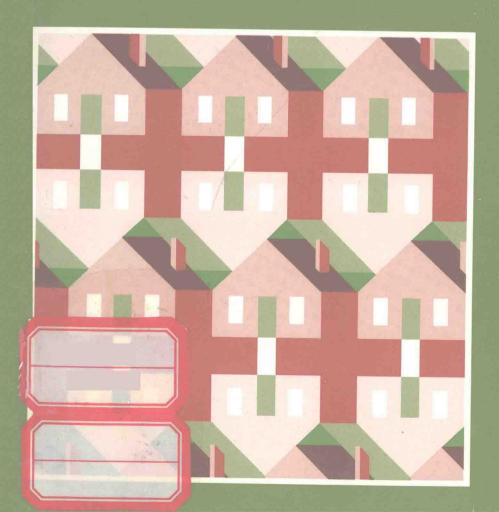


Nursing

Manual of Community and Home Health Nursing

Ruth Stewart



Manual of Community and Home Health Nursing

Ruth F. Stewart, MS, RN, FAPHA, FAAN

Associate Professor Community Health Nursing The University of Texas Health Science Center at San Antonio School of Nursing San Antonio, Texas



Little, Brown and Company
Boston Toronto

Dedicated to Community Health Nurses Past, Present, and Future

Library of Congress Cataloging-in-Publication Data

Manual of community and home health nursing.

Includes bibliographies and index.

1. Community health nursing—Handbooks, manuals, etc. I. Stewart, Ruth F. [DNLM: 1. Community Health Nursing.

WY 106 M294] RT98 M273

1987

610.73'43

87-2832

ISBN 0-316-81435-0

Copyright © 1987 by Ruth F. Stewart

All rights reserved. No part of this book may be reproduced in any form or by any electronic or mechanical means including information storage and retrieval systems without permission in writing from the publisher, except by a reviewer who may quote brief passages in a review.

Library of Congress Catalog Card Number 87-2832

ISBN 0-316-81435-0

987654321

SEM

Published simultaneously in Canada by Little, Brown and Company (Canada) Limited

Printed in the United States of America

Credit

The Physical Growth NCHS Percentile Charts on pp. 68–79 are reprinted by permission of Ross Laboratories, Columbus, Ohio.

Manual of Community and Home Health Nursing

Preface

The Manual of Community and Home Health Nursing was written as a clinical reference for students in baccalaureate and graduate level community health nursing courses and for professional home, community, and public health nurses. It is filled with practical information commonly needed

by nurses working outside the hospital setting.

Community health nursing practice is an art and a science, deriving its basis from professional nursing and the public health sciences. The goal, a healthy community, involves interventions that require a wide range of knowledge and skills. The Manual of Community and Home Health Nursing is designed to serve as a ready reference for meeting community and client needs. Coverage ranges from health promotion and disease prevention to care of the sick or disabled at home. The manual provides guidance for client teaching and nursing interventions for the wide variety of home and community health nursing roles.

Rozella Schlotfeldt has stated that the goal of nursing is to help people to "attain, retain and regain health." Further challenge to community health nurses is to maximize the health potential of the community through meeting the diverse needs of its people. I hope this manual will be helpful to my

colleagues in meeting this challenge.

I would like to take this opportunity to thank the following reviewers for their assistance in the development of the manuscript: Joan H. Baldwin, Group Health Association, Washington, D.C.; Helen A. Carcio, Curry College; Peggy J. Drapo, Texas Woman's University; and Charlotte R. Patrick, Texas Woman's University. R.F.S.

Schlodtfeldt, R. M. "This I Believe . . . Nursing is Health Care." Nursing Outlook 20 (4), April 1972, p. 24.

Contributing Authors

Betty J. Goodpasture, MS, RN. CPNP

Geraldine Hughes-Bennett, MA. RN

Julie S. Meyer, MSN, RN

Consultant, Pediatric Nursing in the Home, San Antonio, Texas

Consultant, Gerontological Nursing, San

Antonio, Texas

Assistant Professor, The University of Texas Health Science Center at San Antonio School of Nursing, San Antonio.

