% confidence interval (CI) -0.56 to -0.26). This effect was maintained in the seven studies reporting 12 month follow-up (SMD = -0.40, (95% CI -0.73 to -0.06)). School or agency disciplinary actions in response to aggressive behaviour were reduced in intervention groups for nine trials with data, SMD = -0.48; 95% CI -1.16 to 0.19, although this difference may have been due to chance and was not maintained, based on two studies reporting follow-up to two to four months (SMD = 0.03; 95% CI -0.42 to 0.47). Subgroup analyses suggested that interventions designed to improve relationship or social skills may be more effective than interventions designed to teach skills of non-response to provocative situations, but that benefits were similar when delivered to children in primary versus secondary school, and to groups of mixed sex versus boys alone. AUTHORS' CONCLUSIONS: School-based secondary prevention programmes to reduce aggressive behaviour appear to produce improvements in behaviour greater than would have been expected by chance. Benefits can be achieved in both primary and secondary school age groups and in both mixed sex groups and boys-only groups. Further research is required to establish whether such programmes reduce the incidence of violent injuries or if the benefits identified can be maintained beyond 12 months. ARE SCHOOL-BASED PROGRAMMES AIMED AT CHILDREN WHO ARE CONSIDERED AT RISK OF AGGRESSIVE BEHAVIOUR, EFFECTIVE IN REDUCING VIOLENCE?: Violence is recognised as a major global public health problem, thus there has been much attention placed on interventions aimed at preventing aggressive and violent behaviour. As aggressive behaviour in childhood is considered to be a risk factor for violence and criminal behaviour in adulthood, violence prevention strategies targeted at children and adolescents, such as school-based programmes, are considered to be promising interventions.Some school-based prevention programmes target all children attending a school or class, whilst others confine the intervention to those children who have already been identified as exhibiting, or threatening, behaviour considered to be aggressive, such an approach is known as 'secondary prevention'. A wide variety of school-based violence prevention programmes have been implemented over the last 20 years, yet we are still without a full understanding of their effectiveness.The objective of this systematic review was to determine the effectiveness of school-based secondary prevention programmes to prevent violence (that is those interventions targeted at children identified as aggressive or at risk of being aggressive) .The authors examined all trials investigating the effectiveness of secondary violence prevention programmes targeted at children in mandatory education compared to no intervention or a placebo intervention.The authors found 56 studies; the overall findings show that school-based secondary prevention programmes aimed at reducing aggressive behaviour do appear to produce improvements in behaviour. The improvements can be achieved in both primary and secondary school age groups and in both mixed sex groups and boy-only groups.Further research is needed to investigate if the apparent beneficial programmes effects can be realised outside the experimental setting and in settings other than schools. None of the studies collected data on violent injury, so we can not be certain of the extent to which an improvement in behaviour translates to an actual injury reduction. In addition, more research is needed to determine if the beneficial effects can be maintained over time, and if the benefits can be justified against the costs of implementing such programmes.

8. **Reutzel TJ, Patel R, Myers MA. Medication management in primary and secondary schools. J Am Pharm Assoc (Wash) 2001;41(1):67-77.**
Abstract: OBJECTIVE: To summarize present knowledge about medication management in primary and secondary schools; to place this knowledge in its drug use and organizational contexts; and to provide a foundation for studying the problem and developing policy- and practice-level interventions aimed at alleviating it. To offer recommendations for practitioners, policy makers, and health professions educators aimed at improving the situation. DATA SOURCES: MEDLINE database (1966-1998); International Pharmaceutical Abstracts database (1977-1998); complete Medscape full-text search; contents of the Journal of School Nursing and the Journal of School Health (1966-present). STUDY SELECTION: We reviewed 95% of all articles, books, and reports identified using the search terms elementary school, middle school, junior high school, high school, primary school, secondary school, school nurse, school health, and schoolchildren. DATA EXTRACTION: The literature on this topic includes background material describing the nature of the problem and its political and organizational context and implying its significance; summaries of regulations, guidelines, and recommendations regarding medication management in the schools; and empirical studies. Few articles address pharmacist involvement in medication management in schools. DATA SYNTHESIS: Although approaches to this important problem vary widely, a set of core medication management guidelines is identifiable. Formal research is sparse, but it shows that medication use is widespread in schools and carries significant therapeutic and safety consequences. CONCLUSION: Pharmacists and school nurses must cross professional borders if they wish to play a role in solving this important drug therapy problem. Pharmacists can provide therapeutic and contextual perspectives on the problem, while school nurses can implement solutions within the schools.

9. **Rispens J, Aleman A, Goudena PP. Prevention of child sexual abuse victimization: a meta-analysis of school programs. Child Abuse Negl 1997;21(10):975-87.**
Abstract: OBJECTIVE: The aim of this article was to provide data about the effects of child sexual abuse prevention programs. A more specific aim was to estimate the contribution of potential moderator variables such as age, program duration, or sample size to effect size. METHOD: A meta-analytic approach was used to calculate post-test and follow-up effect sizes of 16 evaluation studies of school programs aimed

at the prevention of child sexual abuse victimization. Tests of categorical models were used in the analysis of moderator variables. Multiple regression analysis was used to determine their association with effect sizes. RESULTS: Significant and considerable mean post-intervention (d = .71) and follow-up (d = .62) effect sizes were found, indicating that victimization prevention programs are successful in teaching children sexual abuse concepts and self-protection skills. Intervention characteristics such as duration and content of the program, and child characteristics such as age and SES were important moderators of effect size. CONCLUSIONS: Our findings corroborate and refine the positive conclusions of traditional narrative reviews. Programs that focus on skill training, allowing sufficient time for children to integrate self-protection skills into their cognitive repertoire, are to be preferred. Future evaluation research should focus on transfer of training.

10. **Zwi K, Woolfenden S, Wheeler DM, O'Brien T, Tait P, Williams KJ. School-based education programmes for the prevention of child sexual abuse. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD004380. DOI: 10.1002/14651858.CD004380.pub2.**
Abstract: BACKGROUND: Child sexual abuse is a significant problem that requires an effective means of prevention. OBJECTIVES: To assess: if school-based programmes are effective in improving knowledge about sexual abuse and self-protective behaviours; whether participation results in an increase in disclosure of sexual abuse and/or produces any harm; knowledge retention and the effect of programme type or setting. SEARCH STRATEGY: Electronic searches of Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, PsycINFO, CINAHL, Sociological Abstracts, Dissertation Abstracts and other databases using MESH headings and text words specific for child sexual assault and randomised controlled trials (RCTs) were conducted in August 2006. SELECTION CRITERIA: RCTs or quasi-RCTs of school-based interventions to prevent child sexual abuse compared with another intervention or no intervention. DATA COLLECTION AND ANALYSIS: Meta-analyses and sensitivity analysis, using two imputed intraclass correlation coefficients (ICC) (0.1, 0.2), were used for four outcomes: protective behaviours, questionnaire-based knowledge, vignette-based knowledge and disclosure of abuse. Meta-analysis was not possible for retention of knowledge, likelihood of harm, or effect of programme type and setting. MAIN RESULTS: Fifteen trials measuring knowledge and behaviour change as a result of school-based child sexual abuse intervention programmes were included. Over half the studies in each initial meta-analysis contained unit of analysis errors. For behaviour change, two studies had data suitable for meta-analysis; results favoured intervention (OR 6.76, 95% CI 1.44, 31.84) with moderate heterogeneity (I2=56.0%) and did not change significantly when adjustments using intraclass coefficients were made. Nine studies were included in a meta-analysis evaluating questionnaire-based knowledge. An increase in knowledge was found (SMD 0.59; 0.44, 0.74, heterogeneity (I2=66.4%). When adjusted for an ICC of 0.1 and 0.2 the results were SMD 0.6 (0.45, 0.75) and 0.57 (0.44, 0.71) respectively. Heterogeneity decreased with increasing ICC. A meta-analysis of four studies evaluating vignette-based knowledge favoured intervention (SMD 0.37 (0.18, 0.55)) with low heterogeneity (I2=0.0%) and no significant change when ICC adjustments were made. Meta-analysis of between-group differences of reported disclosures did not show a statistically significant difference. AUTHORS' CONCLUSIONS: Studies evaluated in this review report significant improvements in knowledge measures and protective behaviours. Results might have differed had the true ICCs from studies been available or cluster-adjusted results been available. Several studies reported harms, suggesting a need to monitor the impact of similar interventions. Retention of knowledge should be measured beyond 3-12 months. Further investigation of the best forms of presentation and optimal age of programme delivery is required. SCHOOL-BASED PROGRAMMES FOR PREVENTING CHILD SEX ABUSE MAY IMPROVE KNOWLEDGE AND SELF-PROTECTIVE BEHAVIOURS BUT ALSO INCREASE ANXIETY; FURTHER RESEARCH IS NEEDED: Childhood sexual abuse is a serious problem for school aged children worldwide. There is no consistent definition of sexual abuse. Some studies restrict sexual abuse to instances of sexual body contact with the child, while others define sexual abuse as any sexual behaviour in a child's presence. Whatever its form, childhood sexual abuse can have a very negative impact on a child. The United Nations' Convention on the Rights of the Child states that "children have the right to be protected from being hurt and mistreated, physically or mentally" and the international community needs to investigate ways this can be done effectively. One widespread method used is to teach school aged children, using school-based programs, about child sexual abuse and how to protect themselves from it. It is important to know if this approach works, for how long it works and if it causes any unintended harm to children and adolescents. This is the purpose of this systematic review.While this review found improvements in knowledge and protective behaviours among children who had received school-based programs, these results should be interpreted with caution. The reasons for a need for caution is that there were problems with the way that many of the original studies were analysed, children's knowledge was tested only a short time period after the program, the studies were conducted in North America and therefore may not apply to other countries and cultures, and several studies reported harms, such as increased anxiety in children. Potential harms need to be closely monitored in future studies and existing school based programs. It is difficult to know if the changes in children's knowledge and protective behaviours seen in the studies will result in prevention of child sexual abuse. As such, school-based programs should, at best, be seen as part of a community approach to the prevention of child sexual abuse.