Texas

Betty Northern, RN Consultant, Respiratory Nursing Care,

San Antonio, Texas

Jacqueline Rhoads, PhD,

RN

Former Assistant Professor, The

University of Texas Health Science Center at San Antonio School of Nursing, San

Antonio, Texas

Mary McCarty Spencer, MSN, RN, ET

Jeanette A. Tilley, BSN, RN

Instructor, The University of Texas Health Science Center at San Antonio School of

Nursing, San Antonio, Texas

Home Dialysis Coordinator, Kidney Disease Clinic of San Antonio, San

Antonio, Texas

Rita A. Yakubik, MSN, RN

Consultant, Hospice Nursing, San

Antonio, Texas

Consultants

Frances Baar, MSN, RN

Susan Cooning, MS, RN

Wilma Hayek, MSN, RN

Barbara Carlile Holmes, MSN, RN, OCN

Nancy Lees, MN, RN

Patricia Nelson, MS, RN

Consultant, Nursing Procedures, San

Antonio, Texas

Instructor, The University of Texas Health Science Center at San Antonio School of Nursing, and Clinical Specialist, Santa Rosa Medical Center, San Antonio, Texas Assistant Professor, The University of Texas Health Science Center at San

Texas Health Science Center at San Antonio School of Nursing, San Antonio, Texas

Oncology Clinical Nurse Specialist, The University of Texas Health Science Center

at San Antonio, San Antonio, Texas Former Instructor, The University of

Texas Health Science Center at San Antonio School of Nursing, San Antonio,

Texas

Instructor, The University of Texas Health

Science Center at San Antonio School of Nursing, and Clinical Nurse Specialist, Health Care for the Homeless, San

Antonio, Texas

Alice C. Sarro, BS, RN Program Manager, Tuberculosis Control

for San Antonio and Bexar County, San

Antonio, Texas

Notice

The indications and dosages of all drugs in this book have been recommended in the medical literature and conform to the practices of the general medical community. The medications described do not necessarily have specific approval by the Food and Drug Administration for use in the diseases and dosages for which they are recommended. The package insert for each drug should be consulted for use and dosage as approved by the FDA. Because standards for usage change, it is advisable to keep abreast of revised recommendations, particularly those concerning new drugs.

Contents

Preface v Contributing Authors vi List of Tables in Appendices xi

1 Growth and Development along the Age Continuum

1

Growth and Development: One Month 1 / Growth and Development: Two to Four Months 5 / Growth and Development: Four to Six Months 7 / Growth and Development: Six to Nine Months 9 / Growth and Development: 9–12 Months 12 / Growth and Development: 12–15 Months 14 / Growth and Development: 15–24 Months 16 / Growth and Development: Two Years 19 / Growth and Development: Three Years 21 / Growth and Development: Four Years 23 / Growth and Development: Five Years 25 / Growth and Development: Six to Eight Years 27 / Growth and Development: 9–12 Years 29 / Growth and Development: 13–15 Years 30 / Growth and Development: 16–19 Years 32 / Growth and Development: 20–39 Years 35 / Growth and Development: 40–59 Years 37 / Growth and Development: 60 Years and Older 40

Appendix A Growth and Development along the Age Continuum

47

Family and Home Assessment Guide 47 / Family Genogram 49 / Breast-feeding Guidelines 49 / Formula-feeding Guidelines 55 / Pediatric Health History Guide 58 / Suggested Upper Limits of Normal Blood Pressure in Children by Age Category 65 / Vital Signs along the Age Continuum 66 / National Center for Health Statistics Percentile Charts for Physical Growth 68 / Infant and Child Stimulation Guidelines 76 / Hematocrit Reading Indicative of Anemia 82 / Personal Safety Guidelines 82 / Adult Health History Guide 84 / Adult Height and Weight Tables 86

| | _ | 22 | | 22 202 | |
|---|-----------|----|--------|--------|----------|
| 2 | Screening | to | Detect | Health | Problems |

87

Anthropometric Measurements 88 / Denver Developmental Screening Test 90 / Breast Self-Exam 92 / Testicular Self-Exam 94 / Hearing Screening 95 / Vision Screening 98 / Spine Screening 100 / Blood Pressure Screening 105 / Diabetes Screening 106 / Family Abuse Screening 107 / Tuberculosis Screening 109 / References 112

Appendix B Screening to Detect Health Problems

114

Guidelines for Anthropometric Measurements 114 / Arm Measurement Percentiles for Whites in the United States 119 / Blood Pressure: Recommendations for Follow-up and Classification 122

3 Nutrition and Health

124

General Assessment of Nutritional Health 124 / Dietary Analysis 125 / Analysis by U.S. Recommended Daily Allowances 130 / Analysis by Recommended Dietary Allowances 131 / Dietary Management 131