SELVMORDSFOREBYGGING

1. **Guo B, Harstall C. Efficacy of suicide prevention programs for children and youth. Health Technology Assessment; 26 Series A. Edmonton, AB, Canada: Alberta Heritage Foundation for Medical Research, 2002.**
Abstract: Author's objectives: The authors' aim was to present the findings from primary research that assessed the efficacy and/or effectiveness of suicide prevention programmes, including those based in the school or community, on school-aged children and youth. Author's conclusions: The overall findings of this review suggest that there is insufficient evidence to either support or refute curriculum-based suicide prevention programmes in schools.

2. **Ploeg J, Ciliska D, Brunton G, MacDonnell J, O'Brien MA. The effectiveness of school-based curriculum suicide prevention programs for adolescents. Ontario Ministry of Health, Region of Hamilton-Wentworth, Social and Public Health Services Division, 1999.**
Abstract: Author's objectives: To summarise the evidence about the effectiveness of school-based curriculum suicide prevention programmes for adolescents. Author's conclusions: The findings of this review indicated that there is currently insufficient evidence to support school-based curriculum suicide prevention programmes for adolescents. The literature suggests that more broadly based comprehensive school health programmes should be evaluated for their effectiveness in addressing the determinants of adolescent risk behaviour.

3. **Ploeg J, Ciliska D, Dobbins M, Hayward S, Thomas H, Underwood J. A systematic overview of the effectiveness of public health nursing interventions: an overview of adolescent suicide prevention programs. Canadian Journal of Public Health, 1995; Working paper series; 95-12.**
Abstract: Author's objectives: To summarise the evidence on the effectiveness of adolescent suicide prevention curricula programmes. Author's conclusions: The findings of this review must be considered in light of the serious methodological limitations of the studies reviewed. The evidence suggests there may be both beneficial and harmful effects of suicide prevention programmes for adolescents. The literature suggests that more broadly-based comprehensive school-based health programmes should be evaluated for their effectiveness in addressing the determinants of adolescent risk behaviour.

4. **Steele MM, Doey T. Suicidal behaviour in children and adolescents. Can J Psychiatry 2007;52(6 Suppl 1):35S-45S.**
Abstract: OBJECTIVE: To systematically review the treatment of suicidal behaviour in children and adolescents. METHOD: After discussing the principles of treatment, we review the literature regarding adequate assessment, hospital-based services and their alternatives, and follow-up. RESULTS: Treatment modalities (including psychotherapy) and preventive strategies (including school-based interventions, gatekeeper and primary practitioner training, and treatment of psychiatric disorders) are considered in the light of existing evidence. CONCLUSIONS: The assessment of youth at risk for suicide should include attention to well-established risk factors, but prediction of risk remains difficult. Treatment of suicidal children and adolescents should be evidence-based and may include psychotherapy and psychopharmacology. Effective methods of prevention are emerging, but more research is needed.

SOSIAL ULIKHET

1. **Gepkens A, Gunning-Schepers LJ. Interventions to reduce socioeconomic health differences: a review of the international literature. Eur J Public Health 1996;6(3):218-26.**
Abstract: The objective of this study was to review information on evaluated interventions to reduce socioeconomic health differences (SEHD) and analyse studies to identify possible conditions for success. The analysed interventions were from published and unpublished sources. They were evaluated in terms of socioeconomic health outcomes. Ninety-eight publications on actual interventions to reduce SEHD and 31 so-called 'grey literature' interventions were identified. Many of the interventions described are reported to be effective. Many of the local experimental interventions, however, were not formally evaluated. Structural measures appear to be effective most often, but cannot be taken to affect all determinants. Interventions often Involve health education. This, however, only appears to be successful if providing information is combined with personal support or structural measures. Many very creative interventions to reduce SEHD have been reported. Several appear to be effective, but all address only a small aspect of health inequalities.

Regrettably the lack of standardized measures and a common methodology hamper our ability to integrate and compare the results. However, all the studies show that there is room for improvement in our existing health policies to reach everyone in our population to the same degree of effectiveness.

2. **Holmboe O , van Roy B , Helgeland J , Clench-Aas J , Dahle KA. Sosiale ulikheter i helse og bruk av helsetjenester blant barn i Akershus. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2006. Rapport fra Kunnskapssenteret nr 05 - 2006.**
http://www.kunnskapssenteret.no/Publikasjoner/1033.cms
Abstract: Bakgrunn**:** Sammenhengen mellom sosioøkonomiske faktorer, sykdom og bruk av helsetjenester blant barn er lite studert i Norge. Datamaterialet i denne rapporten stammer fra Helseprofilundersøkelsen, som ble gjennomført i 2002 blant skoleelever i samtlige kommuner i Akershus. I alt var det 16480 barn og 14698 foreldre som besvarte spørreskjemaene. Hovedfunn**:** Bruk av helsetjenester avhenger først og fremst av forekomsten og alvorlighetsgraden av sykdommer og lidelser. Bruken av somatiske helsetjenester er større hvis foreldrene har langvarig utdanning, tydeligst for bruk av kommunale helsetjenester. Gutter med astma, allergi eller eksem bruker oftere somatiske spesialisthelsetjenester enn jenter. Bruk av PP-tjenesten avtar noe med inntekt og utdanningens lengde, og er klart størst for gutter. Barn som ikke bor sammen med både mor og far, er mye oftere i kontakt med psykiatriske spesialisthelsetjenester enn andre. En forholdsvis stor andel av barn med psykiske vansker er ikke i kontakt med psykiatriske spesialisthelsetjenester. Noen somatiske sykdommer forekommer hyppigere hvis foreldrene ikke har lang utdanning eller hvis inntekten er lav. Forekomsten av diabetes og epilepsi varierer ikke med noen av bakgrunnsfaktorene vi 2 har studert. Hvis ikke begge foreldre er norske, øker forekomsten av luftveissykdommer eller annen alvorlig sykdom eller skade. *Psykiske symptomer og vansker* forekommer hyppigere hvis barnet ikke bor sammen med både mor og far, hvis foreldrene ikke har lang utdanning og hvis inntekten er lav. Enkeltvis har ingen av disse faktorene sterk sammenheng med sykelighet, men dersom flere opptrer samtidig, kan det være forbundet med ikke ubetydelig økning av sykelighet. Et unntak er psykosomatiske symptomer, som forekommer oftere når foreldrene har lang utdanning. *Livsstilsfaktorer* som hyppig idrett/mosjon og sunne spisevaner er forbundet med redusert forekomst av en rekke sykdommer og lidelser, både de somatiske og psykiske.