Appendix C Nutrition and Health

136

Food Sources: Special Components 136 / Exchange Lists for Basic Food Groups 140 / Recommended Food Exchanges 146 / Mexican Food Exchanges 150 / Fast Food Facts 151 / Common Food-Drug Interactions 157 / Health Risk-Food Pattern Correlations 157 / Health Conditions Requiring Dietary Modification to Maintain Health 158 / Common Myths about Nutrition 159

4 Promoting Nutrition When a Condition Interferes with Eating

160

General Recommendations 160 / Anorexia 161 / Arm and Hand Disability or Pain 161 / Blind or Impaired Vision 162 / Cleft Palate (Unrepaired) 163 / Dentition Impairment 164 / Dysphagia 164 / Neuromuscular Impairment 165 / Severe Nutritional Deficiency 166 / Oral Dryness 175 / Oral Irritation 176 / Respiratory Dysfunction 176 / Impaired Sensory Function 177

| Appendix D | Promoting Nutrition When a Condition Interferes with Eating | 180 |
|----------------------|---|-----|
| Insertion Feeding | ic Tube Insertion 180 / Nasogastric Tube 182 / Nasogastric Tube Removal 184 / Enteral Procedure 185 / Enteral Feeding: Adaptation for a 88 / Suggested Strategies for Developing Feeding 90 | |

5 Health Protection by Immunization

193

Immunization Recommendations 193

6 Management of Common Communicable Diseases

201

Common Childhood Communicable Diseases 201 / Other Common Communicable Diseases 231 / Sexually Transmitted Diseases 249

7 Management of Health Problems in the Home

264

Ambulation of Disabled Clients 264 / Transferring and Positioning of Immobile Clients 268 / Range of Motion Exercises 271 / Fecal Impaction 276 / Sleep Inducement 278 / Pain Care 279 / Progressive Relaxation 293 / Guided Imagery 294 / Apnea Monitoring 295 / Decubitus Ulcer Care 297 / Diabetes Management 302 / Phototherapy 310 / Urethral Catheterization 312 / Intermittent Self-catheterization 318 / Colostomy Care 319 / Colostomy Irrigation 322 / Urostomy Care 324 / Tracheostomy Care 326 / Suction 330 / Adaptation of Suctioning for Routine Home Care 333 / Adaptation of Suctioning for a Child 334 / Mechanical Ventilation 336 / Peritoneal Dialysis 341 / Vascular Access Devices 344 / Chemotherapy in the Home 352 / Death at Home 352

Appendix E Management of Health Problems in the Home

356

Aids for Activities of Daily Living 356 / Suggestions for the Disabled 357 / Caretaker in Home Care 359 / Infection Control 361 / Medication Safety 366 / Calculating Dosages for Infants and Children 366 / Hints for Facilitating Medication Administration 367 / Intracutaneous Administration of

Substances 368 / Subcutaneous Administration of Medications 370 / Intramuscular Administration of Medications 372 / Intravenous Administration of Medications 376 / Venipuncture 380 / Calibration (Drop Factor) of Infusion Sets 384 / Calculation of Intravenous Flow Rate 384 / Summary of Essential Equivalents 385 / Normal Laboratory Test Values 386 / Oxygen Precautions in Home Use 389

8 Management of Common Emergencies

390

Accidental Amputation 392 / Anaphylaxis 393 / Bites or Stings 394 / Burns 397 / Epistaxis 400 / Frostbite 401 / Fractures 402 / Head Injuries 403 / Heat Reactions 407 / Poisoning 410 / Seizures 414 / Shock 416 / Suicide Prevention 418 / Wounds 419

Appendix F Management of Common Emergencies

422

Common Household Poisons 422 / Common Poisonous Plants 423 / Emetic Guidelines 426 / Tetanus Prophylaxis in Wound Management 427

9 Stress Management

428

10 Health Maintenance for Travelers

433

Maintaining Health during International Travel 433 / Treatment of Water for Travel or Emergency 433 / Rehydration for Diarrheal Disease 434 / Exercise for the Long-distance Traveler 434 / Traveling by Air with a Child 435

11 Resource Directories

436

Resource Categories 439 / U.S. Resource Directory 440 / Canadian Resource Directory 452 / Locator: United States 454 / Locator: Canada 463 / Hotline-Crisisline 466 / Phone Lines for Special Inquiry 467 / Guides to Developing Self-Help Groups 468 / Guides to Developing Support and Self-Help Groups 468 / Camps for Children with Disabilities 469 / Selecting a Day-care Center 469 / Selecting a Nursing Home 470