3. **Smedslund G, Steiro A, Winsvold A, og Hammerstrøm, K. Effekt av tiltak for å fremme et sunnere kosthold og økt fysisk aktivitet, spesielt i grupper med lav sosioøkonomisk status. Rapport Nr 8 – 2008. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2008.**
http://www.kunnskapssenteret.no/Publikasjoner/926.cms
Absract: Bakgrunn: Denne rapporten er første del av kunnskapsoppsummeringer om effekten av tiltak overfor sosioøkonomiske grupper, og som vurderer røykesluttiltak. Problemstilling: Hva er effekten av tiltak 1) for å redusere røyking blant ulike sosioøkonomiske grupper? 2) for å redusere røyking blant lavere sosioøkonomiske grupper? Metode**:** Vi søkte systematisk etter litteratur i internasjonale forskningsdatabaser, valgte ut studier som oppfylte våre inklusjonskriterier, vurderte kvaliteten og oppsummerte resultatene. Resultater**:** Det pågår for tiden en oppsummering av befolkningsrettede kontrolltiltak rettet mot røyking for å redusere sosial ulikhet i helse. Vi har oppsummert resultatene fra fire kunnskapsoppsummeringer og 19 randomiserte kontrollerte studier. Få av studiene sammenlignet resultater for ulike sosioøkonomiske grupper. Vi har definert fire hovedmålgrupper for tiltakene: Studier av røykeforebyggende tiltak overfor skoleelever viste sammensatte resultater. Elever med yrkesskoler og lavere akademisk utdanning hadde høyere intensjon om å røyke. Bruk av gratis nikotinplaster og støttende telefonsamtaler hadde en kortvarig effekt for gravide**.** Høy familieinntekt og få venner som røykte var viktige faktorer for røykeslutt. Tiltak overfor dagligrøykere var effektive. Høy sosioøkonomisk status, motivasjon og hvor mye tid man tilbringer sammen med ikke-røykere påvirket lengden på røykeslutt. Tiltak overfor høyrisikogrupper viste at pasienter med godt sosialt nettverk har større sannsynlighet for å slutte å røyke. Rådgivning økte røykeslutt mer blant lavere sosioøkonomiske grupper enn høystatusgrupper. Konklusjon: Tiltak for røykeslutt er mest effektive i grupper med høy sosioøkonomisk status. Få studier rapporterer effekter separat for grupper med lav sosioøkonomisk status.

4. **Smedslund G, Steiro A, Winsvold A, og Hammerstrøm, K. Effekt av tiltak for å fremme et sunnere kosthold og økt fysisk aktivitet, spesielt i grupper med lav sosioøkonomisk status. Rapport Nr 8 – 2008. Oslo: Nasjonalt kunnskapssenter for helsetjenesten, 2008.**
http://www.kunnskapssenteret.no/Publikasjoner/617.cms
Abstract: Bakgrunn: Denne rapporten er andre del av en kunnskapsoppsummering om effekt av tiltak for å redusere sosial ulikhet i helse. Denne rapporten vurderer tiltak som fremmer et sunt kosthold og økt fysisk aktivitet overfor ulike sosioøkonomiske grupper. Den første rapporten vurderte røykeslutt-tiltak. Problemstillinger: Undersøke effekten av tiltak 1) for å fremme et sunt kosthold blant ulike sosioøkonomiske grupper 2) for å fremme et sunt kosthold blant grupper med lavere sosioøkonomisk status 3) for å fremme økt fysisk aktivitet blant grupper med ulik sosioøkonomisk status og 4) for å fremme økt fysisk aktivitet blant grupper med lavere sosioøkonomisk status. Metode: Vi søkte systematisk etter litteratur i internasjonale forskningsdatabaser, valgte ut studier som oppfylte våre inklusjonskriterier, vurderte kvaliteten og oppsummerte resultatene. Resultater: Vi har oppsummert resultatene fra fem kunnskapsoppsummeringer og 14 randomiserte kontrollerte studier (RCT). Fire av de 14 RCTene sammenlignet resultater for ulike sosioøkonomiske grupper, mens 10 av RCTene omhandlet grupper med lavere sosioøkonomiske g. Vi definerte seks hovedmålgrupper for tiltakene: 1. barn. 2. besøkende i

supermarkeder. 3. innvandrere/minoriteter. 4. befolkning i fattige områder. 5. kronisk syke personer/personer i risikogrupper. 6. arbeidstakere/arbeidsløse. På grunn av lav kvalitet på dokumentasjonen er det ikke grunnlag for å konkludere om effekt/manglende effekt av tiltakene i noen av målgruppene. Konklusjon: På dette området er det få studier som rapporterer effekter separat for grupper med lav sosioøkonomisk status. Studiene er i tillegg av så lav kvalitet at vi ikke har grunnlag for å trekke noen konklusjoner om effekten av tiltak for å utjevne sosioøkonomiske forskjeller i kosthold og fysisk aktivitet. Det samme gjelder for studier av grupper med lavere sosioøkonomiske status.

Vedlegg

VEDLEGG 1 SØKESTRATEGI

Ovid MEDLINE 1950 to January Week 2 2009
Dato: 22.01.2009
Treff: 106

1. community health nursing/ or public health nursing/ or school nursing/
2. (health visitor* or public health nurs* or school nurs* or home nurs* or home visit*).tw.
3. exp School Health Services/
4. (school adj health*).tw.
5. Maternal-Child Health Centers/
6. ((child or maternal) adj health adj (clinic* or centre* or center*)).tw.
7. or/1-6
8. exp child/ or exp infant/ or Adolescent/
9. parents/ or fathers/ or mothers/
10. (child* or parent* or mother* or father*).tw.
11. or/8-10
12. 7 and 11
13. (medline or pubmed or systematic* review* or meta-analysis).tw. or meta-analysis.pt.
14. 12 and 13

Ovid EMBASE 1980 to 2009 Week 03
Dato: 22.01.2009
Treff: 38

1. community health nursing/
2. school health service/ or school health nursing/
3. health visitor/
4. (health visitor* or public health nurs* or school nurs* or home nurs* or home visit*).tw.
5. (school adj health*).tw.
6. ((child or maternal) adj health adj (clinic* or centre* or center*)).tw.
7. or/1-6
8. Child/
9. Infant/
10. Newborn/
11. Adolescent/
12. parent/ or exp father/ or exp mother/
13. (child* or parent* or mother* or father*).tw.
14. or/8-13
15. 7 and 14
16. (medline or pubmed or cinahl (systematic* adj2 review*) or meta analysis).tw.
17. 16 and 15

Cochrane Library 2008 issue 4
Dato: 22.01.2009
Treff: Systematic Reviews 56, DARE 53, HTA 4

ID	Search
#1	MeSH descriptor Community Health Nursing explode all trees
#2	MeSH descriptor Public Health Nursing explode all trees
#3	MeSH descriptor School Nursing explode all trees
#4	(health visitor* or public health nurs* or school nurs* or home nurs* or home visit*):ti,ab,kw
#5	MeSH descriptor School Health Services explode all trees
#6	(school health*):ti,ab,kw
#7	MeSH descriptor Maternal-Child Health Centers explode all trees
#8	((child or maternal) next health next (clinic* or centre* or center*)):ti,ab,kw
#9	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8)
#10	MeSH descriptor Child explode all trees
#11	MeSH descriptor Infant explode all trees
#12	MeSH descriptor Adolescent explode all trees
#13	MeSH descriptor Parents, this term only
#14	MeSH descriptor Fathers explode all trees
#15	MeSH descriptor Mothers explode all trees
#16	MeSH descriptor Single Parent explode all trees
#17	(child* or parent* or mother* or father*):ti,ab,kw
#18	(#10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17)
#19	(#9 AND #18)

CRD databases
Dato: 22.01.2009
Treff: DARE 107, HTA 14

1	MeSH Community Health Nursing EXPLODE 1 2
2	MeSH Public Health Nursing EXPLODE 1
3	MeSH School Nursing EXPLODE 1 2 3
4	"health visitor*" OR "public health nurs*" OR "school nurs*" OR "home nurs*" OR "home visit*"
5	MeSH School Health Services EXPLODE 1 2
7	"school health*"
8	MeSH Maternal-Child Health Centers EXPLODE 1
9	"child health cent*" OR "child health clinic*" OR "maternal health cent*" OR "maternal health clinic*"
10	#1 or #2 or #3 or #4 or #5 or #7 or #8 or #9
11	MeSH Child EXPLODE 1
12	MeSH Infant EXPLODE 1
13	MeSH Adolescent EXPLODE 1
14	MeSH Parents EXPLODE 1 2 3
15	child* OR parent* OR mother* OR father*
16	#11 or #12 or #13 or #14 or #15
18	#10 and #16