Index 475

Tables

Suggested Upper Limits of Normal Blood Pressure in Children 65 Vital Signs along the Age Continuum 66 NCHS Percentile Charts for Physical Growth Hematocrit Readings Indicative of Anemia 82 Adult Height and Weight Tables 86 Guidelines for Anthropometric Measurements 114 Arm Measurement Percentiles for Whites in the United States Blood Pressure: Recommendations for Follow-up and Classification 122 Three-day Food History Form 127 Food Sources: Special Components 136 Exchange Lists for Basic Food Groups Recommended Food Exchanges 146 Mexican Food Exchanges 150 Fast Food Facts 151 Common Food-Drug Interactions 157 Health Risk-Food Pattern Correlations 157 Health Conditions Requiring Dietary Modification to Maintain Health 158 Common Myths about Nutrition Potential Problems with Enteral Feedings Potential Problems with Parenteral Nutrition 173 Suggested Strategies for Developing Feeding Skills 181 Recommended Schedule for Active Immunization of Normal Infants and Children 196 Recommended Immunization Schedule for Infants and Children up to 7th Birthday 197 Recommended Immunization Schedule for Persons 7 Years or Older 198 Equianalgesic List 288 Onset, Peak and Duration of Diabetic Drug Action 303 Diabetic Drug Dosages 304 Diabetic Emergencies 309 Summary of Essential Equivalents 385 Normal Laboratory Test Values 386 Glasgow Coma Scale 405 Pupillary Responses 406 Wounds and Tetanus Prophylaxis 427 Camps for Children with Disabilities 469

Growth and Development along the Age Continuum

Growth and Development: One Month

I. Family and home

- A. Environment (see "Family and Home Assessment Guide," Appendix A, p. 47).
- B. "Family Genogram" (see Appendix A, p. 47).

II. Growth and development*

A. Physical

- 1. Has wobbly head.
- 2. Lifts head briefly while on stomach.
- 3. Follows objects with eyes to midline.
- 4. Needs plenty of sucking.
- 5. Sleeps 16-20 hours daily.
- 6. Gains about 1 ounce per day.
- 7. Increases 1 inch in height each month.
- 8. Sneezes frequently.
- 9. Strains with bowel movements.
- 10. Turns head side to side.

B. Social and emotional

- 1. Enjoys being talked to and held.
- **2.** May begin to smile.
- 3. May recognize familiar voices.

^{*}This section and others on growth and development throughout this chapter were adapted from Shamansky, S.L., Cecere, M.C., & Shellenberger, E., *Primary health care handbook: Guidelines for patient education*, pp. 36, III passim. Copyright © 1984 by Sherry L. Shamansky, M. Carolyn Cecere, and Evelyn Shellenberger. Reprinted by permission of Little, Brown and Company.

- 4. Makes eye contact during feeding.
- 5. Is frightened or startled by loud noises.

C. Language

- 1. Uses crying as the primary means of communication.
- III. Nutrition. Breast milk or formula only for first five to six months.

IV. Nutritional requirement

A. Guide (based on standard of 50-68 calories/lb/day or 110-150 calories/kg/day recommended by Committee on Nutrition of American Academy of Pediatrics):

Weight × 50 calories = calories needed/24 hr,

and

Calories needed ÷ (20 calories/oz) = ounces of formula/24 hr.

For example,

 $10 \text{ lb} \times 50 \text{ calories} = 500 \text{ calories/24 hr};$

therefore.

500 calories ÷ 20 calories = 25 oz of formula/24 hr.

- **B.** Individual needs vary because of physical activity or environmental temperature.
- C. Bread-fed baby's intake considered adequate if output is six to eight wet diapers/24 hr (not valid indicator if baby taking large amount of water).

V. Feeding patterns

- A. Frequency best for baby "on demand," in small feedings.
- B. Positioning best if held during feedings, with parent or caretaker relaxed and responsive; this time important to social and emotional development.
- C. Follow guidelines for breast-feeding (see "Breast-feeding Guidelines" in Appendix A, p 49).
- D. Follow guidelines for formula feeding (see "Formula-feeding Guidelines" in Appendix A, p. 55).

VI. Elimination

A. Stools

- 1. Breast fed: with every feeding, unformed, yellow.
- Formula fed: several times daily, semiformed, light brown, slight odor.
- B. Urine. Light color, no odor, wet diaper at each feeding.

VII. Health management

A. Mineral and vitamin supplements

- 1. If breast-feeding, give iron and vitamin D.
- 2. If using evaporated milk formula, give iron and vitamin C.
- 3. If using prepared formula, use one with iron and vitamins needed; no supplement is required.
- 4. Whether breast-feeding or using formula, use fluoride supplement if local water contains less than 0.3 ppm (little fluoride in breast milk even if in mother's water supply).

B. Stimulation

- 1. See "Infant Stimulation Guidelines" in Appendix A, p. 76.
- 2. Sucking needs: thumb sucking an indicator of inadequate sucking, unless hungry just before feeding. Using a pacifier is preferable to allowing thumbsucking, because its use will be discontinued sooner.
- C. Growth monitoring. Begin using growth chart (see "National Center for Health Statistics Percentile Charts for Physical Growth" in Appendix A, p. 68).
- **D. Developmental monitoring.** Begin with Denver Developmental Screening Test (Chapter 2) or other tool; DDST also provides for assessment of parent-child interaction and for parent teaching.

E. Health monitoring initiated

- 1. Health history (see "Pediatric Health History Guide," Appendix A, p. 58).
- 2. Growth (see "Anthropometric Measurements," Chapter 2: "NCHS Percentile Charts for Physical Growth," Appendix A, p. 68).
- 3. Development (see "Denver Developmental Screening Test," Chapter 2).
- 4. Vital signs (see "Vital Signs along the Age Continuum" and "Suggested Upper Limits of Normal Blood Pressure in Children," Appendix A, pp. 65-67).

VIII. Care and safety

A. Restraints

- 1. Use "football hold" to carry baby, on hip with hand holding and protecting head, leaving other hand free.
- 2. Make sure crib and car seat meet standards of Consumer Product Safety Commission.

- 3. Use car seat for all auto travel.
- Always watch baby when on surface from which he or she may roll off.
- 5. Put rails up whenever baby in crib.
- 6. Use no nets over crib.
- 7. Use flame-retardant clothing.

B. Obstructives

- 1. Place baby on stomach or side to sleep, in case of regurgitation.
- 2. Keep pillows and filmy plastics out of reach.
- Avoid propping bottles if at all possible; if bottle is propped, watch for unsatisfactory sucking, irritability, choking, or other sign of distress.
- Provide toys larger than baby's mouth with no long strings, buttons.
- Do not use talcum powder or cornstarch because it is easily inhaled and can cause lung problems.

C. Environment

- 1. Check household safety features, including hot water faucet (temperature below 130°C), fire alarm, and escape plan.
- 2. Check bath water temperature carefully before bathing baby.
- 3. Protect baby from young siblings and pets.
- 4. Secure proper immunization for pets.

D. Emergency preparedness

- 1. Post emergency phone numbers.
 - a. Fire department.
 - **b.** Emergency medical service.
 - **c.** Primary health care provider.
 - d. Poison control (find through 1-555-1212).
- 2. Keep emergency supplies on hand.
 - a. First aid manual.
 - b. Syrup of ipecac and instructions for use.
 - c. DeLee mucous trap or bulb syringe for suctioning (see "Suctioning: Adaptation for A Child" in Chapter 7).
- **3.** Cardiopulmonary resuscitation (CPR) and emergency care for choking (ECC) preparation for primary caretakers.

Growth and Development: Two to Four Months

I. Growth and development

A. Physical

- 1. Holds head steady and can lift head off bed while on stomach.
- 2. May roll from stomach to back.
- 3. Sits with support.
- Increases in weight about 1 ounce per day.
- 5. Increases in height about 1 inch per month.
- Sleeps about 10 hours at night.
- Begins finger sucking.
- Follows moving object 180 degrees.
- Reaches for object and carries it to mouth.

B. Social and emotional

- 1. Smiles in response to another person.
- 2. Finds way to get attention, such as coughing or clicking tongue.
- 3. Enjoys being held and having people around.
- 4. May be distracted by other people while eating.
- 5. Begins to show interest in playthings.
- Knows mother's face.
- Becomes bored.

C. Language

- 1. May laugh aloud.
- Coos, squeals, or babbles when talked to.
- 3. Has strong cry.
- Imitates some sounds.
- Listens to voices.

II. Nutrition

- A. Breast milk or formula should be continued as primary food source.
 - Cow's milk is not appropriate.